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**About Harper College**

**A Message from the President: Kenneth L. Ender, Ph.D**



**Welcome to Harper College. We're pleased that you've chosen to start here.**

When William Rainey Harper helped start the community college movement a century ago, he couldn't have dreamed of the complex challenges that higher education faces today. But like our namesake, we believe in dreaming boldly, challenging the status quo and advancing innovative solutions to help students achieve their goals in a fast-changing world.

We are engaged in a continuous two-way conversation with local businesses to make sure our programs are meeting their changing workforce needs, and we're collaborating more closely with our local high schools to ensure our curriculums align and that students come to Harper well-prepared. Because of these partnerships, Harper College is well-positioned to train our students for new economy jobs, prepare them for transfer to four-year universities and deliver the credentials needed for promotions. Through the hard work of our faculty and staff and the support of so many others, including our extraordinary alumni, we're preparing students for great careers and great futures.

As a college accessible to all, we know we can no longer afford to measure ourselves simply by how many students choose to enroll at Harper College. It's about how many finish here, and we are working diligently every day toward that goal of student success.

**Kenneth L. Ender, Ph.D.**  
*President*

**Academic Calendar**

**College Calendar**

Harper College follows a semester calendar that includes 16-week fall and spring semesters and 5-week and 8-week summer sessions. Not all classes follow a 16-week or 8-week calendar; 4-week, 6-week, 8-week and 12-week options are a few of the choices that may be available during the fall, spring and summer sessions. Classes are generally scheduled Monday through Friday from 7 a.m. until 10 p.m., Saturday from 8 a.m. until 6 p.m. and Sunday from 1 to 6 p.m. during the spring and fall semesters. The College is closed Saturday and Sunday during the summer session.

**2016-17**

**First Semester - Fall 2016 (August 22 to December 16, 2016)**

- Full-time Faculty Report: August 16
- Semester Begins: August 22
- Labor Day (College Closed): September 5
- Thanksgiving Holiday (College Closed): November 23 - 27
- Final Exams\*\*: December 12-16

**Second Semester - Spring 2017 (January 17 to May 19, 2017)**

- Full-time Faculty Report: January 11
- Martin Luther King Day (College Closed): January 16
- Semester Begins: January 17
- Lincoln's Day Observed (College Closed): February 20
- Spring Break: March 20-March 26
- Classes Resume: March 27
- Reading Day (College Closed): April 14
- Final Exams\*\*: May 15-19
- Graduation: May 20

**Summer Session - Summer 2017 (May 22 to August 11, 2017)**

- Semester Begins: May 22
- Memorial Day (College Closed): May 29
- Independence Day (College Closed): July 4

\*\* Most classes will have final exams administered this week; however, 8-week sections and other short-term/early-start classes are not included.

**2017-18**

**First Semester – Fall 2017 (August 21 to December 15, 2017)**

- Full-time Faculty Report: August 15
- Semester Begins\*: Monday, August 21
- Labor Day (College Closed): Monday, September 4
- Thanksgiving Holiday (College Closed): November 22–26
- Final Exam Week\*\*: December 11 – 15

\*\* Most classes will have final exams administered this week; however, 8-week sections and other short-term/early-start classes are not included.

**Second Semester – Spring 2018 (January 16 to May 18, 2018)**

- Full-time Faculty Report: Wednesday, January 10
- Martin Luther King Day (College Closed) Semester Begins\*: January 15

- Semester Begins\*: Tuesday, January 16
- Lincoln's Day Observed (College Closed): February 12
- Spring Break (classes not in session): March 26–April 1
- Reading Day (College Closed): March 30
- Classes Resume: April 2
- Final Exam Week\*\*: May 14–18
- Graduation: Saturday, May 19

\*\* Most classes will have final exams administered this week; however, 8-week sections and other short-term/early-start classes are not included.

### Summer Session– Summer 2018 (May 21 to August 10, 2018)

- Semester Begins\*: May 21
- Memorial Day (College Closed): May 28
- Independence Day (College Closed): July 4

### College Office Hours

Typical office hours are Monday through Thursday from 8 a.m. to 7 p.m., Friday from 8 a.m. to 4:30 p.m. For specific office hours, please check harpercollege.edu

## Accreditation

The Higher Learning Commission, 230 South LaSalle Street, Suite 7-500, Chicago, IL, 60604; 800.621.7440

- The Harper College business-related programs of Accounting, Computer Information Systems, Financial Services, Management, Marketing, Mass Communication and Supply Chain Management are accredited by the Association of Collegiate Business Schools and Programs.
- Harper College is accredited as a Community/Junior College member of the National Association of Schools of Music.
- The Harper College Paralegal Studies Program is approved by the American Bar Association.
- The Harper College Real Estate Program is licensed by the State of Illinois Department of Financial and Professional Regulations as a Real Estate Pre-License School (#110000046), a Licensed Appraiser–Education Provider (#155000165), a Licensed Home Inspector–Education Provider (#052000106), a Continuing Education School for Real Estate Sales and Brokerage (license 162.0000220).
- The Harper College Child Learning Center is accredited by the National Association for the Education of Young Children (NAEYC).
- The Harper College Nursing Program is accredited by the Accreditation Commission for Education in Nursing, Inc. (ACEN), 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326. The Harper College Certified Nursing Assistant Program is approved by the: Illinois Department of Public Health, Training and Technical Direction Unit LTC Field Operations, 525 W. Jefferson, 4th Floor, Springfield, IL 62761, 217.785.5569
- The Harper College English as a Second Language Intensive English Program is accredited by the Commission on English Language Program Accreditation (CEA).
- The Harper College Diagnostic Medical Sonography Program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Joint Review Committee on Diagnostic Medical Sonography.  
The Commission on Accreditation of Allied Health Education Programs, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763; 727.210.2350, [www.caahep.org](http://www.caahep.org)

- The Harper College Diagnostic Cardiac Sonography Program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Joint Review Committee on Diagnostic Medical Sonography.  
The Commission on Accreditation of Allied Health Education Programs, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763; 727.210.2350, [www.caahep.org](http://www.caahep.org)
- The Harper College Dental Hygiene Program is accredited by the: American Dental Association (ADA) Commission on Dental Accreditation (CODA) 211 East Chicago Avenue, Chicago, IL 60611-2678 312.440.2500
- The Harper College Dietetic Technician Program is accredited by the: Commission on Accreditation for Dietetics Education (CADE) of the American Dietetic Association, 120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, 312.899.0040
- The Harper College Fire Science Technology Program is accredited with course approval by the Office of the Illinois State Fire Marshall, Division of Personnel Standards and Education, 1035 Stevenson Drive, Springfield, IL 62703-4259, 217.782.4542
- The Harper College Interior Design department is accredited by The National Kitchen and Bath Association, 687 Willow Grove St., Hackettstown, NJ 07840, 800.843.6522
- The Harper College Medical Assisting Certificate Program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Medical Assisting Education Review Board (MAERB).  
The Commission on Accreditation of Allied Health Education Programs, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763; 727.210.2350, [www.caahep.org](http://www.caahep.org)
- The Harper College Radiologic Technology Program is accredited by the: Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182, 312.704.5300
- Illinois Department of Financial and Professional Regulations:
  - Registered Public Accounting Continuing Professional Education sponsor
  - Licensed Real Estate Pre-license School

## Associate Degrees

Harper College offers eight associate degrees, six of which are designed for students who will transfer to a four-year college or university to complete a bachelor's degree. The six are the Associate in Arts (AA), the Associate in Science (AS), the Associate in Arts in Teaching – Secondary Mathematics (AATM), the Associate in Fine Arts–Art (AFA), the Associate in Fine Arts–Music (AFA) and the Associate in Engineering Science (AES) degrees, which comprise the first two years of study toward degrees in a broad range of arts-related or science-related disciplines.

The Associate in Applied Sciences (AAS) degree is designed for those who are pursuing a two-year career program, although many students transfer to four-year colleges after earning the AAS degree.

The Associate in General Studies (AGS) degree is a flexible, somewhat individually designed option for those individuals who do not intend to transfer, but who can benefit from having earned a degree credential, whether for career purposes or for personal satisfaction. The AGS can serve as a capstone for occupational certificate programs, or as an individualized program meeting needs not met by other degree programs. Students can use some credits earned toward their AGS degree to transfer, but should be aware that transfer options for the degree as a whole are limited. Students are strongly encouraged to meet with a Student

Development counselor to make course selections and to learn about possible transfer options.

## Campus Facilities

Harper College supports a wide range of programs within its 200-acre campus in Palatine and two satellite facilities at the Harper Professional Center in Schaumburg and Harper College Learning and Career Center in Prospect Heights. Our main campus is comprised of 23 buildings and offers state-of-the-art science and technology laboratories and classrooms, a comprehensive library and learning resources center, computer labs, lecture halls, theaters, a Wellness and Sports Center and the Wojcik Convention Center. WiFi access is provided across campus. The College also offers electric vehicle charging stations in Parking Lot 14, near the Wojcik Conference Center.

Every ten years the College completes a new Campus Master Plan, an exhaustive analysis to determine the physical needs of the campus. The most recent Campus Master Plan (2010) revealed the need to create a more effective and welcoming campus and provide space for the current and future needs of academic programming and student services. The College is currently undertaking extensive renovation and construction that addresses the recommendations of that plan.

The first phase of the 2010 Campus Master Plan began in 2012 with the reconstruction of the north parking lots and the reconfiguration of the entrances at Euclid and Roselle Roads to provide a safer and more sustainable campus. The design incorporated the use of vegetated swales to help channel and filter storm water, native plantings and returned nearly an acre of land to green space.

In 2014, the College completed the renovation of two 1970s era buildings to create the Engineering and Technology Center (Building H), funded by a combination of capital referendum dollars matched by a grant from the State of Illinois. This new building houses enhanced facilities to accommodate the growing demand for career training programs that lead directly to jobs such as manufacturing, welding, architectural technology, heating, ventilation and air conditioning (HVAC), maintenance technology, law enforcement and fire science. Some of the programs have experienced double-digit enrollment increases as adults have gone back to school to train for new careers after the current economic downturn. In 2015, an adjacent space was built for Harper's innovative new Advanced Manufacturing program that was launched in 2012. A new parking garage was also constructed adjacent to the Engineering and Technology Center that provides convenient parking and enclosed access to the campus.

In May 2016, Building D completed its extensive renovation. This building was one of the original six buildings opened in 1969 and had remained virtually unchanged. Building D, like the others, meets LEED Silver standards and provide enhanced accessibility and state-of-the-art classrooms. Adjacent to Building D is a new multi-use outdoor pavilion. This venue will provide more outdoor gathering space for students as well as theater, concerts, graduation and other College-related events.

The 2010 Campus Master Plan also identified a new area that centralizes all student services in one location on campus as one of the top priorities for the campus. Construction of the new One Stop Admission and Campus/Student Center (Canning Center) is expected to be completed within two years after the State of Illinois releases their funding portion. That release is currently pending State budget approval. It will provide a natural meeting place for students and faculty and will include a lounge, food service facilities and other amenities.

Two other significant 2010 Campus Master Plan projects are currently in design development. The first is Building F, a complete renovation of the College's existing library. The second is the complete renovation of Building M, which houses classrooms, wellness and athletics. Finally, it should be mentioned that a significant portion of funds received in the last referendum have been allocated toward campus infrastructure improvements including building exteriors, windows and doors, mechanical, electrical, plumbing and HVAC. These equally critical components are necessary to keep our physical College assets in good working condition.

The Harper College campus is a vibrant and vital cornerstone of the community. Revitalizing campus buildings will enable the College to meet the projected needs of the students and the community through 2020.

## Campus Map

Harper College is located at 1200 West Algonquin Road, at the intersection of Algonquin and Roselle Roads in Palatine. [View the Campus Map.](#)

Areas of the campus are currently under construction as we implement the [Campus Master Plan](#). Please visit our [campus construction page](#) for the status of construction and any detours or changes in access to the campus and our buildings.

## Communities Served

- Arlington Heights
- Barrington
- Barrington Hills
- Inverness
- Buffalo Grove\*
- Carpentersville\*
- Deer Park\*
- Des Plaines\*
- Elk Grove Village
- Fox River Grove\*
- Hanover Park\*
- Hoffman Estates\*\*
- Lake Barrington
- Mount Prospect
- North Barrington
- Palatine
- Prospect Heights
- Rolling Meadows
- Roselle\*
- Schaumburg
- South Barrington
- Tower Lakes
- Wheeling

\* Portions of these communities are included in the district.

\*\* The area bounded by the Northwest Tollway on the south and Higgins Road on the north (but west of Illinois Route 59) is not in the Harper College district. This includes the Prairie Stone Office Park.

## Emergency Preparedness

Harper College has plans, procedures and resources in place to help detect, prevent and/or respond to potentially threatening situations that may occur. Your understanding of these tools promotes your personal safety and greatly contributes to our

commitment to protect our community from danger. Harper's Emergency Procedures and an overview of the Campus Emergency Operations Plan are accessible on the College's web site.

The ability to communicate during emergency situations is critical. We encourage all members of the Harper community to enroll in the Emergency Alert System on the College's web site. At no cost from Harper, registered participants will receive critical information via text message, voice message and/or e-mail regarding emergencies that have campus-wide impact or concern. For more detailed registration information regarding the Emergency Alert System, please contact Student Service Desk at 847.925.6866.

## Equal Opportunity Statement

Harper College does not discriminate on the basis of race, color, religion, sex, national origin, ancestry, age, marital status, sexual orientation, disability or unfavorable discharge from military service. This policy governs the recruitment and admission of students, the recruitment and employment of faculty and staff and the operation of any of the College's programs and activities as specified by federal laws and regulations. It is also the policy of Harper College that no student or employee shall be subjected to sexual harassment, which is regarded as a form of discrimination. Statutory references which support this practice include, but are not limited to the following:

- The Americans with Disabilities Act (ADA)
- The Illinois Human Rights Act (IHRA)
- Title VII of the Civil Rights Act
- The Vietnam Era Veterans and Veterans Act
- The Cook County Human Rights Ordinance
- The Family Medical Leave Act (FMLA)
- Title VI and Title IX of the Educational Amendments Act
- The Family Education Rights Privacy Act (FERPA)
- The Prevailing Wage Act
- The Freedom of Information Act (FOIA)
- The Gift Ban Act
- The Open Meetings Act
- The Investment of Public Funds Act
- The Tort Immunity Act, and
- The Health Insurance Portability and Accountability Act (HIPAA).

Inquiries should be directed to the [Chief Human Resources Officer](#).

Inquiries regarding Title IX and Sexual Misconduct should be directed to the College's Title IX Coordinators. For more information please refer to the [Title IX/Sexual Misconduct](#).

## History of Harper College

**As early as 1950**, discussion began about establishing a community college. An active committee was at work on the project in 1961, and a community survey was done in 1962. In 1964, an area community college committee studied the feasibility of establishing a community college. The study committee's report concluded with the recommendation that "the citizens of the two high school districts...take appropriate steps to bring the voters of the four townships the proposal that a community college be established."

**Early in 1966**, the present 200-acre campus site in Palatine was selected, and the College was named William Rainey Harper College, in honor of the first President of the University of Chicago and the originator of the community college concept. In

the spring, district voters approved a bond referendum by a four-to-one margin.

**In 1967**, Harper's first faculty members were hired, and classes for 1,725 students were begun in temporary facilities in September. In the same year, the College broke ground for the first six buildings on campus property.

The William Rainey Harper Educational Foundation was incorporated in 1973 to broaden and enrich the College program through support of such projects as scholarships and special project initiatives funded by private donations to the College.

**In September 1975**, a successful funding referendum was held that allowed the College to proceed with completion of the Palatine campus. Buildings G and H, housing vocational technology shops and laboratories, were completed in 1977. The Board of Trustees named an interim successor after the founding College President, Dr. Robert Lahti, resigned. Harper's second President, James McGrath, assumed the position the following year.

**In 1978**, the College began a major effort to develop a new master plan in concert with a comprehensive self-study effort. A referendum to increase operating revenue failed to gain voter approval that year. This led to major budget cuts in an effort to match expenditures with income.

**By 1980**, the campus had increased to 15 buildings with the opening of the physical education, athletics, and recreation facility (Building M) and business, social science, and vocational education housed in Buildings I and J.

**In 1982**, the College established a CAD/CAM training center in cooperation with high technology firms in the area. The center was designed to provide instruction and resource materials relating to computer-aided design and manufacturing.

**In February 1985**, district residents approved a tax rate increase for operation of the College. This was the first increase in tax support for the educational programs, services, and operating expenses of Harper College since the College was established.

**In 1988**, the College hired its third President, Dr. Paul Thompson, after the retirement of the Dr. McGrath. The College began an extensive study in 1990 which led to the vision statement "Our Preferred Future." More than 1,000 College personnel and community residents worked together to develop this document to serve as a Harper College planning guide until the year 2000. In response to an emerging industry need, the Corporate Services department, now called Harper College for Business, was established in 1991 as the College's office of first contact representing all programs of interest to businesses and industry, including credit classes, continuing education, and customized training.

**In 1992**, a new Information Systems Division was formed. Harper developed a new technology plan in 1994, following two years of extensive participation and input by administrators, faculty, and staff. In 1993, the College opened Building S to house the Publications and Communication Services department. In spring 1994, the Liberal Arts building was opened. Building L included the Liberal Arts Division office, classrooms, faculty offices, and the College Bookstore. A studio (Black Box) theater and three-dimensional art studios occupy the first floor of the facility. The two buildings were part of a building phase that also included renovations to Building F which houses the Learning Resources Center and the Academic Enrichment and Language Studies Division.

**In 1994**, the College purchased the Northeast Center (NEC). The Board of Trustees approved the first and second phases of the Technology Plan in 1995 and 1996. The campus computer

network was completed in 1996, providing links between offices and classrooms and as a resource to position Harper for higher education in the current century.

**In 1997**, Harper College received a 10-year re-accreditation from the North Central Association's Commission on Higher Education.

**In 1998**, Dr. Robert L. Breuder, the fourth President, was hired. The College implemented a new shared governance structure and published its first comprehensive strategic long range plan (SLRP). Groundbreaking for the new Performing Arts Center (PAC) and the Wojcik Conference Center was held on May 18, 2000. The new buildings were partially funded by the Illinois Capital Development Board. In 2002, the conference center opened and was named the Wojcik Conference Center in recognition of a \$1.1 million member initiative grant given to Harper by Illinois State Representative Kay Wojcik. At a special Board meeting on August 16, 2000, the Trustees were presented with a comprehensive long-range Campus Master Plan. The plan was intended to guide the College into the future. On November 7, 2000, the Harper College district residents passed an \$88.8 million referendum to build a new facility to house Harper's growing science, technology, and health care programs. Construction of Avanté began in fall 2001.

**On August 29, 2001**, Harper College purchased a new facility in Schaumburg for the Technical Education and Consulting at Harper (TECH) program. The facility, now called the Harper Professional Center (HPC), is the site for the new Fast Track degree option.

**In 2004**, Harper College served a total of 37,338 credit and noncredit students during the summer, fall, and spring terms, making Harper one of the largest community colleges in the country. In 2004, Harper College opened Avanté, Center for Science, Health Careers, and Emerging Technologies. In 2005, Avanté was selected as a Merit Award finalist by the Chicago Building Congress (CBC). The CBC praised Avanté for its distinctive design and outstanding construction, and its positive impact on the surrounding community. In 2006, Harper College received the National Science Foundation Undergraduate Research grant.

**In 2009**, Dr. Kenneth Ender became Harper College's fifth president.

**In 2010**, The College worked with community partners to develop a new five-year strategic plan. The plan emphasizes increasing the number of students who graduate from Harper with a degree or workforce certificate or transfer successfully to a four-year university. The plan focuses on four strategic directions: Completion (increase completion and achievement of all students with a focus on underperforming student groups), Accountability (create a culture of innovation, accountability and transparency), Partnerships (engage in partnerships to develop programs in existing and emerging career areas that enable students to succeed in a global economy) and Inspiration (develop programs with educational partners that inspire postsecondary education and career readiness as a life goal.)

**In 2011**, The College approved a new Campus Master Plan. The plan outlines a comprehensive ten-year program to renovate the campus to meet the needs of 21st century teaching and learning.

**In 2012**, The U.S. Department of Labor awarded Harper \$12.9 million to expand the Advanced Manufacturing program to community colleges across Illinois. The program offers industry-endorsed skills certificates and paid internships with local manufacturers. It's also designed to encourage younger students to consider a manufacturing career by offering college credit to high school students.

**In 2013**, The College broke ground on \$38 million renovation of the Engineering and Technology Center. The project includes new state of the art classrooms for career and technical programs and expanded facilities for Harper's innovative Advanced Manufacturing Program. The College also broke ground on the \$46 million renovation of Building D which includes new lecture halls, general classrooms and student study and commons areas.

**In 2014**, The College relaunched the Northeast Center (NEC) in Prospect Heights as the [Harper College Learning and Career Center \(LCC\)](#) with a target market focus on local community needs, credential programs, wrap-around services and workforce emphasis.

The College simultaneously launched the [Education and Work Center \(EWC\) in Hanover Park](#), an unprecedented partnership with Elgin Community College, the Village of Hanover Park, the State of Illinois and the Chicago-Cook Workforce partnership. The EWC offers adult education programs and a full-service Illinois WorkNet® Center for career support. Harper College offers classes during the day and Elgin Community College offers evening classes.

**In 2015**, the College launched the Harper College Promise Scholarship Program. The program offers every eligible public high school freshman in Harper's district the opportunity to attend Harper for up to two years tuition-free if, during high school, they maintain solid grades, have good attendance, don't repeat classes, graduate on time and perform community service. During its first year more than 4,600 high school freshmen in Harper's district signed up for the program.

## Mission, Vision, Philosophy, Core Values

### Mission

Harper College enriches its diverse communities by providing quality, affordable, and accessible education. Harper College, in collaboration with its partners, inspires the transformation of individual lives, the workforce, and society.

### Vision Statement

Committed to academic integrity and excellence, Harper College will be a leader in teaching and learning, transforming lives by responding to the needs of the individual and the community.

### Philosophy Statement

We, at Harper College, believe that our charge is to facilitate active learning and foster the knowledge, critical thinking and life/work skills required for participation in our global society. We work with our community partners to enrich the intellectual, cultural and economic fabric of our district. We believe that excellence in education must occur in an ethical climate of integrity and respect. We hold that the strength of our society is rooted in our diversity and that it is through synergy that we achieve excellence.

### Core Values

- **INTEGRITY**  
Result: An environment where relationships and practices are based on trust. Key Action: Be responsible and accountable for your own actions.
- **RESPECT**  
Result: Interactions which add dignity to ourselves, our relationships with others and our organization. Key Action: Value and celebrate the uniqueness of individuals.
- **EXCELLENCE**



Result: Student, employee and organizational success through a creative and responsive work environment by exceeding the needs and expectations of all. Key Action: Effectively anticipate, identify and respond to learner, employee and organizational needs.

- **COLLABORATION**  
Result: Accomplishment of better results by working together than otherwise likely to occur by working alone. Key Action: Address issues as they arise and take necessary actions to productively resolve them.

## Administration

### Executive Council

**Kenneth Ender**  
President

**Maria Coons**  
Chief of Staff and Vice President of Workforce, Planning and Institutional Effectiveness

**Ronald Ally**  
Executive Vice President of Finance and Administrative Services

**Laura Brown**  
Vice President and Chief Advancement Officer

**Judith Marwick**  
Provost

**Mark Mrozinski**  
Assistant Vice President for Workforce and Strategic Alliances / Executive Dean

**Michéle Smith**  
Associate Provost/Special Assistant to the President for Diversity and Inclusion

### Administration

**Vicki Atkinson**  
Director of New Student Programs and Canning Women's Program

**Kenya Ayers**  
Vice President and Chair of the Board of NECSS

**Michael Barzacchini**  
Director of Marketing Services

**Michael Bates**  
Associate Dean Academy for Teaching Excellence

**Patrick Bauer**  
Chief Information Officer

**Jennifer Berne**  
Dean of Liberal Arts

**Bret Bonnstetter**  
Controller

**Kathy Bruce**  
Dean of Mathematics and Science

**Bridget Cahill**  
Director of Health Services

**Kathleen Canfield**  
Director of Job Placement Resource Center

**Kimberly Chavis**  
Dean of Health Careers

**Susan Contarino**  
Director of Client Services

**Katherine Coy**  
Director of Institutional Research

**Darryl Knight**  
Interim Executive Director of Facilities Management

**Julie D'Agostino**  
Director of Nursing

**Andrea Fiebig**  
Director of Adult Educational Development

**Paula Hanley**  
Director of Student Services of One Stop

**Travaris Harris**  
Dean of Student Affairs

**Kristin Hoffhines**  
Director of One Million Degrees Program

**Njambi Kamoche**  
Dean of Resources for Learning

**Brian Knetl**  
Associate Provost

**Rebecca Lake**  
Dean of Workforce and Economic Development

**Paul LeBreck**  
Chief of Police

**Laura McGee**  
Director of Student Financial Assistance

**Maria Moten**  
Assistant Provost/Dean of Enrollment Services

**Keith O'Neill**  
Associate Dean of Student Affairs

**Mary Beth Ottinger**  
Dean of Career and Technical Programs

**Sheryl Otto**  
Assistant Provost/Dean of Student Development

**Robert Parzy**  
Director of Admissions Outreach

**Stephen Petersen**  
Campus Architect

**Kathryn Rogalski**  
Dean of Business and Social Science

**Eric Rosenthal**  
Director of Academic Advising and Counseling/Transfer Coordinator

**Darlene Schlenbecker**  
Executive Director of Planning, Research and Institutional Effectiveness

**Roger Spayer**

Chief Human Resources Officer

**Douglas Spiwak**

Director of Athletics and Fitness

**Darice Trout**

Associate Dean of Interdisciplinary Programs

**Heather Zoldak**

Associate Executive Director of Foundation/Major Gifts

**Affiliations by Division**

- [Academic Enrichment and Engagement](#)
- [Business and Social Science](#)
- [Career and Technical Programs](#)
- [Continuing Education](#)
- [Enrollment Services](#)
- [Harper College for Business](#)
- [Liberal Arts](#)
- [Mathematics and Sciences](#)
- [Resources for Learning](#)
- [Student Affairs](#)
- [Student Development](#)
- [Third-Party Certifications](#)

**Academic Enrichment and Engagement**

- Member, Association of International Student Educators (NASFA)
- Member, Commission on Adult Basic Education (COABE)
- Member, Illinois Adult and Continuing Educators Association (IACEA)
- Member, Illinois TESOL/Bilingual Education (ITBE)
- Member, International Reading Association (IRA)
- Member, National Association for Developmental Education (NADE)
- Member, National College Transition Network (NCTN)
- Member, National Council of Teachers of English (NCTE)
- Member, National Council of Teachers of Mathematics (NCTM)
- Member, Network of Intensive English Programs: Illinois, Indiana and Wisconsin
- Member, Teachers of English to Speakers of Other Languages (TESOL)

**Business and Social Science**

- The Harper College Child Learning Center is licensed by the Department of Children and Family Services.
- Registered by the State of Illinois as a Public Accountant Continuing Professional Education Sponsor (CPA classes)
- Student Chapter of Kappa Beta Delta, the national business honor society (ACBSP)
- Harper College is an Illinois Gateways to Opportunity Credentials Entitled Institution

**Career and Technical Programs**

- Air Conditioning Contractors of America (ACCA)
- American Association for Paralegal Education
- American Culinary Federation (ACF)
- American Hotel & Lodging Association (AH & LA)
- American Institute of Architects (AIA)

- American Judicature Society (AJS)
- American Radio Relay League (ARRL)
- American Society for Engineering Education (ASEE)
- American Society of Interior Designers (ASID)
- American Society of Law Enforcement Trainers (ISLET)
- American Technical Education Association
- American Welding Society
- Association of Graphic Solutions Providers, The (IPA)
- Association of Licensed Architects (ALA)
- Association of Nutrition and Foodservice Professionals (ANFP)
- AutoCAD Users Group International (AUGI)
- Building Officials and Code Administrators (BOCA)
- Building Officials and Code Administrators – International Code Council (BOCA – ICC)
- Consortium for Design and Construction Careers
- Coordinators of Community College Architecture Programs (CCCAP)
- Council of Supply Chain Management Professionals (CSCMP)
- Fabricators and Manufacturers Association, International (FMA)
- Fire Department Safety Officers Association (FDSOA)
- Fire and Emergency Services Higher Education (FESHE)
- Flexographic Technical Association (FTA)
- Graphic Communications Guild (GCG)
- Great Lakes Graphics Association
- Idealliance (IDEA)
- Illinois Academy of Criminology (IAC)
- Illinois Advisory Commission on Arson Prevention (IACAP)
- Illinois Association of Architecture Instructors
- Illinois Building Commission (IBC)
- Illinois Council of Air Conditioning & Refrigeration Educators (ICARE)
- Illinois Drafting Educators Association (IDEA)
- Illinois Department of Finance and Professional Regulation (IDFPR)
- Illinois Department of Public Health Food Managers Certification
- Illinois Fire Chiefs Association (IFCA)
- Illinois Green Economy Network (IGEN)
- Illinois Office of the State Fire Marshal (IL OSFM)
- Illinois Paralegal Association
- Illinois Professional Firefighters Association (IPFA)
- Illinois Restaurant Association (IRA)
- Illinois Society of Fire Service Instructors (ISFSI)
- Illinois Society of Professional Engineers (ISPE)
- Institute of Electrical and Electronics Engineers (IEEE)
- International Association for the Study of Organized Crime (IASOC)
- International Association of Auto Theft Detectives (IAATI)
- International Association of Chiefs of Police (IACP)
- International Association of Fire Chiefs (IAFC)
- International Association of Intelligence Analysts (IALEIA)
- International Design Educators Council
- International Digital Enterprise Alliance (IDEAlliance)
- International Food Services Executives Association (IFSEA)
- International Furnishings and Design Association (IFDA)
- International Graphic Arts Education Association (IGAEA)
- International Homicide Investigators Association (IHIA)
- International Interior Design Association (IIDA)
- Lake County Chiefs of Police Association
- Lithographers Club of Chicago
- Manufacturing Skill Standards Council
- Midwest Organization for Human Services (MWOHS)
- National Association of Legal Assistants
- National Alliance on Mental Illness (NAMI)
- National Association of Remodeling Industry (NARI)
- National Association of Social Workers (NASW)
- National Coalition of Certification Centers (NC3)
- National Fire Academy Alumni Association (NFAAA)

- National Fire Protection Association (NFPA)
- National Kitchen and Bath Association (NKBA)
- National Restaurant Association (NRA)
- National Society of Professional Engineers (NSPE)
- Northwest Building Officials and Code Administrators (NWBOCA)
- Northwest Suburban Alliance on Domestic Violence (NWADV)
- Northwest Suburban Chiefs of Police Association
- Northwest Suburban Bar Association
- PIA/GATF – Printing Industries of America (PIA)/Graphic Arts Technical Foundation (GATF)
- Radio Amateur Satellite Corporation (AMSAT)
- Radio Club of America (RCA)
- Refrigeration Service Engineer Society (RSES)
- School Excelling Through National Skills Standards Education (SENSE)
- Society of Broadcast Engineers (SBE)
- Student Chapter of Lambda Epsilon Chi, the National Paralegal Honor Society
- Suburban Law Enforcement Academy (SLEA)
- United States Green Building Council (USGBC)

### Continuing Education

- ACT WorkKeys Test Center
- American Heart Association
- American Massage Therapy Association
- Associated Bodywork and Massage Professionals
- Authorized Autodesk Training Center
- Certiport Authorized Partner
- CompTIA Learning Alliance – Education to Career Programs (E2C)
- Condensed Curriculum International
- Eagle Training
- HealthPro Rehab
- Illinois Department of Transportation
- innovative Exams
- Manufacturing Skills Standards Council (MSSC)
- Microsoft Partner for Learning Solutions
- National Association of Veterinary Technicians in America
- National Guild for Community Arts Education
- Oracle Academic Initiative Workforce Development Program
- Pearson Vue Authorized Test Center (PVTC)
- Performance Assessment Network (PAN)
- Prometric Authorized Test Center (APTC)
- Sylvan Learning

### Enrollment Services

- National Association for College and Admissions Counselors (NACAC)
- Illinois Association for College and Admissions Counselors (IACAC)
- American Association of Collegiate Registrars and Admissions Officers (AACRAO)
- Illinois Association of Collegiate Registrars and Admissions Officers (IACRAO)
- National College Testing Association (NCTA)
- Illinois Community College Admissions and Records Officers Organization (ICCAROO)
- National Association of Financial Aid Administrators (NASFA)
- Midwest Association of Student Financial Aid Administrators (MASFAA)
- Illinois Association of Student Financial Aid Administrators (ILASFAA)

### Harper College for Business

- AchieveGlobal: Leadership, Customer Service, Sales Performance
- Certification in Production & Inventory Management (CPIM Review)
- Certification in Purchasing Management (CPM Review)
- CISCO: Cisco Certified Network Associate (CCNA)
- Command Spanish
- Comprehensive Adult Student Assessment System (CASAS): ESL, Basic Skills
- Development Dimensions International (DDI): Leadership, Customer Service
- Tests of Adult Basic Education (TABE)

### Liberal Arts

- Accredited by the National Guild of Community Music Schools
- American Symphony Orchestra League
- Association of Departments of English (ADE)
- Association of Illinois Music Schools (AIMS)
- Community College Humanities Association (CCHA)
- Illinois Council of Orchestras
- Institutional Chapter of Phi Theta Kappa, International honor society for two-year institutions; student chapter
- Modern Language Association (MLA)
- National Association of Schools of Music (NASM)
- National Guild of Community Music Schools
- Registry of Interpreters for the Deaf (RID)

### Mathematics and Sciences

- American Academy of Actuaries
- American Association for the Advancement of Science (AAAS)
- American Association of Physics Teachers
- American Astronomical Society
- American Chemical Society (ACS), Division of Chemical Education
- American College of Sports Medicine (ACSM)
- American Council on Exercise (ACE)
- American Geophysical Union (AKA)
- American Kinesiology Association
- American Mathematical Society (AMS)
- American Mathematics Association of Two Year Colleges (AMATYC)
- American Physical Society
- American Society for Engineering Education
- American Society of Microbiologists
- American Sport Education Program (ASEP)
- American Statistical Association
- Association for Computing Machinery (ACM)
- Association for the Education of Teachers of Science (AETS)
- Association of College and University Biology Educators
- Association of Environmental and Engineering Geologists
- Association of Mathematics Teacher Educators (AMTE)
- Astronomical Society of the Pacific
- Casualty Actuarial Society (CAS)
- Chicago Section American Association of Physics Teachers
- Committee on Chemistry of the Two Year College, Division of Chemical Education, American Chemical Society (2YC<sub>3</sub>)
- Consortium for Computing Sciences in Colleges (CCSC)
- Consortium for Mathematics and Its Applications, The (COMAP)
- Ecological Restoration
- Ecological Society of America

- EDS PLM Solutions
- Explorers Club
- Geological Society of America
- Human Anatomy and Physiology Society
- Illinois Academy of Science
- Illinois Association of Chemistry Teachers (IACT)
- Illinois Association of Community College Biologists
- Illinois Council of Teachers of Mathematics (ICTM)
- Illinois Education Association (IEA)
- Illinois Lake Management Association
- Illinois Learning Specialist and Development Educators (ILSADE)
- Illinois Mathematics Association of Community Colleges (IMACC)
- Illinois Mathematics Teacher Educators (IMTE)
- Illinois Ornithological Society
- Illinois Science Teachers Association (ISTA)
- Illinois Section America Association of Physics Teachers (ISAAPT)
- Illinois Section of the Mathematics Association of America (ISMAA)
- Illinois Society of Professional Engineers (ISPE)
- Institute of Electrical and Electronics Engineers (IEEE)
- Institute of Mathematical Statistics
- Mathematics Association of America (MAA)
- Metropolitan Mathematics Club of Chicago (MMC)
- The National Association for Developmental Education (NADE)
- National Association for Research in Science Teaching (NARST)
- National Association of Biology Teachers
- National Association for Sports Medicine (NASM)
- National Council of Teachers of Mathematics (NCTM)
- National Science Teachers Association (NSTA)
- National Strength and Conditioning Association (NSCA)
- Natural Areas Association
- Natural Lands Institute
- Physics Northwest
- Project Kaleidoscope (PKAL)
- Society for College Science Teachers (SCST)
- Society of the Directed Energy Directorate
- Society of Health and Physical Educators (SHAPE)
- Society for Public Education (SOPHE)
- Tex User's Group (TUG)
- The Astronomical Society of the Pacific
- Women in Mathematics Education (WME)

## Resources for Learning

- Member, American Library Association (ALA)
- Member, Amigos Library Services
- Member, Illinois Community Colleges Online (ILCCO)
- Member, College and Research Libraries (ACRL)
- Member, Consortium of Academic and Research Libraries in Illinois (CARLI)
- Member, Illinois Library Association (ILA)
- Member, Network of Illinois Learning Resources in Community Colleges (NILRC)
- Member, International Writing Centers Association
- Member, Library Orientation Exchange (LOEX) Clearinghouse for Library Instruction
- Member, Midwest Writing Centers Association
- Member, National Council for Learning Resources (NCLR)
- Member, National Tutoring Association
- Member, Online Computer Library Center (OCLC)
- Member, Reaching Across Illinois Library Systems (RAILS)

## Student Affairs

- American College Health Association (ACHA)
- Association for Student Conduct Administration (ASCA)
- College Student Educators International (ACPA; formerly known as American College Personnel Association)
- National Alliance of Two-Year College Athletic Administrators (NATYCAA)
- National Behavioral Intervention Team Association (NaBITA)
- National Junior College Athletic Association (NJCAA)
- National Wellness Institute (NWI)
- North Central Community College Conference (N4C)
- Student Affairs Professionals in Higher Education (NASPA; formerly known as National Association for Student Personnel Administrators)

## Student Development

- Association of University and College Counseling Center Directors
- Association on Higher Education and Disability
- National Association of Colleges and Employers

## Third-Party Certifications

### ACT WorkKeys®

- National Career Readiness Certificate (NCRC)

### Autodesk

- Autodesk AutoCAD Certified User
- Autodesk AutoCAD Certified Professional

### Cisco

- Cisco Certified Network Associate (CCNA)

### CompTIA Learning Alliance

- A+
- Linux+
- Network+
- Security+
- Project+

### Intuit QuickBooks

- Intuit QuickBooks Certified User

### Manufacturing Skill Standards Council Certified Production Technician in:

- Safety
- Quality Practices and Measurement
- Manufacturing Processes and Production
- Maintenance Awareness and Green Production

### Microsoft Partner for Learning Solutions

- Microsoft Office Specialist (MOS)
- Microsoft Technology Associate (MTA)

### Oracle Workforce Development Program

- Oracle Certified Associate
- Oracle Certified Professional

### Project Management

- Certified Associate in Project Management Professional (CAPM®)
- Project Management Professional (PMP®)

**Board of Trustees**

The Board of Trustees is composed of seven elected individuals who represent the voters of the district and one student representative, who has an advisory vote, elected by the student body for a one-year term.

Meetings of the Board of Trustees, which are open to the public, are held each month on the Harper Campus at Algonquin and Roselle Road in Palatine. Meeting dates and times are posted on [harpercollege.edu](http://harpercollege.edu).



Gregory Dowell, *Chair*  
Deer Park

Walt Mundt, *Vice-Chair*  
Palatine



Dr. Nancy Robb, *Secretary*  
Inverness

James Gallo  
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- [Faculty: A - E](#)
- [Faculty: F - M](#)
- [Faculty: N - R](#)
- [Faculty: S - Z](#)
- [Professor Emeritus](#)

**Faculty: A - E**

- [A-E](#)
- [F-M](#)
- [N-R](#)
- [S-Z](#)

**S. Aram Agajanian**  
Assistant Professor  
Manufacturing

- B.S., University of Rochester
- M.S., Syracuse University

**Anne Paslean Abasolo**  
Associate Professor

Student Development Faculty/Counselor

- B.A., Michigan State University
- M.S., National-Louis University

**Paula Akialis**

Instructor  
Health Information Technology

- B.S.N., University of Texas-Austin
- M.S., Loyola University
- M.B.A., University of Dallas

**Marjorie Allen**

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English as a Second Language and Linguistics

- B.A., University of Michigan, Ann Arbor, MI
- M.A., American University, Washington, DC

**Jane Allendorph**

Professor  
Dietetic Technician

- B.S., Purdue University
- M.S., Purdue University

**Ronald N. Ally**

Professor  
Executive Vice President of Finance and Administrative Services

- B.S., Elmhurst College
- M.S., Northern Illinois University
- Ed.D., Northern Illinois University
- Ed.S., Northern Illinois University

**Andrew Anastasia**

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- B.A., Illinois State University
- M.A., University of Wisconsin-Milwaukee
- Ph.D., University of Wisconsin-Milwaukee

**Barbara S. Anderson**

Professor  
Nursing

- A.D.N., Moraine Valley Community College
- B.S., Northern Illinois University
- M.S., St. Xavier College
- C.N.E., National League for Nursing Credentials

**Nancy Andrews**

Associate Professor

- R.D.H., University of Pittsburgh
- B.S.H.R.P., University of Pittsburgh
- M. Ed., National-Louis University

**David Antonides**

Associate Professor  
Student Development Faculty/Counselor

- B.S., Santa Clara University
- M.A., Fuller Theological Seminary; Graduate School of Psychology

**Mariano Arellano**

Assistant Professor  
Mathematics

- B.S., California State Polytechnic University
- M.S., California State Polytechnic University

**Chris Athanassopoulos**

Instructor  
Engineering

- B.S., University of Illinois
- M.S., University of Illinois

**Vicki Atkinson**

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Director of New Student Programs and Canning Women's Program

- B.A., Roosevelt University
- M.A. Ed., Roosevelt University
- Ed. D., Northern Illinois University

**Kenya Ayers**

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Vice President and Chair of the Board of NECSS

- A.B., University of Michigan
- M.S., Eastern Michigan University
- Ed.D., University of Houston

**Lisa Ayers**

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Nursing

- B.S.N., Indiana University
- M.S.N., Northern Illinois University
- CNE, Certified Nurse Educator

**Susanne K. Bajt**

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Computer Information Systems

- B.S., University of Illinois at Champaign/Urbana
- M.B.A., Lake Forest Graduate School of Management
- M.S. Ed., University of Illinois at Champaign/Urbana
- Ed.D., University of Illinois at Champaign/Urbana

**Todd Ballantyne**

Associate Professor  
Speech/Theatre

- B.A., Hastings College
- M.F.A., University of Iowa

**Michael J. Barzacchini**

Associate Professor  
Director of Marketing Services

- B.S., Ohio University
- M.A., Ohio University

**Michael Bates**

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Associate Dean of Center for Adjunct Faculty Engagement

- B.S., Indiana University
- M.S., University of Illinois at Champaign/Urbana
- Ed.D., National Louis University

**Patrick Bauer**

Associate Professor  
Chief Information Officer

- B.S., University of Michigan
- M.S., University of Michigan

**Patrick Beach**

Professor  
Hospitality Management

- A.B.A., Oakland Community College
- B.S., Grand Valley State University
- M.S., Central Michigan University

**Getachew Begashaw**

Professor  
Economics

- B.A., University of California - Santa Cruz
- M.A., Michigan State University
- Ph.D., Michigan State University

**Jennifer Bell**

Associate Professor  
Adult Educational Development

- B.A., University of Chicago
- M.A., University of Illinois at Chicago

**Michael Bentley Jr.**

Faculty Fellow  
Philosophy

- B.A., Northwestern University
- M.A., California Institute of Integral Studies

**Jennifer Berne**

Associate Professor  
Dean of Liberal Arts

- B.A., University of Michigan
- M.A., Northeastern University
- Ph.D., Michigan State University

**Kurt Billsten**

Assistant Professor  
Maintenance Technology

- B.S., Elmhurst College

**Margaret Bilos**

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Speech/Theatre

- B.S., Illinois State University
- M.A., Miami University of Ohio

**Shanté S. Bishop**

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- M.A. Ed., National-Louis University
- Ed.D., National-Louis University

**Lisa Blaylock**

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- B.A., Southeast Missouri State University
- M.S., Northern Illinois University

**Carole A. Bomba**

Professor  
Nursing

- A.D.N., Kent State University
- B.S.N., Kent State University
- M.S.N., Azusa Pacific University
- C.N.E., National League for Nursing Credentials

**Bret Bonnstetter**

Controller  
Associate Professor

- B.S., Iowa State University

**Sheri Bono-Striegel**

Instructor  
Diagnostic Medical Sonography

- A.A.S., Harper College

**Willis Boughton**

Associate Professor  
Computer Information Systems

- B.S., Kansas State University
- Ph.D., University of Illinois

**Barbara E. Bowker**

Professor  
Music

- B.A., Beloit College
- M.A.T., Beloit College
- M.M., University of Wisconsin – Madison
- Ph.D., Northwestern University

**David Braunschweig**

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Computer Information Systems

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- M.A., University of California, Riverside

**Robert Paul**

Professor

American Sign Language Studies/Sign Language Interpreting Program

- B.A., Gallaudet University
- M.S., Western Maryland College

**Jason Peot**

Professor

Art

- B.A., DePaul University
- M.F.A., Northern Illinois University

**Stephen Petersen**

Associate Professor

Campus Architect

- B.A., Iowa State University
- B.Arch., Iowa State University

**Paul Peterson**

Assistant Professor

English

- A.A., Oakton Community College
- B.A., University of Illinois
- M.Ed., DePaul University
- M.S., Northern Illinois University

**Kris E. Piepenburg**

Associate Professor

English

- A.A., Harper College
- B.A., University of Illinois at Chicago
- M.A., University of Illinois at Chicago

**Perry Pollock**

Professor

Art

- B.F.A., University of Illinois at Urbana - Champaign
- M.F.A., Bradley University

**Kimberley Polly**

Assistant Professor

Mathematics

- B.S., University of Wisconsin – Madison
- M.S., University of Missouri

**Kathryn Powell**

Professor

Adult Educational Development

- B.A., Cornell University
- Ed.M., Boston University

**Jeffrey Przybylo**

Professor

Speech/Theatre

- B.S., Northern Illinois University
- M.S., Illinois State University

**Helmut Publ**

Professor

Anthropology/Sociology

- B.A., University of the Americas, Mexico
- M.A., University of the Americas, Mexico
- C.A.S., Concordia University
- Ph.D., Southern Illinois University

**Laura Pulio Colbert**

Professor

Speech/Theatre

- A.A., Harper College
- B.S., Illinois State University



- M.F.A., National Theatre Conservatory

**Daniel Ranieri**

Assistant Professor  
Chemistry

- B.S., Northern Illinois University
- M.S., Northern Illinois University
- Ph.D., Northern Illinois University

**Pearl Ratunil**

Associate Professor  
English

- B.A., Antioch College
- M.A., University of Illinois at Chicago
- Ph.D., University of Illinois at Chicago

**Regina Rector**

Professor  
Biology

- B.S., Eastern Washington University
- M.S., Eastern Washington University

**Kathleen Reynolds**

Assistant Professor  
English as a Second Language

- B.A., College of Wooster
- M.A., University of Illinois at Chicago

**David Richmond**

Associate Professor  
History

- B.A., Manchester College
- M.A., Loyola University

**Stephany Rimland Sicner**

Associate Professor  
Art History

- B.A., University of Vermont
- M.A., University of Chicago

**Jace Robinson**

Associate Professor  
Biology

- B.S., Northern Illinois University
- M.S., Northern Illinois University

**Stephanie Robinson**

Instructor  
Medical Office Administration

- B.S., Mountain State University
- M.A., University of Phoenix

**Charles Roderick**

Assistant Professor  
Art

- B.F.A., University of Colorado, Boulder
- M.F.A., University of Illinois

**Kathryn Rogalski**

Associate Professor  
Dean of Business/Social Science

- B.A., Northeastern University
- M.A., University of Chicago

**Jennifer Rojek-Schullo**

Assistant Professor  
Student Development Faculty/Counselor

- B.S., Northern Illinois University
- M.S., National-Louis University

**Sam Rosby**

Associate Professor  
Art

- B.A., Northern Illinois University
- M.A., Northern Illinois University
- M.F.A., Northern Illinois University

**Eric Rosenthal**

Assistant Professor  
Director of Academic Advising and Counseling

- B.A., Rollins College
- M.S., University of Florida
- Ph.D., University of Florida

**Joanne Rothblum**

Professor  
Nursing

- B.S.N., University of Illinois Medical Center
- M.N., University of California - Los Angeles
- C.N.E., National League for Nursing Credentials

**Faculty: S - Z**

- [A-E](#)
- [F-M](#)
- [N-R](#)
- [S-Z](#)

**Judith Sallee**

Associate Professor  
Mathematics

- B.A., Ball State University
- M.A.M.Ed., De Paul University

**Darlene Schlenbecker**

Associate Professor  
Executive Director of Planning, Research and Institutional Effectiveness

- B.A., Northeastern Illinois University
- M.A., Ball State University

**Charlotte Schulze-Hewett**

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- B.S., Iowa State University
- M.S., University of Illinois at Chicago
- M.S., University of Illinois at Chicago

**Linda Schumacher**

Instructor  
World Languages

- B.A., Central College
- M.A., Northern Illinois University
- M.Ed., Northern Illinois University

**Nupur Sharma**

Assistant Professor

Fashion Design

- M.A., University of Cincinnati

**Silky Sharma**

Instructor  
Dental Hygiene

- A.A.S., Harper College
- B.S., Roosevelt University
- Ed.M., University of Illinois-Urbana

**Brian Shelton**

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Mass Communications

- B.A., University of Findlay
- M.A., Northern Illinois University

**Violet Shelton**

Instructor  
Medical Office Administration

- B.S., Governors State University
- M.S., Governors State University

**Jennifer Smith**

Associate Professor  
Nursing

- B.S., St. Lawrence University
- B.S.N., Georgetown University
- M.S.N., Loyola University
- M.B.A., Loyola University

**Leslye Smith**

Associate Professor  
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- A.A.S., Oakton Community College
- B.S., University of Health Science/Chicago Medical School
- M.A.Ed., Northwestern University
- M.A., Northeastern Illinois University

**Lisa Smith**

Instructor  
Supply Chain Management

- B.A., Michigan State University
- M.B.A., Northwestern University

**Michéle Smith**

Associate Professor  
Associate Provost/Special Assistant to the President for Diversity and Inclusion

- B.A., Northwestern University
- M.Ed., National Louis University

**Barbara Solheim**

Professor  
Philosophy

- A.A., College of Lake County
- B.A., University of Illinois at Chicago
- M.A., University of Illinois at Chicago
- Ph.D., University of Illinois at Chicago

**Roger Spayer**

Associate Professor  
Chief Human Resources Officer

- B.A., Western Illinois University
- M.P.A., University of South Florida

**Douglas Spiwak**

Assistant Professor  
Director of Athletics and Fitness

- B.S., University of Illinois
- M.S. Ed., Northern Illinois University

**Daniel Stanford**

Professor  
Chemistry

- B.S., University of Illinois at Chicago
- M.S., University of Illinois at Chicago
- Ph.D., University of Illinois at Chicago

**Thomas Stauch**

Professor  
Music

- B.A., Western Illinois University
- M.M., Arizona State University
- D.M.A., Arizona State University

**Craig Stettner**

Professor  
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- B.S., Purdue University
- M.S., Ball State University
- M.S., Iowa State University

**Anna Stroh**

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Health Information Technology

- B.S., Illinois State University

**Jane Suárez del Real**

Assistant Professor  
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- B.A., University of Wisconsin
- M.A., Seattle University

**Bobby Summers**

Professor  
Political Science

- B.A., Southern Illinois University
- M.A., Southern Illinois University
- M.A.T., National-Louis University
- M.S. Ed., Northern Illinois University

**Joshua Sunderbruch**

Professor  
English

- B.A., Bradley University
- Ph.D., Southern Illinois University

**Dominique Svarc**

Associate Professor  
Accounting

- B.S., Northern Illinois University
- M.B.A., Northern Illinois University
- C.P.A., State of Illinois

**Joella Tabaka**

Instructor  
Nursing

- B.S., Kaplan University
- M.S.N., Kaplan University

**Chad Taylor**

Associate Professor  
Mathematics

- B.S., Illinois State University
- M.S., Illinois State University

**Kelly Taylor**

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Graphic Arts

- B.S., Illinois State University
- M.S., Illinois State University

**Elayne MacArdy Thompson**

Professor  
Psychology

- B.A., University of Wisconsin–Milwaukee
- M.A., Kent State University
- Ph.D., Kent State University

**Colleen V. Tomanek**

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Student Development Faculty/Counselor

- A.A., Harper College
- B.S., University of Illinois at Urbana - Champaign
- M.A., University of Chicago

**Alicia Tomasian**

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English

- B.A., Bates College
- M.A., University of Chicago
- Ph.D., University of Chicago

**Darice Trout**

Assistant Professor  
Associate Dean/Interdisciplinary Programs

- B.S., University of Illinois at Urbana - Champaign
- M.A., University of Illinois at Chicago

**Elizabeth Turner**

Professor  
English

- B.A., George Mason University
- M.A., University of Tulsa
- Ph.D., University of Nebraska

**Jose Vital**

Instructor  
Heating and Air Conditioning

**Joseph Wachter**

Associate Professor  
Chemistry

- B.S., University of Michigan
- M.S., Michigan State University

**Valerie Walker**

Assistant Professor  
Human Services

- B.A., University of Iowa
- M.S.W., University of Illinois at Chicago
- Licensed Clinical Social Worker – IL

**Jessica L. Walsh**

Professor

English

- B.A., Kalamazoo College
- M.A., The University of Iowa
- Ph.D., The University of Iowa

**Christine Wayne**

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- M.B.A., Northern Illinois University

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- M.A., Gallaudet University
- M.A., McDaniel College

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English

- B.A., University of Illinois at Urbana - Champaign
- M.Ed., University of Illinois at Urbana - Champaign

**LaVonya Williams**

Associate Professor  
Student Development Faculty/Counselor

- B.S., Western Illinois University
- M.S. Ed., Western Illinois University

**Andrew Wilson**

Professor  
English

- B.S., Bowling Green State University
- B.A., Bowling Green State University
- M.A., Ohio University
- M.A., Northeastern Illinois University
- Ph.D., Kent State University

**Joyce Wisniewski**

Associate Professor  
English as a Second Language and Linguistics

- A.A., Harper College
- B.A., University of Missouri
- M.A., Wheaton College

**Renee S. Zellner**

Professor  
Kinesiology and Health Education

- B.S., University of Wisconsin
- M.A., Northwestern University

**Heather Zoldak**

Assistant Professor  
Associate Executive Director of Foundation/Major Gifts

- B.A., University of Wisconsin

**Kathy Zuo**

Associate Professor  
English as a Second Language and Linguistics

- B.A., Moody Bible Institute
- M.A., University of Illinois

## Professor Emeritus

### **Awarded 2004**

Steven Catlin, Jean Chapman, J. Harley Chapman, Thomas Johnson, Patricia Mulcrone, Janice Phillips

### **Awarded 2005**

Sharon Alter, James Amesen, Roger Bechtold, Solveig Bender, Virginia Bender, Carol Bennett, Richard Bernstein, Patricia Best, Robert Boeke, Francis Brantley, Margaret Burbach, Pauline Buss, Cecilia Cooper, Therese Cummings, John W. Davis, John Dodds, George Dorner, George Evans, John Gallagher, Robert Held, Charlotte Herzog, Marianne Holt, Elizabeth Hull, Randy Illg, Sally Koziar, Carole Lissy, David Macaulay, Dominic Magno, Mercedes McGowen, Edger Metcalf, William Miller, Joyce Nolen, Charles Norris, Michael Oester, Barbara Olson, John Papandrea, Edward Ponczek, William Punkay, Barbara Radenbaugh, William Schooley, Martha Simonsen, Jay Singlemann, Frank Smith, Phillip Stewart, Jerome Stone, Jane Ann Thomas, Robert Tillotson, Jake Duane Tippens, Phillip Troyer, Mary Waite, Mary Jo Willis, Joseph Yohannon

### **Awarded 2006**

Dianne Batzkall, John Eliasik, Susan Farmer, William Jedicka, Marcia Litrenta, Paul Szipera

### **Awarded 2007**

John Kiener, Margaret Smith

### **Awarded 2008**

Karen Froelich, Jean-Louise Gustafson, Peggy Kazkaz, Christine Poziemski, Renate von Keudell, Barbara Weil

### **Awarded 2009**

Linda Nelson

### **Awarded 2010**

Michael Vijuk

### **Awarded 2013**

Randall Schietzelt

### **Awarded 2014**

Terry Ann Morris

### **Awarded 2016**

Wendy Mertes

## Resources for Students

- [Continuing Education, Workforce, and Community Services](#)
- [Enrollment Services](#)
- [Resources for Learning](#)
- [Student Services](#)

## Continuing Education, Workforce, and Community Services

### Continuing Education

The mission of Continuing Education (CE) at Harper College is to offer a variety of educational experiences and activities that respond to business, lifelong learning and personal needs of the community. Instructional formats including day, evening, and weekend courses, workshops, refresher skill programs, certificates, and certification preparation, and exams are available on the main campus and extension sites.

These programs promote the philosophy of ongoing learning to assist people in their educational pursuits, help them to participate in society, influence social and cultural change, and reach goals in their professional and personal lives.

Continuing Education course schedules are published and distributed throughout the year and are available at [harpercollege.edu/ce](http://harpercollege.edu/ce). Registration for Continuing Education offerings can be accomplished via the website, in person, or by phone at 847.925.6300.

Continuing Education offers more than 2,200 courses with enrollments of over 22,000 annually, and many courses are short term learning opportunities that can be completed in one semester or less. Continuing Education continually scans community needs leading to 30% of courses new each year. Courses are customarily taught by industry professionals who are dedicated to the profession, Harper College, and their students.

Continuing Education offers specific courses that are approved by the Illinois Community College Board for non-transferable credits which generally cannot be applied to credit or degree programs.

Below are examples of Continuing Education offerings.

**Career Skills Institute** provides an educational program for students with mild cognitive disabilities, age 18 and above, that assesses and strengthens basic employability skills and helps students develop a realistic career plan.

**Career Training** offers job skill certificates and courses for people changing careers or boosting skills to earn a promotion or get their next job. From one-day seminars to evening programs to weekend courses, courses equip learners with the skills needed to become more than they are today. Certificates and courses online or in the classroom include real estate licensing, professional communication, meeting and event planning, food sanitation standards, wedding consultant, refrigerant handling, and veterinary assistant.

**Community Music and Arts Center (CMAC)** instructors will help you pursue *your* music and refine your artistic craft. CMAC provides an environment that encourages each student to achieve his or her potential and thrive. CMAC is developing promising young talent to be the next generation of artists and musicians. We focus on providing quality music and arts education programs which draw on practice and theory and allow students to pursue a diverse range of career options relating to the music and arts industries.

**Computer Training** enables learners to master a new computer skill, learn a new software application, enhance project management skills, or advance a career with training and certifications in leading technologies. Sample programs include Office Applications, Project Management, Digital Media, Computer Aided Design, Programming and Web Development, Database Administration, Computer/Network Support and System Administration. Courses may be taken individually or as part of a certificate program.

**Health Careers** offers training in the largest industry in the U.S. An aging population has created a huge demand for skilled health care workers. Programs and courses include RN Refresher, CPR, Pharmacy Technician, Phlebotomy Refresher, Physical Therapy Aide, and Massage Therapy.

**InZone** offers kid-friendly and teen activities throughout the year. Each semester, you'll find courses for kids and teens, ages 8-18, including classes in athletics and swimming; kitchen creations; math and science; games; technology; the arts; stage, studio and screen; and writing.

**Lifelong Learning Institute** provides the experiences that enhance the joy of learning with peers, age 55+. With great discussions, innovative courses, and new friendships, the Lifelong Learning Institute (LLI) offers courses at a variety of convenient locations in the community. Learners explore topics such as aquatics, history, art, healthy living, music, literature, science, politics, philosophy, current events, and more. Membership's available providing access to free courses and members-only courses.

**Motorcycle Safety Program** is offered in partnership with the Illinois Department of Transportation on Harper's campuses and at sites throughout Cook County. Classes are offered free of charge to students. Students participate in classroom and hands-on instruction to learn the fundamental skills of straight-line riding, shifting, turning, and stopping, then work toward developing more complex street skills including essential braking, turning and swerving techniques. Students also focus on developing good mental strategies and managing special situations. Upon successful completion of the Basic course, the Illinois Secretary of State drivers license examiner will waive the written and the riding portion of the motorcycle license test for those aged 18 or older.

**Personal Enrichment** expands your world with courses that provide opportunities to learn a new hobby, learn a new skill, and enjoy time doing what fulfills the soul. Courses are offered in the arts, green living, home maintenance, public speaking, cooking, photography, wine, personal finance and more.

**Workforce Certification Center (WCC)** provides secure, reliable and convenient certification testing and proctoring services for our community. Located at the Harper Professional Center in Schaumburg, the WCC provides state-of-the-art technology and user-friendly service in the best possible testing environment. Services include group testing events, certification preparation training, workforce skills and career training, and the Mobile Workforce Unit is available to come to your location for these and other services.

### Harper College for Business

Harper College for Business provides customized training, education and consulting for business and industry that meets specific needs and can be conducted on-site or on the Harper campus.

As a true partner to the business community, Harper College for Business helps organizations translate business strategies into bottom line results through employee development. Harper College for Business is a major player in the learning arena. We

listen to the needs of organizations and then design solutions that meet those unique needs.

Harper College for Business serves as a gateway to the vast resources and learning opportunities that Harper College has to offer. These resources include leading-edge programs and courses, a talented faculty and staff, all complemented by state-of-the-art facilities. As a partner for business learning, we help organizations move forward by:

- Identifying key training needs
- Developing solutions using a consultative partnership approach
- Providing comprehensive, responsive product and service offerings
- Providing flexible, efficient delivery options sourcing only expert workforce instructors and consultants
- Customizing solutions to the needs of the organization
- Developing highly motivated employees who place customer satisfaction first
- Providing leadership in workforce and organizational development

Harper College for Business is a service organization—the success of our business partners defines our future.

For more information on how Harper College for Business can provide training, education or consulting opportunities that will help you develop your people and/or your organization, please call 847.925.6640, email [training@harpercollege.edu](mailto:training@harpercollege.edu) or visit [harpercollege.biz](http://harpercollege.biz).

**Wojcik Conference Center**

The Wojcik Conference Center contains a 250-seat state-of-the-art auditorium and dining room, and smaller conference rooms that can be rented for meetings, training, and special events.

For more information on the Conference Center, or to book space, please call 847.348.5100.

**Workforce and Economic Development**

The Workforce and Economic Development Department works with college departments, area high schools, and employers to meet labor force needs in the community. The Workforce and Economic Development Department includes four areas. The Job Placement Resource Center assists students preparing to seek employment opportunities in the area. The Illinois Small Business Development Center at Harper College provides outreach and support to small and medium-sized businesses to help them launch, grow and prosper. The Office of Apprenticeships coordinates the college growing apprenticeship programs. Finally, the department has administrative responsibilities of several workforce federal and state grants including those awarded through the Trade Adjustment Assistance Community College and Career Training (TAACCCT) Act.

**Job Placement Resource Center**

The Job Placement Resource Center provides services to help currently enrolled Harper students and alumni prepare for a successful job search that leads to employment. Services include help with resume and cover letters, interview preparation, and review of the “soft skills” required for today’s workplace. Check out the online job database for jobs in the Chicagoland area. This database offers full-time and part-time jobs, co-ops and internships 24/7. For more information at [www.harpercollege.edu](http://www.harpercollege.edu)

**Office of Apprenticeship**

The Office of Apprenticeship serves as the Harper representative to the federal Registered Apprenticeship College Consortium. The Office coordinates college-wide apprenticeship activities

enabling registered apprentices a planned career path in a variety of apprenticeships. The Office strengthens relationships with postsecondary institutions, employers, and other stakeholders in the greater Chicago area advancing flexible apprenticeship programs to meet the need for talented, skilled, and knowledgeable employees.

For more information call the Office of the Apprentices 847.925.6630 and [goforward.harpercollege.edu/academics/apprenticeships](http://goforward.harpercollege.edu/academics/apprenticeships) and the Apprenticeship on Demand web site [HarperAOD.org](http://HarperAOD.org).

**Small Business Development Center**

Small Business Development Center supports those with entrepreneurial interests with training, business plan development and resources. The Illinois Small Business Development Center at Harper College offers no-cost, confidential, one-to-one guidance and workshops to help small business owners achieve marketing, financial and operational success.

For more information or to make an appointment with a small business advisor, please call 847.925.6520 or email [sbdc@harpercollege.edu](mailto:sbdc@harpercollege.edu).

**Community Services**

From the beginning, College supporters have been committed to the concept of an institution oriented to its community. Harper has enjoyed a heartening involvement and interest by members of the community who continue to give countless hours to accomplish key phases of the College’s programs.

Advisory committee members selected from the community for their expertise and knowledge give support to Harper on career programs, management training seminars for business and industry, women’s programs, senior citizens’ programs, public relations, the College’s long-range plan and fund raising.

Community leaders serve as directors of the Harper College Educational Foundation, which provides scholarships and supports special projects to enhance the educational programs of the College.

In the early 1990s, the College enhanced its efforts to provide educational and training opportunities to employees of companies throughout the district. An Education Service Agreement allows employees of in-district companies to attend Harper at in-district tuition. Harper College for Business provides customized on-site training in everything from basic skills to new technologies. In addition, classes continue to grow in areas of English as a Second Language, citizenship preparation and Adult Educational Development.

As Harper plans for the future, input will be sought constantly and reevaluated to enable the College to continue to be accountable to the community it serves.

**Enrollment Services**

- [Academic Policies](#)
- [Admissions](#)
- [Financial Assistance](#)
- [Forgiveness Policy](#)
- [Grading](#)
- [Honors](#)
- [Registration Policies](#)
- [Repeat Policy](#)
- [Transcripts](#)
- [Tuition and Fees](#)

## Academic Policies

- [Assessment Testing and Placement](#)
- [Mandatory Advising](#)
- [Standards of Academic Performance](#)

## Assessment Testing and Placement

Harper College welcomes all who can benefit from the courses and programs offered. To that end an assessment policy is in place requiring all new degree-seeking students to complete writing, reading and math placement tests. Students entering their first English and/or math courses are also required to complete appropriate placement test(s).

### The goals of assessment are:

1. To inform students about their competency levels in English, reading/writing and math.
2. To place students in the English and math courses in which they have the best opportunity for success.

Students who place at the developmental level in any of the four subject areas are required to enroll in at least one developmental course their first semester and every subsequent semester until the respective initial college-level course is reached.

Details of the mandatory assessment testing and placement policy, including options for waiving testing, are available in the Testing Center.

## Mandatory Advising

### For Students on Probation, Post Suspension and Post Dismissal

As part of the required success-oriented strategies, students on probation, post suspension and post dismissal are required to see a counselor for educational planning and academic support. Individualized strategies will be developed to assist the student to identify causes of academic difficulties and to achieve satisfactory grade point averages. College services will be utilized to help the student reach his or her educational potential and goals. Students who fail to see a counselor will not be allowed to register for subsequent classes. Students placed on suspension and dismissal may seek counseling assistance during the semester(s) of non-attendance. Upon returning to school, previously suspended and dismissed students will be placed on post suspension or post dismissal, restricted to a maximum of 13 credit hours and required to see a counselor to develop success-oriented strategies before being allowed to register.

## Standards of Academic Performance

### Rationale for Standards

The Standards of Academic Performance at Harper College have been established in order to:

### Guide the student in pursuit of academic success:

The Standards assure the availability of services which can help students reach success as well as clearly notify them of their progress.

### Maintain an academic environment that clearly defines expectations for progress:

The Standards communicate the College's definition of academic progress. The Standards clarify College expectations and afford the student a guideline for setting realistic goals.

### Clarify the roles and responsibilities of students, faculty and administrators:

The Standards define the role of the student in terms of academic performance and responsibility as well as the role of College personnel in evaluating academic performance and intervening with special assistance at specific intervals.

### Allow the institution to maintain its academic integrity.

## Categories of Standards

### Good Standing

Students with a cumulative GPA of 2.0 or higher and students who have attempted\* fewer than seven credit hours or have not attended classes since the summer of 1989 are in good standing.

### Academic Caution

Students who have attempted\* seven and not more than 15 credit hours and have achieved a cumulative GPA of less than 2.0 will receive a caution notice and the recommendation to take advantage of various programs and services designed to help them achieve success.

### Academic Warning

Students who have a cumulative GPA of less than 2.0 and have attempted\* 16 or more credit hours, or have completed their second successive semester with a cumulative GPA of less than 2.0, are given academic warning. These students will be advised to restrict their enrollment to a maximum of 13 credit hours and may have other restrictions imposed upon them.

\* Refers to receipt of grades A, B, C, D and F.

### Probation

Students who were academically warned in a previous semester and have a cumulative GPA of less than 2.0 will be placed on probation. Students who have returned to good standing and then earn less than a 2.0 cumulative GPA will return to probation. These students will be restricted to a maximum of 13 credit hours and will be required to participate in success-oriented strategies.

### Suspension

Students who have attempted\* 40 or more credit hours, have had three successive semesters with a cumulative GPA of less than 2.0, with one of those semesters in probation, and earned below a 2.0 semester GPA (recalculated to include repeated courses) the last semester they were enrolled are placed on suspension. These students will be suspended from the College for one full semester (fall or spring). Students suspended after spring term will not be allowed to enroll for summer session or fall semester. Students must be involved in success-oriented strategies upon their return.

\* Refers to receipt of grades A, B, C, D and F.

### Dismissal

Students who have returned to the College after one semester of suspension and who receive a semester GPA of less than 2.0 (recalculated to include repeated courses) will be dismissed for a minimum of two full semesters (fall/spring or spring/fall). After this dismissal period, these students must petition the Dean of Student Development for reinstatement.

<b>Term</b>	<b>Reason</b>	<b>Action</b>
Academic Caution	Attempted 7+ credit hours and cumulative GPA less than 2.0.	Caution and recommendations of success-oriented strategies.
Academic Warning	Attempted 16 or more credit hours with cumulative GPA less than 2.0 or second successive semester with cumulative GPA less than 2.0.	Recommend restriction to maximum 13 credit hours. May have restrictions imposed.
Probation	Previous semester with Academic Warning and cumulative GPA less than 2.0.	Mandatory restriction to maximum of 13 credit hours. Required success-oriented strategies.
Suspension	Attempted 40 or more credit hours, at least three successive semesters with cumulative GPA less than 2.0 with one of those terms in probation and earned below a 2.0 semester GPA (recalculated to include repeated courses) the last semester they were enrolled.	One semester suspension. Required success-oriented strategies upon return.
Post Suspension	Semester after suspension and subsequent semesters with semester GPA of 2.0 or higher (recalculated to include repeated courses) and cumulative GPA of less than 2.0.	Mandatory restriction to maximum of 13 credit hours. Required success-oriented strategies.
Dismissal	One semester after suspension or a previous semester in post dismissal with semester GPA (recalculated to include repeated courses) and cumulative GPA less than 2.0.	Dismissal for two semesters. Must petition for reinstatement.
Post Dismissal	Semester after reinstatement from dismissal and subsequent semesters with semester GPA	Mandatory restriction to maximum of 13 credit hours. Required

<b>Term</b>	<b>Reason</b>	<b>Action</b>
	(recalculated to include repeated courses) of 2.0 or higher and cumulative GPA of less than 2.0.	success-oriented strategies.

### **Admissions**

- [Center for New Students and Orientation](#)
- [Early College Credit](#)
- [Eligibility / Dual Admission / Readmission](#)
- [International Students](#)
- [Limited Enrollment](#)
- [One Stop](#)
- [Testing Center](#)
- [Transfer of Credit](#)

### **Center for New Students and Orientation**

The Center for New Students and Orientation is available to all students entering the College for the first time. The Center for New Students and Orientation assists all admitted students by providing the preliminary information helpful in their transition to Harper College.

This center is responsible for New Student Orientation each semester. These programs provide opportunities for new students to become familiar with the campus and services available. Students begin setting goals and are assisted in the course selection and registration process.

For further information, contact the Center for New Students and Orientation at 847.925.6208.

### **Early College Credit**

#### **Concurrent Enrollment**

High School or home schooled students who are 16 years old and older, or who have junior or senior status, are eligible for concurrent enrollment consideration at Harper College pending the following:

1. Complete the Harper College Application for Admission (Early College - Concurrent/Home Schooled Version) and submit a one-time \$25 non-refundable application fee.
2. Complete the appropriate Early College Supplemental Form – High School Students or Home Schooled Students version – and submit it to the Center for New Students and Orientation along with the high school transcript or documentation of the home-schooled program.

Information will be reviewed by a counselor in the Center for New Students and Orientation in order to verify appropriate readiness for desired coursework. Additional information and/or a meeting with a counselor may be necessary before a final determination can be made. For further information, contact the Center for New Students and Orientation at 847.925.6208.

#### **Dual Credit**

The high school dual credit program provides an opportunity for qualifying high school students from Districts 211, 214 and 220 to



earn both high school and college credit. For further information, call 847.925.6364.

## Eligibility / Dual Admission / Readmission

### Eligibility

All high school graduates or the equivalent (students who have successfully completed a state-level high school enrollment certificate) are eligible for admission to the College. A non-graduate 16 or 17 years of age who has severed his or her connection with the high school system, as certified in writing by the chief executive officer (or designee) of the high school district in which the student has legal residence, or a non-graduate 18 years of age or older, may be admitted if he or she demonstrates the capacity to benefit from programs and courses offered by the College. High school students may be admitted to selected courses upon the written approval of their high school principal (or designee) and the designated College admissions official, and with written parental acknowledgement.

#### Applicants will be required to:

1. Complete a Harper College application.
2. Pay a \$25 nonrefundable application fee.
3. It is highly recommended that all applicants submit an official copy of their final high school transcript or the equivalent. Non high school graduates should contact the Center for New Students at 847.925.6208.
4. Submit official transcripts from all colleges attended, and complete the online Transcript Credit Evaluation Form.
5. Recent High school graduates are encouraged to provide ACT scores. Either an official ACT score report or an official high school transcript that includes ACT scores can be submitted to fulfill this requirement.

To be eligible for some College programs, the applicant may have to meet additional requirements as specified by that program.

### Dual Admission Programs

These agreements with selected universities allow students to apply for admission to Harper College and the four-year college to which they plan to transfer simultaneously. Dual admission provides a seamless transition between Harper and participating schools by providing optimum continuity of courses, faculty and resources during all four years of study. Dual Admissions Programs currently are offered through Harper College and the following four-year institutions: DePaul University, Governors State University, Northeastern Illinois University, Northern Illinois University, Rasmussen College, Roosevelt University and Western Illinois University. Applicants may obtain detailed program information from the Harper College Admissions Outreach office.

### Readmission

A student who has previously attended Harper College, and who is returning after an absence of one semester or more, does not need to complete an application for readmission. (An exception to this is a student who is applying for admission to a limited enrollment program. Contact the Health Careers Division Office for limited enrollment information.) If a student has attended any other educational institution since attending Harper, official transcripts from each college attended should be submitted to the One Stop. Students dismissed from Harper for disciplinary reasons must be reviewed by Harper's Dean of Student Affairs.

## International Students

Students from other countries attending Harper College are termed "international" students, according to the following definition: "A person who is a citizen of a country other than the United States who has a visa for educational purposes (F-1) with an intent to return to his or her homeland upon completion of his or her educational program."

International students must carry a minimum of 12 semester hours or be enrolled in the Intensive English Program. Because no scholarships are available to new international students, nor are they eligible for financial assistance, it is essential that students from outside the United States have sufficient funds to cover their expenses while in this country.

International students are not considered residents of the College district for purposes of in-district tuition or admission to limited enrollment programs.

International students are required to have health insurance coverage and will be charged an individual health insurance fee each semester. Students can receive a credit for the fee if they provide proof of equivalent coverage through a government or employer plan.

International students will be required to submit the following to the International Student Office at least eight weeks prior to the beginning of the semester or summer session in which they intend to begin their studies:

1. A completed Harper application (online or paper) with a non-refundable \$175 application fee.
2. Official transcripts and diploma of secondary school study and any university-level or postsecondary school work that has been completed or attempted. If these documents are not in English, they must be accompanied by authorized English translations.
3. An official Test of English as a Foreign Language (TOEFL) score report. To be considered for admission, students must receive a minimum score of 79 on the iBT. Students may choose to submit an official report of the IELTS with a minimum score of 6.5. This requirement will be waived for students applying to the Intensive English Program.
4. A bank certificate or letter verifying sufficient funds for tuition and living expenses.
5. A written statement regarding what the student plans to study at Harper.
6. International Student Responsibility Checklist, signed.
7. Copy of passport (visa stamp and I-94 card if already in the United States).
8. Photograph
9. Copy of I-20 if student is transferring from another U.S. college or university.

This information is subject to change by the Department of Homeland Security (DHS). Please consult harpercollege.edu for updates.

## Limited Enrollment

### Degrees

Dental Hygiene, Diagnostic Cardiac Sonography, Diagnostic Medical Sonography, Nursing, Radiologic Technology, Surgical Technology (Pending IBHE approval).

## Certificates

Cardiographic Technician, Computed Tomography, Emergency Medical Technician, Paramedic, Practical Nursing, Mammography, Magnetic Resonance Imaging.

For up-to-date information about eligibility for admission, requirements, procedures, and options available to students interested in limited enrollment and other programs, contact the Admissions Outreach Office or check the program website.

Limited enrollment program files will be reviewed after the initial program application deadline.

Because of the nature of clinical experiences, individualized instruction, specialized technology and the equipment necessary to offer certain limited enrollment programs, a higher tuition rate is assessed for career specific courses in most of these select programs. Tuition for these courses is 200 percent of the standard tuition rate.

## One Stop

The One Stop provides one-stop service to students and provides answers to student questions about course registration, billing and financial aid.

Services provided by the One Stop include:

- Registration Assistance
- Financial Aid and Scholarship Assistance
- Student Account and Billing Inquiries
- Payment Plan Information
- Records Information
- Add/Drop Processes
- General procedures and policies of the College
- Referrals to other areas on campus

## Testing Center

The Testing Center is responsible for the coordination and administration of course placement testing and other testing programs available to Harper College students. All new degree-seeking students are required to participate in an orientation program that includes placement testing. New degree-seeking students assess their academic skills in writing, reading and mathematics through this battery of tests. Tests for distance learning classes, independent study programs, proficiency and CLEP testing and entrance examinations for limited enrollment programs are coordinated in this office.

## Transfer of Credit

Degree and certificate-seeking students who have attended any other college(s) and want their transcripts evaluated must have an official transcript from each college or university attended sent to the Admissions Office immediately upon being admitted to Harper College. Students must also complete a Transcript Evaluation Request form found at [harpercollege.edu](http://harpercollege.edu). Once the evaluation request has been submitted and all transcripts have been received, results will be emailed to the student Harper email account and can be viewed online through the student portal. Transcript evaluations may take 2–3 weeks to process.

A student may transfer credit to Harper College according to the following conditions:

1. The collegiate institution previously attended must be a regionally accredited institution awarding college credit.
2. Credit may be transferred to Harper College for courses earning credit and successfully completed with a grade of D or better if the student's cumulative grade point average (GPA) is 2.0 or above (C average) at the previously attended institution. (Some programs may require grades of C or better, have time limitations or restrictions. Please refer to the current curriculum for possible exceptions.) If the student's cumulative GPA is less than 2.0 at a previously attended institution, credit may be transferred for courses earning credit and successfully completed with a grade of C or better. The student's work at each institution is evaluated independently if several institutions were attended. A student may complete a Transcript Evaluation Form in the One Stop or online at [harpercollege.edu](http://harpercollege.edu).
3. Credit may be transferred, but the grades earned at other institutions are not transferred, nor are the grades included in computing the cumulative GPA at Harper College. Grades from other institutions may be used to determine whether a student has successfully met course prerequisites. Elective credit may also be awarded for transfer course work with no direct equivalency at Harper College.
4. Courses which are a part of a department or program of study not offered by Harper College may be acceptable as elective credit.
5. Evaluation of credentials from a foreign country may be requested by contacting World Education Services at [www.wes.org](http://www.wes.org) or Educational Credential Evaluators at [www.ece.org](http://www.ece.org). The Office of the Registrar at Harper College will use the results to determine transfer of foreign credit to the College.
6. Effective for students following the 1999-2000 Catalog (and thereafter), transfer students must earn a grade of C or better in their courses equivalent to ENG 101-Composition and ENG 102-Composition at the collegiate institution previously attended. This requirement will be in place for the A.A., A.S., A.F.A. and A.E.S. and some A.A.S. degrees, as well as the IAI core curriculum for students who are not completing the degree.

## Financial Assistance

Harper College offers an outstanding education at an affordable cost. Many of our students receive grants, scholarships, campus employment, and loans to help with their education related expenses.

The primary responsibility of paying for a college education rests with the student and the student's family. If the financial assistance awarded does not cover expenses, the student is responsible for paying the remainder within Harper College's established payment deadlines.

The majority of the funds are based on demonstrated financial need. To be considered for financial aid, the student must:

- [Apply for Financial Aid](#) by completing the Free Application for Federal Student Aid (FAFSA), a federal form, at [www.fafsa.gov](http://www.fafsa.gov) and related steps;
- [Apply for Scholarships](#); and
- [Meet General Eligibility Requirements](#).

Detailed information about financial aid requirements, deadlines, and programs is available at [harpercollege.edu/financialaid](http://harpercollege.edu/financialaid)

## Return to Title IV Policy for Financial Aid Recipients

The federal government requires that Harper College reviews a student's eligibility for Title IV federal funds when he/she withdraws, either officially or unofficially, and on or before completing 60 percent of the term. Federal financial assistance includes a Federal Pell Grant, Federal Supplemental Education Opportunity Grant, Iraq Afghanistan Service Grant, Federal Direct Loan, and/or a Federal Direct PLUS Loan. A federally mandated formula determines how much of a student's federal funding was "earned" up to the time of withdrawal. This review and recalculation is called a "Return of Title IV Aid."

The official date of withdrawal is the withdrawal date as recorded by the Registrar's Office. Once a complete withdrawal occurs, the federal Return to Title IV funds calculation is used to determine the amount of aid that the student earned. The number of days the student attended is then used, along with the student's institutional costs and the total federal funds the student was eligible to receive, to determine the amount of aid that the student has earned.

Any Title IV funds that were disbursed for the payment period that are in excess of the amount calculated to be earned are considered unearned. Unearned funds must be returned to the federal government. Harper College notifies students with instructions on how to proceed if funds are required to be returned to the government. The unearned amount is the student's responsibility to pay and this may result in an outstanding balance owed to Harper College and/or to the U.S. Department of Education. Students with outstanding balances may be restricted from registering for future classes and receiving transcripts. Funds that are returned to the federal government are used to reduce the outstanding balances in individual programs. Title IV federal financial aid returned must be allocated in the following order:

1. Federal Unsubsidized Direct Loan
2. Federal Subsidized Direct Loan
3. Federal Direct PLUS
4. Federal Pell Grant
5. Federal Supplemental Education Opportunity Grant
6. Iraq and Afghanistan Service Grant

Repeated withdrawals can impact a student's eligibility to receive federal financial aid for future terms. (see [Satisfactory Academic Progress Policy](#))

## Satisfactory Academic Progress Requirements for Financial Assistance

In addition to the Standards for Academic Achievement, federal and state financial aid recipients must also comply with all Satisfactory Academic Progress (SAP) requirements for financial assistance as follows:

1. **Grade Point Average Standard:** Students must achieve and maintain a cumulative grade point average of at least 2.00 in all credit courses attempted throughout their entire enrollment at Harper College; whether or not financial aid was received. This grade point average standard does not include developmental courses, and for repeated courses it only includes the highest earned grade.
2. **Cumulative Completion Rate:** Students must complete at least 67 percent of the credit courses attempted throughout their entire enrollment at Harper College; whether or not financial aid was received. The percentage is found by dividing the successfully completed credit hours by the

number of credit hours the student attempted. Successfully completed credit hours include the following grades: A, B, C, D, AR, BR, CR, DR, AV, BV, CV, DV, P.

3. **Maximum Time Frame (Credit Hours) Standard:** Students must complete their program of study within 150 percent relative to the published length of the program of study. For example, a student enrolled in an educational program that requires 60 credit hours cannot receive financial assistance after 90 attempted credit hours. If during the SAP review it becomes clear that a student cannot mathematically complete his/her program within the maximum time frame (credit hours), he/she will become ineligible for financial assistance.

Review the complete Satisfactory Academic Progress Policy, including the requirements and appeal procedures, which is posted at <http://goforward.harpercollege.edu/registration/financialaid/sap>

## Scholarships

More than one million dollars in Harper College Educational Foundation and Institutional Scholarships were awarded to 800 students in 2015-2016. See [Scholarships](#) for more information.

### Harper College Educational Foundation Scholarships

The Harper College Educational Foundation provides funding for 160 different scholarships thanks to the generosity of Harper College friends and alumni. These scholarships are awarded on a competitive basis. An applicant's GPA; participation in clubs, organizations, and community service activities; leadership experiences; and personal statement regarding educational and career aspirations are considered.

### Harper College Institutional Scholarships

Many institutional scholarships are offered in recognition of students who exhibit academic excellence, artistic talent, strong leadership skills or service to their communities. These scholarship programs may pay for part-or all-of the student's first two years of college.

### Private Scholarships

A private scholarship can be awarded to a student by an organization other Harper College. Students are eligible to use private scholarships by enrolling at Harper College and meeting any of the requirements that the private scholarship donor has placed on the scholarship.

### Transfer Scholarships

Many four-year institutions offer scholarships designated for transferring community college students. See [Transfer Information](#) for more assistance.

## Veterans Services

Harper College is distinguished as a Military Friendly School, an honor given to universities and colleges nationwide for their efforts to embrace America's veterans-turned-students.

Our veterans receive invaluable services to maximize their benefits and be successful while attending classes at Harper. The [Veterans Services](#) web page features the New Veterans Student Checklist that includes the application steps and other important information.

Visit the website for information about veterans services and the various types of financial aid programs available to cover education benefits for veterans such as tuition and mandatory fees.

### Forgiveness Policy

Under limited circumstances, a student may petition to have previously earned F grades excluded from the calculation of the cumulative grade point average. If the F grades are excluded from the cumulative grade point average calculation, they will still appear on the student record.

Eligibility guidelines and procedures are available in the Student Development Centers, the One Stop, the Registrar's Office and at harpercollege.edu.

### Grading

Approximately one week after the course ends, the student will receive a grade for each class in which he or she was officially enrolled. Students may view grades on [MyHarper Student Portal](#). Students attending without registering and paying for a class will not be allowed to receive a grade once the semester ends. The official grade point average is computed on the basis of final grades awarded at the end of each semester or term.

### Grade Points

Grade points are numerical values which indicate the scholarship level of the letter grades. Grade points are assigned according to the following scale:

Grade	Significance	Grade Point
A	Superior	4.0
B	Good	3.0
C	Average	2.0
D	Poor	1.0
F	Failure	.0
FG	F Grade Forgiven	.0
H	Audit	.0
IP	In Progress	.0
NR	Not reported by Instructor	.0
NP	Not passed	.0
P	Pass	.0
W	Withdrawal	.0
X	Incomplete	.0

The following classes are not computed in the semester cumulative grade point average and students will receive a grade of **P**.

- Communication Skills: all courses
- English as a Second Language: all courses

Course work with an **R** designation after the grade indicates that the course is a developmental course (AR, BR, CR, DR, PR, etc.) not included in grade point average.

Course work with a **V** designation after the grade indicates that the course is a vocational skills course (AV, BV, CV, DV, etc.) not included in grade point average.

**CRD** - Miscellaneous credit - AP, CLEP, Proficiency, or Articulated credit - not included in grade point average.

Academic Standing will be processed at the end of each semester.

### Transfer Credit

Transfer credit is designated with a **T** followed by the letter grade originally earned in the course of **A, B, C, or D**. Only the credit hours are accepted. Prior to Spring 2009, transfer credit is designated with a **T** grade.

### Incomplete Grades

A student may be assigned a grade of **X** for unfinished work in a course provided the work was incomplete because of circumstances deemed to be unavoidable or uncontrollable (to be determined by the instructor). The work to be completed will be assigned by the instructor. The unfinished work must be satisfactorily completed by the midterm of the following 16-week semester. Failure to do so will result in a grade of **F**.

### Honors

Beginning fall 2010, Harper College will recognize academic achievement each semester by designating an academic recognition to students who meet the following criteria:

#### President's List

Each semester, students who successfully complete 9 or more college level credit hours and achieve a semester grade point average of 3.75 or higher will be recognized as President's List students.

#### Dean's List

Each semester, students who successfully complete 6 or more college level credit hours and achieve a semester grade point average of 3.50 or higher will be recognized as Dean's List students.

Honors designations will be noted each semester on the student academic record. The total number of hours a student successfully completes will determine the designation received, based on the grade point average.

#### Graduate Honors Designation

Beginning fall 2010, Harper College will recognize the academic achievement of its associate degree graduates by designating Academic Honors to students who have completed a minimum of 45 semester hours of their coursework at Harper College and who meet the following criteria:

- Cum Laude: 3.5 - 3.749 cumulative GPA
- Magna Cum Laude: 3.75 - 3.899 cumulative GPA
- Summa Cum Laude: 3.9 - 4.0 cumulative GPA

The official transcript will show honors designations based on the student cumulative grade point average upon completion of the associate degree program.

### Registration Policies

- [Attendance Policy](#)
- [Auditing a Course](#)
- [Business EdVantage Agreement](#)

- [Enrollment Status Verification](#)
- [Registration Deadline](#)
- [Residency](#)
- [Withdrawals](#)

## Attendance Policy

Regular attendance is necessary for satisfactory class completion. Each instructor or program coordinator has the responsibility of establishing the attendance requirements which best suit the educational goals of a class or program. No central class attendance record is kept other than a required midterm report. It is the **student's responsibility** to learn the instructor's attendance policy for each course, as well as to discuss with their instructors any extraordinary circumstances affecting his/her attendance. Students attending without registering and paying for a class will not be allowed to receive a final grade once the semester ends.

## Auditing a Course

A student who wishes to audit a course will be required to pay full tuition and fees and must obtain approval from the instructor, department chair or dean prior to enrollment in the course. Registration for audit status may be completed only during the first week of the class and must be the original enrollment in the class. Changes from credit to audit or from audit to credit will not be permitted. Students taking a course for credit are given priority in registration. Upon completion of the course, the instructor will assign an **H** grade. This grade does not count in cumulative hours or grade point average. Courses in which an audit (H) grade is received are not eligible for financial aid.

## Business EdVantage Agreement

Businesses within the Harper College district offer Harper in-district tuition rates to employees who live outside the College district but within Illinois. The Business EdVantage Agreement program permits employees of in-district businesses to attend Harper classes at in-district rates. In order to be eligible to use the Business EdVantage, students must be employed as of the first date of semester. Students are required to submit a current pay slip each semester and must be consistently employed throughout the semester to be eligible for this program. Personal checks and letters from the employer are not accepted as proof of in-district employment. Short-term consultant and contractors are not eligible for in-district rates. The in-district tuition is available whether the cost is to be paid by the employees or by the company.

Students and employers who are interested in this program should contact Admissions Outreach at 847.925.6700 or the One Stop at 847.925.6710.

International students are not eligible to use the Business EdVantage Agreement.

## Enrollment Status Verification

Employers, background search firms and recruiters may require verification of current or previous enrollment. Our institution has authorized the National Student Clearinghouse to act as our agent for all verifications of student enrollment. Please visit the Clearinghouse online at [www.studentclearinghouse.org](http://www.studentclearinghouse.org) or contact them by phone at 703.742.4200.

## Full-time Status

A student is considered full-time if he/she is enrolled in 12 or more credit hours during the fall or spring terms. (6 credit hours during the summer term).

## Three-quarter-time

A student is considered three quarter time if he/she is enrolled between 9 - 11.9 credit hours in the fall or spring terms (4.5 – 5.9 hours during the summer term)

## Half-time Status

A student is considered half-time if he/she is enrolled in 6 or more credit hours but fewer than 12 credit hours (6-11.9) during the fall or spring terms. (3-5.9 credit hours during the summer term).

## Less than Half-time Status

A student is considered less than half-time if he/she is enrolled in fewer than 6 credit hours during the fall or spring terms. (Less than 3 credit hours during the summer term). A current semester verification is based on the enrollment status of the student on the day after the refund period ends for those courses in which the student is enrolled. A previous semester verification is based on the actual dates of attendance.

## Registration Deadline

Effective Fall 2014, students may not register for credit courses once they have started. Be sure to register early for the best course selection! The deadline to register for a class is 11:59 p.m. the day before the first official class meeting. Registration for a class on the date it starts must be done in person or by phone, and must be completed before the class start time.

## Residency

Students enrolling at Harper College are classified as In-district, Out-of-district, Out-of-state or Out-of-country for tuition and fee purposes:

### In-district Resident

A student who has resided within the State of Illinois and the Harper College district\* 30 days immediately prior to the start of the term is eligible to be classified as an in-district student for tuition calculation purposes. Proof of in-district status is required at the time of registration. Proof of residence can include current driver's license, voter's registration card, utility bill or credit card bill.

### Out-of-district Resident

A student who has resided in the State of Illinois, but outside the Harper College district, for 30 days\* immediately prior to the start of the term shall be classified as an out-of-district student.

### Out-of-state Resident

A student who has resided in the State of Illinois for less than 30 days\*\* immediately prior to the start of the term shall be classified as an out-of-state student.

### Out-of-country Resident

A student whose permanent residence is outside the United States and is attending Harper College on an F-1 visa shall be classified as an international student.

\* Communities in Harper College District #512: Arlington Heights, Barrington, Barrington Hills, Buffalo Grove+, Carpentersville+,

Deer Park+, Des Plaines+, Elk Grove Village, Fox River Grove+, Hanover Park+, Hoffman Estates+, Inverness, Lake Barrington, Mount Prospect, North Barrington, Palatine, Port Barrington, Prospect Heights, Rolling Meadows, Roselle+, Schaumburg, South Barrington, Tower Lakes, Wheeling.

+ Portions of these communities are not included in the district.

\*\* Students who move from outside the state or district and who obtain residence in the state or Harper district for reasons other than attending the community college shall be exempt from the thirty day requirement if they demonstrate through documentation a verifiable interest in establishing permanent residency. The Registrar's Office shall make the final determination of residency status for tuition purposes.

## Withdrawals

Students who wish to withdraw from a class after the regular registration period must withdraw officially by the appropriate deadline date. A student who does not withdraw officially from a class prior to the last date for withdrawals is subject to an F grade.

The following guidelines determine grades for an official withdrawal from a 16-week course; the timetable for withdrawing from other courses (12-week, 8-week, 4-week, etc.) will be determined on a pro rated basis according to these guidelines:

1. Classes dropped prior to the refund period will not become a part of the student's permanent record;
2. A **W** grade will be assigned to a class dropped after the refund period and prior to the last date for official withdrawals;
3. A student who does not withdraw officially from a class prior to the last date for withdrawals is subject to an **F** grade.

The deadline to withdraw from classes is available on the student schedule on the Student Portal, by viewing the "Important Registration and Payment Dates" calendar, or the official College calendar for the year in question.

## Medical Withdrawals

Criteria and procedures for a withdrawal due to significant medical reasons are available in the Health Services office.

Medical withdrawals provide students an opportunity to withdraw from a class(es) after the withdrawal date due to a medical/psychological reason or a personal crisis. Tuition refunds are not granted for medical withdrawal. Medical withdrawals are only granted for an "F" grade. Medical withdrawals are honored within the past 5 years. No more than 2 terms will be honored. Medical withdrawal is offered as an option only after the regular withdrawal period has ended. Students requesting a medical withdrawal should contact Health Services at 847.925.6268.

## Military Withdrawals

In support of America's call to military action, the College will offer full refunds of tuition and mandatory fees to all military reservists, National Guardsmen and active-duty military personnel who receive emergency orders preventing them from attending classes after they have enrolled at the College. Official documentation is required and may be submitted through the online appeal process at harpercollege.edu

## Appeal Process

Students who feel they have a legitimate reason for not adhering to the refund/withdrawal deadlines set forth by the College can substantiate their request with documentation, and fill out a registration appeal online. All appeals are reviewed by the

Appeals Committee. The process may take up to three weeks. Students will be notified by mail with the final decision.

Appeals will not be accepted for grades previously earned. Grades are not removed from an official academic record.

## Repeat Policy

Students will be allowed to repeat courses and attempt to earn a higher grade for classes taken at Harper College. When a course has been attempted more than once, only the highest grade received for that course will be used to compute the cumulative GPA. The lower grade(s) will remain on the transcript but will not be used to compute the Harper College cumulative GPA. The repeat policy applies only to courses currently offered. A student transferring to another college should check the institution's repeat policy as it may differ.

Students may repeat a private music lesson a maximum of four times. Students who would like to continue taking private lessons should contact the Continuing Education department to enroll in the course as non-credit.

Note: In the case of courses that are approved to be taken more than one time, the repeat policy is not in effect until the number of approved repeatable hours is exceeded.

## Transcripts

Students can order their Harper College transcripts online at [harpercollege.edu](http://harpercollege.edu). There is a \$5 fee for each official transcript ordered. Additional fees may be charged based on method of delivery; electronic transcripts are available with many institutions. The College reserves the right to withhold transcripts of persons who have past due monetary obligations such as tuition, fees or materials. All holds must be cleared before a transcript is released. Transcripts are generally processed within four (4) working days. Electronic transcripts are processed within one day provided a student has no holds on their record.

## Tuition and Fees

### Tuition for Credit Classes\*

**In-District Residents:** \$119.25 per credit hour(full-time employees of in-district companies are also eligible)

**Out-of-District:** \$376.25 per credit hour

**Out-of-State:** \$451.75 per credit hour

**Out-of-Country Student:** \$451.75 per credit hour

### Programs/Courses with variable tuition

Programs

- Cardiographic Technician certificate
- Computerized Tomography certificate (RAD)
- Dental Hygiene degree
- Diagnostic Cardiac Sonography degree
- Diagnostic Medical Sonography degree
- Magnetic Resonance Imaging certificate (RAD)
- Mammography certificate (RAD)
- Nursing degree
- Practical Nursing certificate
- Radiologic Technology degree
- Surgical Technology degree

Courses

- CGT prefix
- DCS prefix
- DHY prefix
- DMS prefix
- NUR prefix
- RAD prefix

\*Costs subject to change without notice

**Fees for Credit Classes**

- Application Fee: \$25
- Activity Fee, full-time student: \$42
- Activity Fee, part-time student: \$21
- Registration Fee (non-refundable): \$15
- Technology Fee: \$7 per credit hour
- Construction and Renovation Fee: \$9 per credit hour
- Distance Learning Fee: \$20 per course
- Fast Track Fee: \$10 per course
- Course Supply Fee: Varies per course
- Other course fees: Varies per course
- Academic Transcripts Fee: \$5 per transcript

**Application Fee**

A one-time application fee of \$25 is charged to each new student applying for admission for credit courses. The fee, which is non-refundable, covers the cost of processing the application.

**Activity Fee**

Students enrolled for 12 or more credit semester hours will pay a \$42 activity fee for each semester; students enrolled for less than 12 hours will pay a \$21 activity fee. No activity fee is charged for students enrolled only in Continuing Education courses. However, students enrolled only in continuing education may wish to pay the activity fee to obtain a HarperCard (see: Student Activities).

**Registration Fee**

A \$15 non-refundable registration fee is charged to all students registering each semester for credit courses. If a student decides to drop all of their courses after they had registered for a semester, they are required to pay the \$15 registration fee.

**Technology Fee**

A technology fee of \$7 per credit hour will be assessed for students enrolled in credit courses. The fee will support all technology throughout the campus such as computer labs, instructional technology, resources of the library, and Web registration.

**Construction and Renovation Fee**

A renovation fee of \$9 per credit hour will be assessed to students enrolled in credit courses. The fee will support the College's infrastructure and the renovation of outdated facilities.

**Course Supply Fee**

These fees are to cover the costs of consumable supplies, materials, requirements for Health Career programs or licensing for tests or software that is specific to a particular course and beyond those covered by the regular tuition.

**Other Course Fees**

These fees are to cover the costs of non-consumable supplies or materials. Students enrolled in MUS 100 level courses will pay \$100 per course, per semester. This entitles the student to one 30 minute private lesson per week. MUS 200 level music students will pay \$200 per course, per semester and will receive one 60 minute private lesson per week.

**Distance Learning Fee**

These fees are assessed to a specific courses that are listed as either blended or web-based.

**Fast Track Fee**

These fees are assessed to a specific courses that are listed as fast track.

**Payment Deadlines**

Students are required to select a payment arrangement at the time of registration. Financial aid awards and other tuition reductions will be included in the "Amount Due" calculation if all required documents have been received and processed prior to registration. If payment arrangements are not completed by the deadline assigned during registration, the student's registration will be removed. Students are not allowed to attend classes until a payment arrangement is in place for the term.

Any student with no amount due at the time of registration will need to click on the "Finalize Registration" button within 30 minutes to keep their schedule. The Harper College Business Office will contact students with a payment due date if it is found they owe a balance after they have finalized their registration.

**Senior Citizen Discount**

District residents age 65 years of age and older are eligible for a 100 percent tuition discount for all credit courses. This discount applies only when registering three calendar days (or later) before the first day of that particular class. This must be the student's initial enrollment in the class and there must be space available. Students may not drop and re-enroll for the discount. This discount does not apply to fees. Fees will need to be paid by the assigned due date.

**Chargeback Tuition**

Resident students desiring to pursue a certificate or degree program not available through Harper College may apply for chargeback or joint agreement tuition if they attend another public community college in Illinois which offers that program.

Through a joint agreement or chargeback, students may attend and pay in-district tuition at a community college outside their home district if they are pursuing a certificate or Associate in Applied Science degree. Joint agreements and chargebacks are available only when the home community college does not offer the certificate or degree program. To determine eligibility and to qualify for a chargeback or joint agreement, Harper College district residents must apply through the Registrar's Office no later than 30 days prior to the beginning of the semester, session or quarter of the college the student desires to attend.

If the application is approved, the student will be able to receive in-district rates. To determine eligibility and for further information call 847.925.6282.

**Tuition Refund Policy**

**Fall/Spring Semesters:**

Term	Percentage of Refund
16-Week Classes First week of classes through Sunday No refund after first week of semester	100%
12-Week Classes First week of classes through Sunday No refund after first week of semester	100%
8-Week Classes First week of classes through Sunday	100%

Term	Percentage of Refund
No refund after first week of semester	
4-Week Classes First week of classes through Wednesday	100%
No refund after Wednesday of the first week of class	

Classes offered in other formats or on the weekend (Friday, Saturday and Sunday) may have separate refund dates. Please refer to the Important Financial Aid and Registration Dates page at harpercollege.edu for specific refund and withdrawal dates.

**Summer Session:**

Term	Percentage of Refund
8-Week Classes First week of classes through Sunday	100%

No refund after the first week of the semester. Refunds vary for non 8-week classes. Please refer to the Important Financial Aid and Registration Date page at harpercollege.edu for specific refund and withdrawal dates.

**Tuition Refunds**

Refunds are not processed until the 100% refund period has passed.

The Business Office will process refunds within 14 calendar days after a credit balance is on a student's account, assuming it was paid with guaranteed funds.

**Refund Eligibility**

To be eligible for a refund, students must drop during the 100% refund period. Refund and withdraw dates may vary per class, depending on the end date of the section within each Part of Term and are listed on the Important Financial Aid and Registration Dates page. Refund deadlines will also be listed on the course schedule and the student's schedule on the My Harper tab of the My Harper Student Portal. Students who do not attend class and who do not submit an official written notice for dropping a class(es) will not receive any refund and are subject to an F grade.

**Refund Process**

If payment was made by credit card in-person or online through Quikpay, the refund will be applied to the credit card account from which the payment originated as long as the refund is within 75 days of the payment date and the credit card has not expired.

If payment was made with cash, check, or through a payment plan, the refund will be in the form of a check or direct deposit. The direct deposit needs to be established at least one week prior to a refund being issued to ensure that the refund is directed to the correct location.

**Direct Deposit**

Direct Deposit forms are available in the Business Office and are available to print from the MyHarper Student Portal. Complete the form, attach a voided check, and either deliver it to the Business Office or fax it to the Business Office at 847.925.6052.

- Please remember that you must notify the Business Office of any change in your bank account.
- The bank account must have the student's name on it.

When a refund is issued, a notification email is sent to the email address provided upon signing up for direct deposit. Direct deposit funds normally take a minimum of 48 hours to reach the bank account once the refund has been processed.

**Excess Financial Aid**

Refunds that are issued due to having excess financial aid will be issued as a check or direct deposit within 14 days of the credit showing on the student account.

**Resources for Learning**

- [Library Services](#)
- Academic Support Centers
  - [Success Services](#)
  - [Tutoring](#)
  - [Writing Center](#)

**Library Services**

The Library's mission, to support student success, is achieved in a variety of ways including; building and maintaining a vibrant collection, providing a variety of services, and student instruction through contact at the reference desk and the library instruction program. Students learn how to find and evaluate information for their research in a learning environment which encourages active self-inquiry.

Borrowing privileges are extended to all currently enrolled Harper students, staff and district residents.

District residents must provide proof of residency for borrowing privileges at the Harper College Library. Accepted proofs of residency include: drivers license or state ID card, mortgage or lease papers, vehicle registration or insurance card, utility bill, or bank statement. All forms of identification used for proof of residency must have name and current address listed.

For more information, call 847.925.6184 or visit [harpercollege.edu/library](http://harpercollege.edu/library).

**Academic Support Centers**

**Success Services for Students**

Learn to study smarter. Success Services for Students provides individual instruction for students who would like to improve their learning skills. One-hour sessions include *Study Skills, Test Taking Tips, Time Management, Reading Strategies, Test Anxiety, Memory, Concentration, Motivation, Note-taking Skills, Math Strategies, Accounting Tips, Economics Tips, Preparing for Finals, and Online Study Tips.*

Students can also schedule a *Test Performance Analysis* in any content area. They will be given a complete breakdown on types of errors being made as well as given strategies to utilize on subsequent tests. In the *Learning Styles Inventory* session, the student's personal learning style is determined and specific strategies are recommended to complement that style. Students can take the *Study Behavior Inventory*, which identifies strengths and weaknesses in specific academic activities and attitudes.

Supplemental Instruction is also offered through the department. Supplemental Instruction (SI) provides regularly-scheduled, informal review sessions. Students compare notes, discuss



readings and develop organizational tools. Students learn how to integrate course content and study skills while working together. The sessions are facilitated by SI leaders. Supplemental Instruction is offered in select classes each semester.

Appointments may be scheduled by coming directly to this office or by calling 847.925.6715.

### Community Success Services

Sessions are offered to high school students and community members for a fee. For additional information, call 847.925.6715.

## Tutoring

### Tutoring Center

Free tutoring is available in more than 200 courses. This assistance is provided by professional and peer tutors. Students must be enrolled in the course for which they are seeking tutoring.

Services that are offered include tutoring by appointment, tutoring on a walk-in basis and review seminars. Study guides are also available for certain courses.

For additional information, stop by the Tutoring Center or call 847.925.6539.

### Community Tutoring Program

Harper's Community Tutoring Program serves community members who are not enrolled as Harper students. Qualified tutors will offer help to students in various subjects based on availability.

Tutoring is offered to community members for a fee. Tutoring sessions are scheduled by appointment only. Call 847.925.6539.

## Writing Center

The Writing Center provides several free services which are available to help Harper students succeed. They can work in the open computer lab, consult with tutors on a walk-in basis about their papers in all academic areas, and make appointments with English tutors to discuss specific assignments and develop skills in writing, literacy, and critical thinking. Online support for writing assignments is also available.

#### Tutors can:

- Clarify assignment requirements
- Guide you through steps of writing process
- Suggest strategies for revision
- Respond to drafts
- Answer specific questions on structure, grammar, and content
- Reinforce skills in building vocabulary, writing sentences, developing paragraphs, and proofreading
- Assist with documentation
- Offer strategies for interpreting, analyzing, and evaluating a text
- Develop a plan for building on strengths and improving writing and reading skills

Stop by this office or call 847.925.6796 to make an appointment.

## Student Services

College can be a positive and enriching experience for students of all ages and backgrounds. Harper College wants every student to achieve success in his/her college endeavor and to have the opportunity to grow both in and out of the classroom. The programs and services listed below are designed toward this end.

- [Academic Advising and Counseling Services](#)
- [Access and Disability Services](#)
- [Athletics](#)
- [Box Office](#)
- [Child Learning Center](#)
- [Computer Labs](#)
- [Dining Services](#)
- [Fitness Center](#)
- [HarperStore](#)
- [Health Services](#)
- [HEAT - Harper Early Alert Team](#)
- [I.D. Cards](#)
- [Job Placement Resource Center \(JPRC\)](#)
- [Police Department](#)
- [Psychological Services](#)
- [Rita and John Canning Women's Program](#)
- [Student Involvement](#)

## Academic Advising and Counseling Services

The Academic Advising and Counseling Centers provide services to help students develop their educational plans. Services include assistance with course selection, information on Harper's career and transfer programs and access to current online and written resources. There are three Centers:

- Academic Advising and Counseling Center, I117
- Career Development Center, A347
- Center for Multicultural Learning A347

Counselors in these Student Development centers also offer personal counseling to students, provide counseling designed to meet the needs of adult students and assist students in academic difficulty.

Students are encouraged to see a Student Development Counseling Faculty member each semester to update their educational plans, check for changes in the Harper curriculum and verify transfer information. It is recommended that students call well in advance to schedule appointments, particularly during mid and late semester.

In addition, the Career Development Center assists students in making career or college major choices. A variety of career and academic information is available and Student Development faculty provide assistance with the decision-making process through the Major In Success! program, individual counseling as well as career planning courses.

The primary objective of the Center for Multicultural Learning is to support the academic success and retention of underrepresented minority students. In addition to the counseling and support services provided in the other academic advising and counseling centers, the Center for Multicultural Learning offers unique services such as a summer bridge high school to college transition program. The Center for Multicultural Learning also provides resources for underrepresented minority students.

## Access and Disability Services

The Center for Access and Disability Services (ADS) mission is to advocate for positive change that makes Harper College more universally accessible. We are guided by a philosophy of providing access so students can achieve their academic and personal goals. Harper College complies with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendments Act of 2008, and State and local legislation.

New students should contact ADS to arrange an intake interview, apply for access/accommodations and provide documentation about the nature and extent of their disability. All new students will be interviewed and may participate in academic placement and Orientation programs based on program of study. ADS assists students in choosing their courses, setting career goals, maintaining good academic standing and planning for after college. In addition, ADS offers students the use of a wide variety of specialized equipment and works closely with faculty and staff across Harper to insure that the campus is physically, electronically and programmatically accessible to individuals with disabilities.

Students interested in securing access or services should contact ADS at the earliest possible date at 847.925.6266 (voice) or 224.836.5048 (VP). Some services such as conversion of print material to digital, large print, auditory or Braille format require 4-6 weeks lead time. Availability of some services may be limited or delayed for students who turn in requests late.

ADS provides information and reasonable accommodations to campus visitors. Requests should be made as early as possible to determine availability of resources. Employees of the College who need reasonable accommodations should refer to the Human Resources Procedure Manual to obtain procedures for requesting accommodations.

ADS has also been designated as the office that will help provide reasonable accommodations and services to pregnant students in accordance with Title IX of the Educational Amendments Act. Pregnant students are afforded protections from discrimination and reasonable accommodations to allow equal access similar to a temporary disability. Pregnant students may contact ADS to learn more.

### Kimball Hill Family Deaf Institute

Thanks to the generosity and support of the Kimball Hill family, ADS has developed a smart classroom for deaf and hard of hearing students, expanded access services such as captioning, and increased instructional support in reading, writing, and math. The Deaf Institute is part of a state-wide effort to serve deaf and hard of hearing students. It is a collaboration between Harper College, the Illinois Department of Human Services, and private donors.

## Athletics

### Intercollegiate

Harper College offers 12 Intercollegiate sports: Men's Soccer, Women's Soccer, Men's Cross-Country, Women's Cross-Country, Women's Volleyball, Wrestling, Men's Basketball, Women's Basketball, Baseball, Softball, Men's Track and Field and Women's Track and Field. The College is a member of the North Central Community College Conference (N4C), which includes Triton, DuPage, Rock Valley, Joliet Junior College, Madison College, Milwaukee Area Technical College, and Wright College (basketball only). Harper College is also a member of the

National Junior College Athletic Association (NJCAA), which has a membership of approximately 560 junior and community colleges throughout the United States.

To participate in a sport, a student must meet NJCAA eligibility rules. Students must also furnish an acceptable record of a physical examination taken within one year of the ending date of their sport season. Interested students should contact the athletic office (Wellness and Sports Center, Room M219) to determine eligibility status and receive specific sport information.

Other questions may be directed to the athletic director at 847.925.6969.

### Recreation

The Harper Recreation program provides free access to the gymnasium, weight room and pool for students, staff, and faculty during the fall and spring semesters. The open recreation schedule is available in the Wellness and Sports Center, M219, and [www.harperhawks.net](http://www.harperhawks.net).

## Box Office

Harper College offers two box office locations. The J Theatre Box Office is located in Building J, Room 135. The Daily Herald Box Office in the Performing Arts Center is only open beginning one hour prior to ticketed events scheduled in the Performing Arts Center.

General admission, student, staff and senior tickets may be purchased by phone, internet\* or in person. Harper students and staff must pick up their tickets in person and show their current HarperCard to receive their tickets.

Cash, Check, Visa, MasterCard and Discover are accepted at the Box Office for ticket purchases.

Programs may sell out in advance. It is recommended, whenever possible, to purchase tickets ahead of time. Harper students with a current HarperCard may purchase a limit of two tickets at the student discount price. Harper Faculty and Staff may also purchase a limit of two tickets at the Faculty/Staff discount price.

\*Special Note: Internet ticket purchases are subject to additional service fees. No extra charges apply to ticket purchases made in person or by phone. Event subject matter, times, dates, venues and Box Office hours are subject to change. Any changes or additions to featured programs will be announced through College publications and the news media. Call the Box Office at 847.925.6100 for the latest updates.

## Child Learning Center

The Early Childhood Education Program offers:

- An extended care preschool program for children of Harper students, faculty, staff and the community at large. This program offers full-day and half-day child care for children 3 through 6 years of age and operates Monday-Friday from 7:30 a.m. - 5:30 p.m. Children may be enrolled for one day or up to five days a week. For more information on fees or registration costs, call 847.925.6262. You may also visit us at [harpercollege.edu](http://harpercollege.edu).
- A preschool program for children of students, faculty, staff and the community at large who are 3 through 6 years of age. The preschool has set sessions which coincide with Harper's academic calendar. For information about the preschool, call 847.925.6262.

All programs are licensed by the Illinois Department of Children and Family Services and accredited by the National Association for the Education of Young Children.

## Computer Labs

More than 2,000 computers provide access to the Internet, the Harper Web site and program-specific software.

### Open Labs

Harper has two large open labs at the Main Campus that are available seven days a week. The Harper College Learning and Career Center (LCC) in Prospect Heights has one large open lab that is available Monday through Thursday. All three labs are staffed to assist students with logging on and off, accessing specific programs and printing their work. Labs are available to all currently enrolled Harper students and all Harper distance learning students.

The Main Campus open computer labs contain an accessible workstation with specialized software for individuals with disabilities. These workstations have a sign posted to note that these machines will be given priority to these individuals. Both main campus open labs have access to current Microsoft Windows and Apple OSX computers with standard versions of Microsoft Office as well as other program specific software. Your faculty can direct you to the appropriate lab for the course in which you are enrolled.

The LCC open lab has access to current Microsoft Windows computers with standard versions of Microsoft Office.

Lab hours can be found on the Student Life tab under the Tech Support/Computer Labs link.

Print capabilities are available at all three open labs. Additional information about available print options can be found on the Student Life tab under Tech Support/Printing and Copying link.

In addition to the Open Labs, Harper College has two Cyber Cafes with Microsoft Windows based computers on main campus which provide basic Internet capabilities. They are:

- **William's Web** Building L, across from the HarperStore
- **Hawk's Nest** Student Center, near the Common Grounds coffee kiosk

The Harper College Library has computers available for public use.

### Special Purpose Open Labs

#### Writing Center

847.925.6796

The Writing Center Lab is open to all currently enrolled Harper students seeking assistance with writing.

#### Developmental Math Center

847.925.6395

## Dining Services

The Sodexo Campus Services offers breakfast and lunch Monday through Friday in the Cockrell Dining Hall located in Building A. Additional venues on campus include Subway in Avante, Starbucks in Building D and Common Grounds coffee kiosk in Building A. Sodexo issues refunds for the vending

machines located in buildings throughout the campus. Food purchases can be paid for with cash, SOGO, American Express, MasterCard, Visa or Discover. Dining Services also provides on-campus catering for approved student activities and special events. Hours will vary when classes are not in session and during summer. For information call 847.925.6253.

## Fitness Center

The Harper College Fitness Center offers a variety of strength training and cardiovascular equipment at very affordable prices. Students are eligible for discounted rates. More information is available on the [Harper Hawks web site](#),

Purchase a membership through [Mindbody Online](#).

## HarperStore

The HarperStore is a resource for textbooks, supplies, spirit wear, reference and other items. It is recommended that you bring your class schedule with you so the necessary textbooks can be located easily.

### Textbook Rental/eBooks

The HarperStore has a diverse selection of course material options including new, used, digital and rental textbooks which can save the student up to 50% compared to a new textbook.

The HarperStore offers pre-paid in-store pick-up and home delivery for your convenience. Orders can be placed on the HarperStore website at [harpershop.com](#).

Cash, checks, MasterCard, Visa, American Express, Discover Card or HarperStore Gift Cards can be used to pay for purchases. If you are paying by check or credit card, a photo ID must be presented at the time of purchase. You may also use financial aid to purchase textbooks. If you have questions about your balance or financial aid funds, contact the One Stop.

### HarperStore Refund Guidelines

#### Save Your Receipts

- Textbooks in resalable condition may be refunded with a receipt within seven (7) calendar days from the start of classes or within two (2) days of purchase.
- Upon proof of Add/Drop, HarperStore will accept textbook returns up to thirty (30) days from the start of classes or until the end of the official Add/Drop period, whichever comes first.
- Textbooks purchased during the last week of classes or during the week of exams may not be returned for a refund but may be sold back under the book buyback policy.
- Non-textbook items in resalable condition may be refunded or exchanged at any time with the original receipt up to thirty (30) days with original tags attached.
- Computer software may be returned if it is unopened and shrink-wrapped within thirty (30) days. This does not apply to software activation codes which are non-returnable.

#### Textbook Buyback

The HarperStore purchases textbooks adopted for the next academic term for up to 50% of the student's purchase price, based on the course's required quantities. HarperStore will purchase textbooks not adopted for the next academic term or in excess of course requirements at national wholesale prices.

## Health Services

Academic achievement and the completion of educational goals are largely dependent upon the physical well-being of the student. The goal of Health Services is to provide care from a holistic perspective that enhances personal health and wellness, promotes academic success and enables students to realize career aspirations. The Health Services team consists of nurse practitioners (adult and women's health), a consultant physician, and registered nurses. The nurse practitioners are available to diagnose, treat, and refer Harper College students as necessary.

Health Services performs physical examinations, administers vaccinations and tests for strep throat, urinary tract infections, pregnancy, and sexually transmitted infections. Other services include first aid, treatment for first degree burns, and over the counter medications for colds and headaches. Students are encouraged to use Health Services. All services are confidential and free or low cost. A valid College I.D. card is required to access services.

Health Services staff plan and coordinate a variety of wellness activities to meet identified student needs regarding disease prevention and health promotion. These include a flu vaccine program, wellness screenings, HIV testing, and prevention campaigns such as Collegiate Alcohol Awareness in compliance with the Drug-Free Schools Act. Various health-related programs and speakers are presented every semester offering students the opportunity for lifestyle enrichment and access to self-help and community resources.

For further information, call 847.925.6268.

## HEAT

The [Harper Early Alert Team, or HEAT](#), is a multidisciplinary campus threat assessment and behavioral intervention team that guides the campus community in effectively assessing and addressing threatening and/or concerning behaviors. HEAT strives to assist the campus in intervening before behaviors reach a critical level.

## I.D. Cards

All credit students (i.e., those who pay an activity fee) are entitled to a photo ID Card, known as the HarperCard. The first card will be issued free of charge. The HarperCard is an all-purpose card that can be used for identification, admittance to College events and open recreation, discounts at the Box Office, as a Library Card, as a copy card for campus photocopy machines, to print documents at print stations and for many other campus services. Check at the ID Card Office about fees for lost, stolen or damaged cards as well as for cards for Continuing Education Students.

Students may get their HarperCard at the ID Card Office. Questions can be directed to 847.925.6000, extension CARD (2273).

## Police Department

The Harper College Police Department is a 24-hour law enforcement agency responsible for the safety and security of the Harper College community. Responsibilities of the department include enforcement of College rules and regulations, village and county ordinances and state and federal laws. In addition, the department provides traffic control, grounds and building patrol,

emergency first aid, CPR and AED, jump starts and vehicle key retrieval.

Important information concerning the College's emergency preparedness for crisis and steps you can take to enhance your safety and security may be viewed at [harpercollege.edu](http://harpercollege.edu).

The Harper College Police Department, by law, is the central repository for all Lost and Found items recovered and stored at the College. If you have found an item, regardless of value, it must be turned over to the Harper College Police Department for safekeeping. If you have lost an item, inquire about it with the Harper College Police Department.

Harper College police officers have the same authority as municipal and state officers as well as sheriff's deputies. These duties include the authority to detain people, conduct investigations, gather evidence and make arrests. As such, all crimes and motor vehicle accidents that occur on campus should be immediately reported to the Harper College Police Department.

Emergency call boxes are strategically located throughout campus parking lots and by inner campus sidewalks. Locations can be identified during hours of darkness by noting the blue lights on parking lot light standards and sidewalk light standards (inner campus). The call boxes are immediately below these blue lights. Pushing the red emergency button puts you in direct contact with the HCPD Operations Center dispatcher.

For emergencies, contact the Harper College Police Department at 911. For non-emergency information call 847.925.6330.

## Student Involvement

A comprehensive student-activities program is available, which includes lectures, concerts, films, special events and other social and intellectual programs of interest sponsored by the Student Activities Board; diversity programs and multicultural celebrations; student media and publications, including the College newspaper, *The Harbinger*; a literary and visual-arts publication, *Point of View*; Pom Pon/Dance Company; an FM student-run radio station, WHCM; Honors Society; Phi Theta Kappa; theater and speech/debate team activities; free legal advice; student government; intramurals; and programs for student leadership development.

A College/community program series of lectures, concerts, films, art exhibits and theater productions as sponsored by a student-faculty Cultural Arts Committee is also offered, and all of these programs are financed by Harper student activity fees.

Numerous student organizations are active, and students are encouraged to begin other organizations within the established guidelines. Among the organizations recently registered are: ADS Success Club, ASL Club (American Sign Language Club), Astronomy Club, Biology Club, Black Student Union, Buddhist Interest Group, Business Club, Campus Crusade for Christ, Deaf Club, Ethics Bowl, Film Club, Food Service Club, Future Education Association, Harper Association of Mathematics, Harper College Chapter of the Sci-Fi Fantasy and Gaming Club, Harper College Clay Guild, Harper College Dance Company, Harper Environmental Club, Harper Pride, Harper's Bizarre Fashion Club, Human Services Club, Indian Pakistani Student Association, International Students' Club, German Club, Graphic Art Design Club, Kappa Beta Delta, Lambda Epsilon Chi, Latinos Unidos, Literature and Creative Writing, Math Club, Model UN, Muslim Student Association, Nursing Club, Political Scholars, Rad Tech Club, Society of Engineers, Spirit Crew, Theatre Club, Think Tank, Veterans Association, and the William Rainey Harper Amateur Radio Club.

The Office of Student Involvement is located in the Student Center, Building A, Room A336. Additional information can be found at [harpercollege.edu/getinvolved](http://harpercollege.edu/getinvolved).

### Student Government Association (SGA)

The Student Government Association (SGA) represents all Harper students to the Board of Trustees, administration, and faculty. SGA officers and senators are responsible for recommending an annual student-activities budget, which provides for a variety of social, cultural and recreational activities as well as special programs and services. They also act upon student concerns, appoint students to College committees, review and recommend changes in College policy, approve registration of student organizations, and otherwise promote and advocate for student success and student welfare.

### Job Placement Resource Center

The Job Placement Resource Center (JPRC) provides services to help Harper students prepare for a successful job search that leads to employment. Workforce Coordinators coach students in becoming job search ready. Assistance can be done online, by scheduling individual appointments, and in small group sessions. Services include help with resume and cover letters, interview preparation, and review of the “soft skills” required for today’s workplace.

In addition, Job Placement Specialists network with community employers to find job openings for Harper students. Check out the online job search database that is continually updated. This database offers full-time and part-time jobs, co-op opportunities and internships to Harper Students and alumni 24/7.

Students interested in working on campus as a student worker can receive help with their application in the JPRC. Many on-campus part-time work opportunities are available each semester.

Call 847.925.6400.

### Psychological Services

Compromises to psychological health are often cited by students as being some of the most common barriers to learning and academic success. Psychological Services is here to help. Psychological services include assessment and referral to appropriate on or off campus resources. Psychological services are available to students currently enrolled in six or more credit or ESL hours in fall or spring semesters, or in three or more credit or ESL hours in summer session. However, any student experiencing crisis when on campus is welcome to utilize services.

The Psychological Services team also offers a variety of outreach activities every semester that are intended to promote student health and wellness. Programs have included stress free zones and stress reduction workshops, mindfulness, healthy relationships, depression and suicide prevention, coping with anxiety, addressing trauma, and self-compassion.

Students are encouraged to use Psychological Services which are confidential and free. A valid College I.D. card is required to access services. For further information, call 847.925.6268 or check out: [goforward.harpercollege.edu/services/psy](http://goforward.harpercollege.edu/services/psy)

### Rita and John Canning Women's Program

The Women’s Program supports the education and employment goals of people in economic need who are single parents, displaced homemakers, women who have experienced domestic violence, non-traditional career seekers, or women with limited English proficiency. Limited financial assistance is available for tuition, books, and class fees as funding permits.

The Women’s Program can be reached at 847.925.6558.

## Student Handbook

- [College Credit Programs and Requirements](#)
- [College Policies](#)
- [Federal and State Laws](#)

## College Policies and Procedures

- [Academic Honesty Policy](#)
- [Alcohol and Substance Abuse Policy and Regulations](#)
- [Bulletin Boards and Publicity](#)
- [Communicable Diseases Policy](#)
- [Demonstrations on Campus](#)
- [Discrimination Complaint Procedure](#)
- [Distribution of Literature and Use of Tables or Display Space](#)
- [Guide to Gender Based and Sexual Misconduct](#)
- [Locker General Use Statement](#)
- [Non-Solicitation Policy](#)
- [Prohibition of Sexual Discrimination, Harassment, and Misconduct](#)
- [Smoking Policy](#)
- [Speakers Policy](#)
- [The Student Center](#)
- [Student Code of Conduct and Resolution Procedures](#)
- [Student Dress Code](#)
- [Student Involvement Awards Programs](#)
- [Technology Resources](#)
- [Workplace Violence Policy](#)

## Academic Honesty Policy

Harper College is strongly committed to the promotion of high ethical standards. Such standards can best be accomplished in an environment where honesty and integrity are practiced.

For this reason the College strongly condemns academic dishonesty. Academic dishonesty includes cheating, plagiarism or other improper appropriation of another's work as one's own and falsifying records to advance one's academic standing.

Cheating includes but is not limited to copying answers, stealing and/or disseminating tests or answer keys, using someone else's data in preparation of reports or assignments and assisting others in such practices.

Plagiarism involves the presentation of another person's words, ideas, or work as one's own. It includes but it is not limited to copying any material, (written or non-written) without proper acknowledgement of its source, and paraphrasing another's work or ideas without proper acknowledgement.

Falsifying records includes but is not limited to falsifying or improperly altering College records and documents, or knowingly supplying false or misleading information to others (e.g. the College, other educational institutions or prospective employers).

Any form of academic dishonesty as defined by the faculty member or department is a serious offense warranting disciplinary measures. Discipline for academic dishonesty involving a specific course shall be first determined by the instructor of the course and may include failure of the specific assignment, project or test or failure of the course. The student may appeal the instructor's decision in accordance with the College's Student Academic Complaint Procedures. In cases of academic dishonesty the faculty-assigned grade supersedes a student-initiated withdrawal. In cases where disciplinary measures beyond course failure may be deemed appropriate or in regards to dishonesty that is not related to a specific course, the student may be disciplined

in accordance with the Student Code of Conduct. For more information, please visit the Student Conduct website at <http://goforward.harpercollege.edu/services/conduct/index.php>.

## Alcohol and Substance Abuse Policy and Regulations

It is the policy of Harper College to provide a drug and alcohol free environment and work place as defined by the Drug Free Workplace Act of 1988 and the Safe and Drug Free Schools and Communities Act of 1994.

Harper College prohibits the unlawful possession, use, distribution, dispensing and manufacture of illicit drugs and alcohol by students and employees on its property or as part of any College activity.

Students who violate this policy will be governed by the College's Student Conduct Code and subject to disciplinary action up to and including suspension, expulsion and referral for prosecution. Employees who violate this policy will be subject to disciplinary action in accordance with their appropriate employee group regulations up to and including suspension, termination of employment and referral for prosecution.

Students, employees and visitors are subject to local, state and federal laws. Criminal penalties for such violations may include assigned community service, fines and imprisonment.

In addition, property used in connection with illegal drugs may be confiscated, Federal student loans, grants and contracts may be denied, and driving privileges may be revoked.

In addition, property used in connection with illegal drugs may be confiscated, Federal student loans, grants and contracts may be denied, and driving privileges may be revoked. In addition, all employees directly engaged in performance of work pursuant to the provisions of a federal grant or federal contract in excess of \$25,000 and students who are Pell Grant recipients must notify the College within five days of any criminal drug statute conviction for a violation occurring on or off College premises while conducting College business or activities. The College shall, within 10 days of receiving such notice, inform the federal agency providing the grant of such conviction.

Within 30 days following such notification of conviction, appropriate disciplinary action shall be taken against such employee or student and/or the employee or student may be required, at his or her own expense, to participate satisfactorily in a substance abuse assistance or rehabilitation program. With the intent to provide a drug and alcohol free educational and work environment, Harper College is committed to providing proactive drug and alcohol abuse prevention programs, confidential counseling, intervention and referral for its students and employees. An Employee Assistance Program is available for employees and their immediate family members.

Harper College shall conduct a biennial review of the drug and alcohol abuse programs to determine their effectiveness and implement appropriate changes.

## Health Risks of Alcohol and Drug Consumption

The consumption of alcohol and drugs may have serious health risks and changes in behavior including: impaired judgment and coordination required to drive a car safely, increased incidences of a variety of aggressive acts, impairment in higher mental functions, risk of dependence, and in high doses, respiratory depression and death. Long-term use can lead to permanent damage to vital organs. Mothers who drink during pregnancy may give birth to infants with fetal alcohol syndrome.

Alcohol and Substance Abuse Policy and Regulations page 1  
(Updated 10-6-14)

### Description of Health Risks Associated with the Use of Some Illicit Drugs and Abuse of Alcohol

#### Classification: ALCOHOL

**Drug Name:** Ethanol

**Common or Brand:** Beer, Wine, Distilled Liquor

**Physical Dependence:** High

**Potential Psychological:** High

**Acute Effects:** Lowered Inhibitions, Impaired judgment, Loss of motor skills, Coordination, Slurred speech

**Health Risks and Effects of Long-term Use:** Hypertension, Liver damage, Cardio-vascular disease, Toxic psychosis, Neurologic damage, Addiction with severe withdrawal

**Overdose Effects:** Coma, Possible death

#### Classification: STIMULANTS

**Drug Name:** Cocaine, Amphetamine

**Common or Brand:** Cocaine Desoxyn, Bennies, Adderall, Dexedrine

**Physical Dependence:** Possible

**Potential Psychological:** High

**Acute Effects:** Feeling of well-being, Excitation, Euphoria, Increased alertness, Increased blood pressure and pulse, Insomnia, Appetite loss

**Health Risks and Effects of Long-term Use:** Delusions, Hallucinations (Toxic Psychosis), Possible organ/tissue damage

**Overdose Effects:** Agitation, Temperature Increase, Hallucinations, Convulsions, Heart Attack, Stroke High blood pressure, Loss of consciousness, Seizures

#### Classification: STIMULANTS

**Drug Name:** Methylphenidate

**Common or Brand:** Ritalin

**Physical Dependence:** Possible

**Potential Psychological:** High

**Acute Effects:** Feeling of well-being, Excitation, Euphoria, Increased alertness, Increased blood pressure and pulse, Insomnia, Appetite loss

**Health Risks and Effects of Long-term Use:** Delusions, Hallucinations (Toxic Psychosis), Possible organ/tissue damage

**Overdose Effects:** Agitation, Temperature Increase, Hallucinations, Convulsions, Heart Attack, Stroke High blood pressure, Loss of consciousness, Seizures

#### Classification: STIMULANTS

**Drug Name:** Methylenedioxymethamphetamine

**Common or Brand:** Ecstasy, MDMA

**Physical Dependence:** Low

**Potential Psychological:** High

**Acute Effects:** Feeling of well-being, Excitation, Euphoria, Increased alertness, Increased blood pressure and pulse, Insomnia, Appetite loss

**Health Risks and Effects of Long-term Use:** Delusions, Hallucinations (Toxic Psychosis), Possible organ/tissue damage

**Overdose Effects:**

Agitation, Temperature Increase, Hallucinations, Convulsions, Heart Attack, Stroke High blood pressure, Loss of consciousness, Seizures

#### Classification: CANNABIS

**Drug Name:** Marijuana, Hashish, Hash oil

**Common or Brand:** Grass, Pot, Weed Dope, Hash

**Physical Dependence:** Low

**Potential Psychological:** Moderate

**Acute Effects:** Tachycardia, Reddened eyes, Euphoria, Profound humor, Altered time/space perception, Short term memory loss, Increased appetite

**Health Risks and Effects of Long-term Use:** Cardiovascular Damage as with smoking tobacco

**Overdose Effects:** Insomnia, Hyperactivity, Panic attacks, Paranoia, Possible toxic reaction if treated with other chemicals

Adapted from Controlled Substances - Uses & Effects. N.d. pct.eduWeb. 18 Dec 2012.

[www.pct.edu/studentPolicy/docs/drugchart.pdf](http://www.pct.edu/studentPolicy/docs/drugchart.pdf)

### Federal and State Legal Sanctions for the Unlawful Possession or Distribution of Illicit Drugs and Alcohol

#### Federal Drug Laws

The possession, use, or distribution of illicit drugs is prohibited by federal law. Strict penalties are enforced for drug convictions, including mandatory prison terms for many offenses. The following information, although not complete, is an overview of federal penalties for first and second convictions.

#### Federal Drug Trafficking Penalties (21 USC 841)

Penalties for federal drug trafficking convictions vary according to the quantity of the controlled substance involved in the transaction. The following list is a sample of the range and severity of federal penalties imposed for first and second convictions.

#### Federal Trafficking Penalties - Marijuana

Drug/ Substance	Quantity	1st Offense	2nd Offense
Marijuana	1000 kg or more mixture; or 1,000 or more plants.	Not less than 10 years, not more than life.	Not less than 20 years, not more than life.
		If death or serious injury, not less than 20 year, not more than life	If death or serious injury, mandatory life.
Marijuana	100-999 kg mixture; or 100 to 999 plants.	Fine not more than \$4 million if an individual, \$10 million if other than an individual.	Fine not more than \$8 million if an individual, \$20 million if other than an individual.
		Not less than 5 years, not more than 40 years.	Not less than 10 years, not more than life.
		If death or serious injury, not	If death or serious injury,

Drug/ Substance	Quantity	1st Offense	2nd Offense
		less than 20 years, not more than life.  Fine not more than \$2 million if an individual, \$5 million if other than an individual.	mandatory life.  Fine not more than \$4 million if an individual, \$10million is other than an individual.
Marijuana	more than 10 kgs hashish; 50 to 99 kg. mixture. More than 1 kg of hashish oil; 50 to 99 plants.	Not more than 20 years.  If death or serious unjust, not less than 20 years, no more than life.  Fine \$1million if an individual, \$5 million if other than an individual.	Not less than 30 years.  If death or serious injury, mandatory life.  Fine \$2 million if an individual, \$10 million is other than an individual.
Marijuana	1-49 plants; less than 50 kg mixture	Not more than 5 years.  Fine not more than \$250,000, \$1million other than individual.	Not more than 10 years.  Fine \$500,000 if an individual, \$2 million is other than an individual.
Hashish	10 kg or less	Not more than 5 years. Fine not more than \$250,000, \$1million other than individual.	Not more than 10 years. Fine \$500,000 if an individual, \$2 million is other than an individual.
Hash Oil	1 kg or less	Not more than 5 years. Fine not more than \$250,000, \$1million other than individual.	Not more than 10 years. Fine \$500,000 if an individual, \$2 million is other than an individual.

**Federal Drug Possession Penalties (21 USC 844)**

Persons convicted on Federal charges of possessing any controlled substance face penalties of up to 1 year in prison and a mandatory fine of no less than \$1,000 up to a maximum of \$100,000. Second convictions are punishable by not less than 15 days but not more than 2 years in prison and a minimum fine of \$2,500. Subsequent convictions are punishable by not less than

90 days but not more than 3 years in prison and a minimum fine of \$5,000. Possession of drug paraphernalia is punishable by a minimum fine of \$750.

**Forfeiture of Personal Property and Real Estate (21 USC 853)**

Any person convicted of a federal drug offense punishable by more than one year in prison shall forfeit to the United States any personal or real property related to the violation, including houses, cars, and other personal belongings. A warrant of seizure is issued and property is seized at the time an individual is arrested on charges that may result in forfeiture.

**Denial of Federal Aid (20 USC 1091)**

Under the Higher Education Act of 1998, students convicted under federal or state law for the sale or possession of drugs will have their federal financial aid eligibility suspended. This includes all federal grants, loans, federal work study programs, and more. Students convicted of drug possession will be ineligible for one year from the date of the conviction of the first offense, two years for the second offense, and indefinitely for the third offense. Students convicted of selling drugs will be ineligible for two years from the date of the first conviction, and indefinitely for the second offense. Those who lose eligibility can regain eligibility by successfully completing an approved drug rehabilitation program.

**State Drug laws**

**Illinois Sanctions for Driving Under the Influence (625 Illinois Compiled Statutes 5/11-501)**

Sanctions for driving under the influence of alcohol or drugs may include suspension or revocation of driving privileges, community service, fines, and imprisonment.

**Illinois Statutory Provisions for Violation of Alcohol Control Statutes (235 Illinois Compiled Statutes 5/6-16)**

Sanctions for violating the Illinois Alcohol Control Statutes may include suspension of driving privileges, fines, community service, and imprisonment for up to one year.

**Illinois Statutory Provisions for Illegal Drug Possession (720 ILCS 570/402)**

**Any substance containing COCAINE**

Amount	Felony Status	Prison Term	Fine
15-<100 gm	Class 1	4-15 years	Up to \$200,000
100-<400 gm	Class 1	6-30 years	Up to greater of \$200,000 or full street value
400-<900 gm	Class 1	8-40 years	Up to greater of \$200,000 or full street value
900+ gm	Class 1	10-50 years	Up to greater of \$200,000 or full street value

**Any substance containing AMPHETAMINE**



Amount	Felony Status	Prison Term	Fine
200+ gm	Class 1	4-15 years	Up to \$200,000

**MARIJUANA (includes HASHISH)**

Amount	Classification	Prison Term	Fine
Up to 2.5 gm	Class C Misdemeanor	Up to 30 days	Up to \$1,500
>2.5 - 10.0 gm	Class B Misdemeanor	Up to 6 months	Up to \$1,500
>10.0 - 30.0 gm	Class A Misdemeanor	Less than 1 year	Up to \$2,500
Class 4 Felony for 2nd and subsequent offenses	1-3 years	Up to \$25,000	
>30.0 - 500.0 gm	Class 4 Felony	1-3 years	Up to \$25,000
Class 3 Felony for 2nd and subsequent offenses	2-5 years	Up to \$25,000	
>500.0 - 2,000.0 gm	Class 3 Felony	2-5 years	Up to \$25,000
>2,000.0 - 5,000.0 gm	Class 2 Felony	3-7 years	Up to \$25,000
>5,000.0 gm	Class 1 Felony	4-15 years	Up to \$25,000

Illinois Statutory Provisions for Manufacture or Delivery ([720 ILCS 570/401](#))

**Any substance containing COCAINE or analog thereof**

Amount	Felony Status	Prison Term	Fine
1-<15 gm	Class 1	4-15 years	Up to \$200,000
15-<100 gm	Class X	6-30 years	Up to \$500,000
100-<400 gm	Class X	9-40 years	Up to greater of \$500,000 or full street value
400-<900 gm	Class X	12-50 years	Up to greater of \$500,000 or full street value
900+ gm	Class X	15-60 years	Up to greater of \$500,000 or full street value

**Any substance containing AMPHETAMINE or analog thereof**

Amount	Felony Status	Prison Term	Fine
50-<200 gm	Class 1	4-15 years	Up to \$250,000
200+ gm	Class X	6-30 years	Up to \$500,000

**MARIJUANA (includes HASHISH)**

Amount	Classification	Prison Term	Fine
Up to 2.5 gm	Class B Misdemeanor	Up to 6 months	\$1,500
>2.5-10.0 gm	Class A Misdemeanor	Less than 1 year	\$2,500
>10-30.0 gm	Class 4 Felony	1-3 years	\$25,000
>30-500.0 gm	Class 3 Felony	2-5 years	Up to \$50,000
>500-2,000.0 gm	Class 2 Felony	3-7 years	Up to \$100,000
>2,000-5,000.0 gm	Class 1 Felony	4-15 years	Up to \$150,000
>5,000.0 gm	Class X Felony	6-30 years	Up to \$200,000

**Resources**

Following is a list of resources available to employees and students for drug and alcohol treatment:

Name	Phone
Kenneth Young Center (Elk Grove Village)	(847) 524-8800
Alexian Brothers – Northwest Mental Health Clinic (Hoffman Estates)	(847) 952-7460
Alcoholics Anonymous - Dist. 21 Answering Service (Palatine)	(847) 359-3311
Harper College Employee Assistance Program	(800) 327-5071

**Bulletin Boards and Publicity**

Announcement of College events can be found on:

- print event listings;
- the online Events Calendar ([harpercollege.edu](http://harpercollege.edu));
- the Algonquin Road marquee;
- Harper Vision, the closed circuit television monitors; and
- bulletin boards around the campus. Publicity must be approved and/or stamped by the Student Involvement office and may be hung or distributed only in designated locations according to posting guidelines. Recommended size is 8.5# x 11# tall, but larger posters will be allowed if space is available. The name of the organization sponsoring an event should be clearly visible on all publicity material as well as the Harper College name or logo. A poster service is available to student clubs and organizations through the Office of Student Involvement, Building A, Room A336. A

three to four week lead time is requested for design and the campus posting. Generally, posters will be displayed for a period not to exceed three weeks. Exceptions to these regulations may be requested through Student Involvement.

If space allows, bulletin boards may also be used for announcements of events by non-Harper not-for-profit organizations; contact the Student Involvement office at 847.925.6242 for guidance. Only the two "Open Access" bulletin boards may be used to announce non-Harper for-profit events: one is in the Student Center, Building A, near the Registrar's Office (on the west side of the hallway); the other is in Building J, near J Theatre (across from the vending machines). The Office of Student Involvement also coordinates the reservation process for table tent advertising in the cafeteria. Contact 847.925.6242 for more information.

In addition, both on-campus and off-campus groups wishing to advertise should contact both WHCM Radio 88.3 FM and The Harbinger, campus newspaper, for rates to reach customers through these student-run venues.

For further information, please contact Student Involvement at 847.925.6242.

## Communicable Diseases Policy

A student who has a chronic communicable disease or who is a carrier of a chronic communicable disease may attend the College and participate in programs and activities whenever, through reasonable accommodation, there is no significant risk of transmission of the disease to others.

A student who has a chronic communicable disease or who is a carrier of a chronic communicable disease may be denied admission to, or may be dismissed from, a particular program or course of study whenever such chronic communicable disease has a direct effect on the student's ability to perform so as to render the student not qualified for the program or course of study.

No other person who has a chronic communicable disease or who is a carrier of a chronic communicable disease shall be denied the use of College facilities or services whenever, through reasonable accommodation, there is no significant risk of transmission of the disease to others.

The President is authorized to establish rules and regulations that are designed to implement this policy.

### Rules and Regulations

#### A. Temporary Exclusion

When there is a question concerning admittance, suspension or dismissal of a student because the student has a chronic communicable disease or is a carrier or is reasonably suspected of having a chronic communicable disease or of being a carrier, such student or other user of College facilities or services may be temporarily excluded from the College by the Provost or designee, pending a final determination. A student who has been temporarily excluded from the College shall be provided with an opportunity to make up any work missed during the absence.

#### B. Initial Evaluation

Whenever necessary, a student or other user of College facilities or services who has a chronic communicable disease or who is a carrier of a chronic communicable disease, or is reasonably suspected of having a chronic communicable disease or of being a carrier, shall be evaluated by a team that may consist of the Provost or designee, other appropriate College personnel,

a physician, the student's physician, public health personnel and other consultants selected by the President or his/her designee. The team's report and recommendations, along with any dissenting opinions, shall be forwarded to the President for decision. Every effort shall be made to complete the evaluation in a timely and prompt manner.

#### C. Admission Decision

The President shall make the decision on admittance, suspension or dismissal after reviewing the report and recommendations of the evaluation team. The President's decision may be appealed to the Board of Trustees.

#### D. Subsequent Evaluations

The student shall be periodically reevaluated by the evaluation team to determine whether the student's status continues to be appropriate. The frequency of the reevaluations shall be determined by the team.

#### E. Withdrawal

If such student cannot attend the College, or participate in a particular program, activity or course of study, the student shall be permitted to withdraw without prejudice and receive a tuition refund within the given guidelines. Any other user of College facilities or services who cannot use such facilities or services shall receive a refund for fees paid.

#### F. Confidentiality

Such student's medical condition shall be disclosed only to the extent necessary to minimize the health risks to the student and others.

## Demonstrations on Campus

### A. General Provisions

1. Harper College supports the rights of student organizations, individual students, faculty, staff, and other members of the community to assemble to express their views on issues of the day, including the right to demonstrate in a peaceful manner, provided their activities do not disrupt normal activities or infringe upon the rights of others. The use of College property for these purposes does not imply acceptance or endorsement by the College of the views expressed.

2. Regulating the time, place and manner of campus demonstrations is a legitimate function and necessary responsibility of the College. This Policy sets out content-neutral rules in order to protect the rights of those involved in the demonstration, others in the College community, and the College itself from unreasonable disruption.

3. For purposes of this Policy, disruption is defined as activity which substantially interferes with the rights of others or with College operations, including activity which

a. Denies or infringes upon the rights of students, staff, visitors or other members of the College community.

b. Interferes with instruction, research, administration, other College services, or other activities of the College community.

c. Restricts or obstructs the free movement of individuals on the campus or in campus buildings.

d. Impedes or denies the use of offices, classrooms or other College facilities to students, staff, visitors, or other members of the College community.

- e. Endangers or threatens the safety of any member of the College community, including by the use of force or violence.
  - f. Damages, defaces or causes the loss of property.
  - g. Violates the law or College policies.
4. The following regulations apply to all demonstrations, rallies, and similar assemblies:
- a. Persons may not use campus buildings for demonstrations or rallies, and may not block or otherwise interfere with the free flow of vehicular, bicycle, or pedestrian traffic. The right of way on streets and sidewalks must be maintained.
  - b. Persons may not block or otherwise interfere with ingress to or egress from campus buildings.
  - c. Persons shall not obstruct, disrupt, interrupt or attempt to force the cancellation of any event or activity sponsored by the College or by any users authorized to use College facilities.
  - d. Persons shall not engage in harassing, physically abusive, threatening or intimidating conduct toward any person.
  - e. Persons shall comply with the directions of a College official acting in the performance of his/her official duty.
  - f. Classes or other scheduled activities shall not be disrupted.
  - g. Use of public address systems and amplified sound will not be permitted without prior approval from the Office of Student Involvement.
  - h. When an invited speaker is the subject of protest, persons may demonstrate outside the building where the speech is taking place. Persons who wish to enter the building must do so as members of the audience and must give the speaker a respectful hearing. Failure to grant the speaker a respectful hearing may result in the offending person being asked to leave. Signs, placards or similar paraphernalia associated with a demonstration may not be carried into the building.
  - i. The safety and well-being of members of the College community collectively and individually must be protected at all times.
  - j. College property must be protected at all times.
  - k. Persons on College property may be required to provide identification to a College official upon request.
  - l. Persons engaging in activities on College property, including non-College participants in demonstrations, are subject to and expected to comply with all applicable College policies and procedures.
5. Student organizations sponsoring or organizing demonstrations, rallies, or equivalent activities will be held responsible to comply with this Policy. Student organization sponsorship of a demonstration does not relieve participating individuals of responsibility for their conduct. Each participant in a demonstration or equivalent activity, whether sponsored or not, is accountable for compliance with the provisions of this Policy as well as (in the case of students) the Student Code of Conduct. Violations of this Policy may be grounds for disciplinary action against individuals and/or the sponsoring or participating student organization and its officers.
6. If non-compliance with this Policy also involves violations of State or Federal law, the College may pursue prosecution of chargeable offenses against violators, and/or recovery of money damages from them for any harm to or loss or destruction of College property resulting from the misconduct.

## B. Scheduled Demonstrations

1. Registered student organizations, full- or part-time students and employees of the College who wish to schedule a demonstration, rally or similar activity, may request to use one of the locations specified below through the regular reservation procedure. Any such request should be submitted at least four (4) weeks in advance of the activity, whenever possible. The Office of Student Involvement will respond promptly to any reservation request. In the event a request is denied, an appeal may be made to the Dean of Student Affairs who shall respond promptly to any such appeal. Demonstrations will be permitted at the following locations, unless a College department or another organization has previously reserved the location:

- Quad – paved area surrounding the bust of William Rainey Harper
- Quad – grassy area between Buildings D, H & X 2.

2. Demonstrations may be held at other locations on campus with the approval of the Dean of Student Affairs on a first-come, first-served basis after an assessment that the demonstrations will not otherwise interfere with scheduled College use or jeopardize the safety of members of the College community and general public, and that they are, as proposed, consistent with these guidelines.

## C. Unscheduled Demonstrations

1. It is the intent of this Policy to ensure that all demonstrations on campus occur with minimal threat to the safety and security of persons or facilities through proper planning and scheduling. Occasionally, events occur which may motivate or necessitate immediate public response, and it is not the intent of this Policy to limit the right of individuals or groups to assemble and express their views with respect to such events.

2. Unscheduled demonstrations, rallies, or similar activities may be held by registered student organizations, full- or part-time students, and current employees of the College in the areas defined above, provided that the activity does not interfere with any functions for which that space has been reserved in advance.

3. However, it is inappropriate for sponsors of events that have been planned to circumvent this Policy by contending that the demonstrations are spontaneous. In deciding whether a demonstration is spontaneous or planned, the College may consider relevant evidence, including (a) whether signs or placards used at the demonstration were commercially produced, (b) whether participants used amplification equipment, (c) whether the Harper College Police Department was alerted, or media contacted, substantially in advance of the demonstration, or (d) whether other circumstances tend to show advance planning by one or more organizers.

## D. Small Demonstrations

Demonstrations or similar activities by ten (10) or fewer students, faculty or staff may occur at any outdoor area without advance reservations. Except with respect to location, such demonstrations are subject to regulations which apply to larger demonstrations. Accordingly, the College encourages all persons planning a demonstration or similar activity to contact the Office of Student Involvement to discuss their plans and the applicable regulations of this Policy.

## E. Parades or Marches on Campus

Demonstrations in the form of parades or campus marches on streets and campus walkways may be conducted with specific advance approval of route and time. An application for approval must be submitted to the Office of Student Involvement at least four (4) weeks in advance of the event, whenever possible. The Office of Student Involvement will notify and make arrangements with the Harper College Police Department to ensure the safety

and security of the campus and participants. In the event a request is denied, an appeal may be made to the Dean of Student Affairs who shall respond promptly to any such appeal.

## F. College Procedures for Responding to Disruptive Demonstrations

The Executive Vice President for Finance and Administrative Services in consultation with the Dean of Student Affairs and the Harper College Police Department will determine whether a demonstration has become disruptive based on the criteria set out in Part A.3. of this Policy. If circumstances permit, the Executive Vice President for Finance and Administrative Services or the Dean of Student Affairs will inform the demonstrators that they must discontinue their disruptive activities, explaining which activities violate this Policy. If the disruption continues, appropriate action will be taken including police action. An immediate physical threat to persons and/or property may require immediate police action, as may situations in which the Executive Vice President for Finance and Administrative Services or the Dean of Student Affairs determines that a warning will not suffice to provide protection for persons or property.

### Discrimination Complaint Procedure

William Rainey Harper College prohibits discrimination against any individual on the basis of race, color, religion, sex, national origin, ancestry, age, marital status, sexual orientation, physical or mental disability or unfavorable discharge from military service.

**The purpose of the discrimination complaint procedure is as follows:**

- to advise individuals who believe that they have been subjected to discrimination of how to proceed with a discrimination complaint;
- to ensure that such complaints are resolved in a manner which is prompt and confidential.

#### Non-Discrimination Compliance Officer

The College President will appoint an employee to act as the College's Non Discrimination Compliance Officer (NDCO) who is currently the Chief Human Resources Officer. The NDCO will be responsible for the investigation of complaints of alleged discrimination within the guidelines of existing legislation, College policy and appropriate contracts.

#### Informal Discussion

Before filing a formal complaint, students and employees are encouraged to discuss their concerns with the Non-Discrimination Compliance Officer. This confidential discussion is seen as the first step in the resolution procedure. It allows for sharing of information, giving of advice and achieving mutual resolution between/ among parties.

#### Filing and Resolution of a Complaint of Discrimination

A formal investigation of a claim of discrimination will only be undertaken by the Non-Discrimination Compliance Officer (NDCO) upon authorization of the complaining individual and receipt of a written complaint.

**The following procedures shall be used for investigating complaint(s) of discrimination.**

Within 21 calendar days of the alleged discriminatory act or conduct, an employee or student should:

- submit a specific and detailed written complaint setting forth the nature of the alleged discrimination;

- identify the person(s) against whom the complaint is being filed;
- and identify the date(s) of the action(s) which is (are) the subject of the complaint, and the remedy or relief sought.

Upon receipt of the written complaint, the NDCO will review and discuss the complaint with all parties directly involved. On the basis of the written complaint and interview(s), the NDCO will determine what further investigative action is required.

After the initial interview(s) with the complainant, the NDCO will conduct further investigation as deemed appropriate. Such investigation may include, but is not limited to:

- interviewing the party(ies) alleged to have committed the discriminatory act;
- interviewing witnesses identified by the complaining or accused party;
- and reviewing documents relevant to the complaint.

As a result of the above initial steps, resolution with the parties will be explored. If resolution is not achieved, the NDCO will determine the appropriate actions to be taken.

The NDCO shall prepare a confidential report with regard to the investigation. The report shall state whether or not the NDCO believes a violation of the College's non-discrimination policy has occurred and whether or not resolution has been achieved. The NDCO's report shall be completed within 30 calendar days of receipt of any complaint(s); however, such time may be extended for an additional 30 calendar days if necessary.

If resolution is not achieved, the NDCO's report shall be submitted to the Executive Council for review and action within 14 calendar days of receipt of the report.

A copy of the confidential report will be sent to and maintained by the Chief Human Resource Officer of the College. The NDCO's findings shall be sent to the complaining and accused parties.

Either party may appeal in writing the decision of the Executive Council by filing an appeal with the President within five calendar days of receipt of the Executive Council's decision. The President shall respond within 30 calendar days of receipt of the appeal.

### Distribution of Literature Policy

#### I. Purpose

This section outlines the policy and procedures regarding distribution of literature and dissemination of information on the Harper College campus by individuals, registered student organizations, and non-profit groups or agencies.

#### II. Policy

A. Individuals, registered student organizations, and non-profit groups may distribute literature and disseminate information on campus in accordance with the following time, place, and manner regulations which are intended to promote freedom of expression while preventing interference with the free flow of traffic and with regular activities and operations of the College.

1. Unregulated distribution of literature has the potential to disrupt College activities, functions, and services; interfere with pedestrian traffic; pose safety hazards; contribute to clutter, litter, and cause visual blight; and result in expenses for cleanup, handling, and environmental costs.
2. Public spaces, including sidewalks, lobbies, courtyards, hallways, and other paths, thoroughfares, and open areas must be maintained so as to permit orderly and safe access and travel for pedestrians, and where appropriate, bicycles

and other vehicles. Literature may be distributed by hand in public spaces outside buildings, as long as the distribution does not cause disruption or other adverse effects as noted above. Small handouts pertaining to College functions or activities may be distributed by hand in public spaces inside buildings, so long as the distribution does not cause disruption or other adverse effects, as noted above.

3. Leafleting is not permitted inside College buildings except at reserved tables as explained in III.B.2, below.

B. The sponsoring organization or individual may be held responsible for costs of cleanup associated with the distribution of information and literature in violation of this policy. A student organization which violates the policy is also subject to the Student Conduct Code and to administrative responses that could affect the organization's future use of College facilities or other privileges afforded to it by the College.

C. Permission to distribute materials does not imply College endorsement of views expressed in the materials.

### III. Procedures

#### A. Outdoor distribution of literature and other expressive activity

1. Any person may distribute literature by hand or communicate information on outdoor areas of the College campus which are open to the general public. Distribution of literature that is obscene or pornographic is prohibited.
2. Outdoor distribution of literature from information tables is restricted to designated areas in the paved area of the Quad surrounding the bust of William Rainey Harper. Official College functions such as Graduation and the Student Involvement Fair are exceptions to these procedures.

a. Two table spaces will be made available on a first come, first served basis, except that registered student organizations shall have priority for reservations.

b. Individuals, registered student organizations, and non-profit groups or agencies may not reserve more than one outdoor table space for a particular date.

c. Requests to distribute literature from outdoor information tables should be made through the Office of Student Involvement, which will then place approved requests through Conference and Event Services.

d. Tables must be attended by a representative of the reserving organization.

3. Materials shall not be distributed by placing copies on or in vehicles (including bicycles) on College property.

#### B. Indoor distribution

1. Registered student organizations, individual students, campus departments, outside non-profit groups or agencies, and individuals sponsored by a Harper College organization or department may distribute literature in the indoor locations designated in III.B.2., as described below. Materials may not be distributed in offices, laboratories, classrooms, or other non-designated locations except as part of official College functions, and shall not be distributed in a manner that would cause disruption to the regular activities of the College.

2. The entities and individuals described in III.B.1. above may distribute literature from indoor information tables at designated areas in the Student Center in Building A, Building D (limited to representatives of four-year colleges and universities), Building J, Building L, and Building Z.

a. The space is available only upon advance request, which shall be obtained by filing a reservation form with the Office of Student Involvement, Building A 336, 847-925-6242. The Associate Dean of Student Affairs or designee will review the requests and then place reservations for approved requests through Conference and Event Services.

b. Space shall be allocated on a first-come, first-served basis, provided that:

- In Building J, College representatives (both of Harper and of four-year institutions) will have priority
- In all other areas, Harper student clubs and organizations will have priority
- These and additional locations may be identified by Student Involvement for use by representatives of colleges and universities who visit campus to provide students with information about educational opportunities at four-year institutions.

Use of a designated area should be requested at least five days prior to the desired date of use, whenever possible. Requests for a subsequent semester will not be accepted earlier than six weeks prior to the beginning of that semester.

c. There may be official College functions or large events requiring the use of space or tables. Should this occur, alternative date(s) and/or location(s) may be offered to the entity making the request. No displays or distribution shall be conducted in the Building A Student Lounge when that area is reserved for an activity.

d. Tables will be provided by the College, and displays may not exceed 4' x 8' in size. Tables are available during the common hours of the College. Table areas are subject to change, based on facility needs. These are the designated table/display areas that may be reserved:

- Building A/Student Center: A maximum of two tables along the south corridor of the Student Center Lounge
- Building J: A maximum of three tables along the north wall by the events sign in the Business & Social Science Center
- Building L: One table in front of the bookstore, at the intersection of the hallways
- Building Z/Avanté: A maximum of two tables in front of the glass near the Z119/Z117 signs

e. In order to allow as many groups as possible to be represented in the Student Center, Building Z, and Building J, a requester may reserve a space for a maximum of: a) one day a week for the semester; b) one full week per semester; or c) no more than eight occurrences in a single month. Tabling in Building L may be subject to additional restrictions, depending on the amount of requests received.

f. There shall be no more than one space per organization at the same time; however, if no other requests have been made by the reservation deadline, one additional display space may be reserved. At least one person, and no more than four, shall staff each information table or display.

g. Displays may not be disruptive in nature. No sound amplification equipment may be used in the designated area.

3. Representatives of organizations or agencies may not approach individuals beyond the designated space (behind display table), and must clearly identify themselves to Harper students and other members of the College community.

4. Alcoholic beverages, narcotics, profane language, quarreling, fighting or gambling are prohibited. Smoking is also prohibited.

5. Solicitation is prohibited, other than as described in the Non-Solicitation Policy.
6. The distribution of literature that is obscene or pornographic is prohibited.
7. The requester is responsible for prompt payment of any damage to College property.
8. If an organization does not staff its reserved space for two reserved dates without notifying the Manager of Conference and Event Services, the College may cancel the balance of the reserved time.
9. Violation of these regulations shall result in revocation of the requesting organization's or individual's reservation by the Manager of Conference and Event Services or by the Associate Dean of Student Affairs for the remainder of the semester or three months, whichever is longer, by service of a cancellation notice in writing upon the person who made the reservation(s). If there is a dispute as to the facts regarding the alleged violation, the party contesting the cancellation notice may, within five days of receiving the notice, request the Dean of Student Affairs to hold a meeting with the aggrieved party and the College office which cancelled the reservation to review the alleged violation. The decision of the Dean of Student Affairs is final.
10. An individual or organization which wishes to register a complaint concerning another person or organization's distribution of literature or other expressive activity on campus should communicate that concern to the Associate Dean of Student Affairs, who shall cause the complaint to be investigated and shall, if appropriate, endeavor to mediate and resolve the differences between the complainant and the person or entity whose activity is the subject of the complaint.

### Guide to Gender Based and Sexual Misconduct

This guide is provided to educate the campus community about what types of behaviors constitute gender-based or sexual misconduct. The most up-to-date version is posted on [harpercollege.edu](http://harpercollege.edu).

### Locker General Use Statement

Lockers are the property of Harper College. At no time does the College relinquish its exclusive control of lockers which are assigned to its students for the students' convenience and temporary use. Students are to use lockers exclusively to store school-related materials. Students are responsible for any items placed in the lockers and Harper College will not be responsible for the loss or damage of the students' goods under any conditions; therefore, students shall not store valuable items in the lockers. Students will be held responsible for damage to lockers beyond expected wear.

Inspection of the interior of lockers may be conducted by College officials, for any reason at any time, without notice, without student consent, and without a search warrant. The personal possessions of students within a College locker may be searched only when College officials have a reasonable suspicion that the search will uncover evidence of a violation of state or federal law or college policy. As soon as practical before the search of a locker, the College officials will provide notice of the search to students whose lockers will be searched unless disclosure would impede an ongoing investigation by police or school officials.

### Procedures

Requests for location of lockers will be considered, but due to limited availability, locker location may be determined by the College or division. If a student who is mobility impaired requests a locker, preference will be given for an accessible location (where possible). Procedures for obtaining locks, lockers, or keys may vary according to division or building within Harper College. There may be a fee or deposit applied to use of the lockers within each division; see division office for details.

The lock and any material left in a locker after the assignment ceases will be removed and secured in the Harper College Police Department Lost and Found area. Lockers will be cleaned periodically and all locks and materials in the lockers for which the assignment has terminated will be removed for this purpose and placed in Lost and Found.

### Seizure of Contraband

If a search of a student locker yields contraband, College officials will seize the item and, where appropriate, turn it over to Harper College Police Department who may follow standard procedures regarding criminal activity. Contraband may be used as evidence in internal College disciplinary proceedings against the student. Contraband is defined as any unauthorized item or substance possession of which is prohibited by College policy and/or state or federal law. It includes but is not limited to weapons and "look-alikes", alcohol beverages, controlled substances and "look-alikes", equipment or records belonging to the College, and stolen property.

### Violations

A student found to have violated the general use statement for College owned lockers shall be subject to discipline in accordance with the College's Student Code of Conduct, which may include suspension, exclusion, or expulsion, and the student may, when appropriate, be referred to Harper College Police.

### Non-Solicitation Policy

Solicitation shall include any undertaking of an individual or group to promote the sale or use of a particular product or service, or a contribution to or request for support of an individual or organization. Except as otherwise provided below, this policy applies to and prohibits the following:

Soliciting in Harper College facilities or on campus by for-profit corporations, non-profit organizations, faculty, staff, students, or any other individuals. This prohibition includes personal solicitations made through campus e-mail listservs.

#### The following solicitation activities have been approved as exceptions to this policy:

##### A. Solicitations Sponsored or Authorized by the College

Harper College participates in approved charitable events, including the Annual Giving Campaign to help support student scholarships, during the year. Participation by employees is on a voluntary basis. Campus-wide solicitations for charitable organizations may not be conducted without approval of the Executive Vice President for Finance and Administrative Services.

##### B. Solicitations Sponsored by Registered Student Organizations of the College

1. Student clubs and organizations are permitted to solicit funds in support of and to help subsidize their activities, and may also solicit funds on behalf of charitable organizations for purposes such as disaster relief or social awareness causes.

2. Student clubs and organizations must contact the Office of Student Involvement to request advance authorization for a solicitation event, and must submit and receive approval of a completed Event Planning and Proposal Form before initiating the sales/solicitation event.

3. Student clubs are required to adhere to all Office of Student Involvement policies regarding sales and fund raising. Funds raised must be deposited to and accounted for through the student organization's College account.

### C. Signature Collection

1. Signatures for petitions or similar documents may be solicited on outdoor campus spaces, such as the Quad. To avoid impeding free access to College facilities, signatures may not be solicited directly in front of the entry way of any campus buildings.

2. No one may approach anyone inside campus buildings to solicit signatures other than these two exceptions:

a. Signatures may be collected at information tables reserved by individuals or organizations as described in the Distribution of Literature Policy.

b. The solicitation of student signatures on nominating petitions of candidates for Student Trustee and Student Government is permitted in common areas of campus buildings during designated pre-election periods.

Harassing behavior is not permitted. Individuals who engage in such conduct may be directed to leave campus or, if they are Harper students, be subject to the proceedings in the Student Code of Conduct.

Harper employees are expected to perform their duties as representatives of the College in a professional manner, and to avoid misusing their positions for personal or private gain. In this regard, class lists and any other data about students to which employees may have access are to be used solely for College instructional, administrative, advising/counseling and business purposes. Use of this information for personal or business solicitation is strictly prohibited.

## Prohibition of Sexual Discrimination, Harassment, and Misconduct

### Sexual Discrimination, Harassment, and Misconduct Policy

William Rainey Harper College is committed to maintaining a safe and healthy educational and employment environment that is free from discrimination, harassment and misconduct on the basis of sex, which includes sexual orientation and gender-related identity and expression. It is the policy of the College that no employee, student or other members of the College community shall be subject to sexual discrimination, harassment or misconduct. This Policy applies to students, employees, appointees, or third-parties, whenever the misconduct occurs:

1. On College property; or
2. Off College property if:
3. The conduct was in connection with a College or College-recognized program or activity; or
4. The conduct may have the effect of creating a hostile environment for a member of the College community.

The College designates one or more Title IX Coordinator(s) to ensure adherence to the policy and promote a respectful College environment free of sexual discrimination, harassment and misconduct.

Any form of retaliation, including intimidation, threats, harassment and other adverse action taken or threatened against any complainant or person reporting or filing a complaint alleging sexual discrimination, harassment or misconduct or any person cooperating in the investigation of such allegations (including testifying, assisting or participating in any manner in an investigation) is strictly prohibited.

The College (under the oversight of the Title IX Coordinator(s)) will maintain and publish procedures implementing this policy on the College's publicly available Title IX [Title IX/Sexual Misconduct website](#) blank, as well as in other formats useful to a variety of College audiences. These sources contain information that includes but is not limited to:

- Definitions of prohibited conduct;
- Responsibilities of and contact information for the College's Title IX Coordinator(s);
- Options for assistance following an incident of sexual discrimination, harassment and/or misconduct;
- Procedures for reporting and confidentially disclosing sexual discrimination, harassment and/or misconduct;
- Complaint investigation, resolution, and appeal procedures;
- Prevention and education programming provided to College students;
- Training and education provided to employees, including the Title IX Coordinator(s), Department of Human Resources, College Police, victim advocates, and anyone involved in responding to, investigating or adjudicating sexual discrimination, harassment and misconduct incidents; and
- Any other relevant information as required by federal and state law.

Comprehensive information about the College's disciplinary procedures can be found in the Student Code of Conduct and in the Human Resources Procedures, both of which can be found online. Additional information can be found at the following:

- [Definitions of Prohibited Behaviors](#)
- [Definition of Consent](#)
- [Definitions of Criminal Activity](#)

There may also be behaviors (such as an isolated inappropriate comment) that are offensive or cause discomfort but do not constitute a policy violation or warrant disciplinary action by the College; In these situations, the College can still provide supportive resources and avenues for feedback and education. For more information, visit the Title IX website at <http://goforward.harpercollege.edu/about/consumerinfo/title-ix/index.php>.

## Smoking Policy

The College strives to maintain a smoke/tobacco free environment consistent with its efforts to promote wellness and a campus environment conducive to work, study and other educational activities for students, employees and the public.

To this end, smoking (burning, inhaling, or exhaling) of any kind from a lighted pipe, cigar, cigarette, hookah, weed, herbs, or any other lighted smoking equipment or electronic cigarette is prohibited in or on College premises, facilities or vehicles. Use of illegal tobacco products is prohibited. Use of any tobacco products is prohibited inside College owned, leased or rented facilities or vehicles. Improper disposal of tobacco-related products on College premises is also prohibited. College premises include all land, buildings, facilities and other property owned, leased or rented by the College, whether on a short- or long-term basis. This includes parking lots, and outdoor athletic facilities and seating areas.

It is the policy of the College to comply with requirements of the Smoke Free Illinois Act (410 ILCS 82/1 et seq.), the Smoke-Free Campus Act (Public Act 98-985), as well as with Section 5 of the Right to Privacy in the Workplace Act (820 ILCS 55/5) prohibiting employment discrimination against an individual because that individual uses lawful products off the premises of the employer during nonworking hours.

## Speakers Policy

Harper College respects the right of all members of the academic community to explore and to discuss questions which interest or concern them and to express opinions, even if unpopular, publicly and privately. To further this expressive activity, registered student organizations, staff, and faculty members may invite outside speakers as guest lecturers, panel participants, discussion leaders.

The procedures set out in this Policy are intended to make College facilities available to registered student organizations (RSOs), staff, and faculty for the exercise of these rights free from disruption or interference, subject to reasonable time, place and manner restrictions. The use of College property for these purposes does not imply acceptance or endorsement of the College of the views expressed.

The staff, faculty, or an authorized officer of the sponsoring RSO(s) should notify the Office of Student Involvement at least two weeks in advance by completing a program registration form, to allow for reservation of the requested space or facility or another appropriate space or facility for the program, and to enable arrangements for special security measures if warranted. One week's notification is sufficient if the program will be open to only members of the sponsoring organization, and not to other students or to the general public. The Dean of Student Affairs may waive the advance notice requirement in appropriate cases.

The sponsoring staff, faculty, or RSO should also notify the Office of Student Involvement of the anticipated cost of the program, and confirm that provision has been made to pay any expenses involved in engaging the speaker(s). Officers and members of sponsoring RSOs and/or the sponsoring staff or faculty are responsible for compliance during the speaker program with any College policies and regulations which apply to the location in which the program is held, and with applicable federal, state and city laws.

The Dean of Student Affairs may withdraw permission to use the reserved facility for the speaker program, or place appropriate additional conditions on the use of the facility, if the Dean determines in consultation with the Harper College Police Department that either of these steps is required in order to protect the safety of the College community or other members of the public, and/or to protect College property from damage.

## Student Involvement Awards Programs

An annual Student Involvement recognition event celebrates outstanding contributions made by students across many areas of campus life. Nominations are submitted by individual members of student organizations and by faculty/staff advisors, generally in March. Honorees are recognized at a spring-semester celebration where they are presented with awards and special mementos of the occasion.

Student Service Awards reimburse full tuition (up to 12 credit hours) or half tuition (up to 6 credit hours) for students who have made outstanding contributions to student involvement. These awards are granted for one semester. Since the budget

is limited, only a specific number of students in each student organization are eligible for consideration. A designated number of organization officers and members may be nominated by the advisor and/or by other students, based on their performance, position, responsibility, leadership, length of service and involvement in student leadership programs. Only students who have served in their positions for the entire semester are eligible for consideration. Evidence of significant contributions must be documented in the recommendation.

More information on these award programs is available in the Office of Student Involvement.

## The Student Center

The Student Center offers space for formal and informal gatherings and student activities. Many of Harper's lectures, concerts, informal discussions, meetings, conferences and other activities are held in the Student Center. Its facilities include The Hawks Nest (Cyber Cafe), Cockrell Dining Hall, two TV areas, lounges, meeting rooms and offices for student government and other student organizations. A variety of College offices are also housed in the Student Center. As a common area of the campus, individuals' behavior is subject to general time, place, and manner guidelines.

To ensure efficient use of the facilities, the following building policies have been established:

- Individuals are expected to be respectful of others who are using the facility. Any person or group causing a significant disruption to others may be required to leave and may be subject to disciplinary action under the Student Code of Conduct or other appropriate means.
- Playing cards or table games is not permitted in the cafeteria between 10:30 a.m. and 1:30 p.m.
- Given the open nature of the third floor of the Student Center, it is restricted to currently-enrolled Harper students. Additional regulations may be posted in that area, and if disruptive behavior occurs, the Office of Student Involvement may impose restrictions on use.
- Programs are occasionally held in the Student Center that may require the relocation of students from one area to another. In such cases, regulations will be posted or announcements will be made indicating the affected area. The fireplace and lounge area may be closed during formally scheduled activities in the lounge.

## Student Code of Conduct and Resolution Procedures

### Philosophy and Authority

William Rainey Harper College (Harper College or College) encourages the intellectual and personal growth of its students as scholars and as citizens. The College has both the authority and responsibility to maintain a campus community where the educational programs can flourish for all students and where individual rights, personal and collective safety, and College operations are appropriately protected. It is a choice to attend Harper College and by doing so, students assume the obligations (including standards for behavior) imposed by the College.

Harper College students and student organizations are expected to act in accordance with the policies, rules, regulations, laws, and requirements of Harper College, municipalities and counties, the State of Illinois, and the United States. The policies and procedures set forth in this document are designed to be



educational, fundamentally fair, and to provide students with the procedural protections that are appropriate for campus conduct proceedings. Students should be aware that they are responsible not only for the intent of their behavior, but also for the impacts of their actions. The student conduct policies and procedures are designed to provide an educational and developmental process that balances the interests of individual students with the interests of the Harper College community.

### Relationship Between Student Conduct and the Violation of Law

The campus student conduct process is an educational and administrative process – it is not designed to mirror a court of law, but to further the educational mission of the College. This includes both maintaining a safe educational environment as well as furthering the learning and development of individual students. As a result, the College may set forth behavioral expectations for students that may be higher than those found in criminal law. Participants in the campus conduct process should be aware that while they are afforded the procedural protections provided in this document, they do not have the same rights that might be afforded to a citizen participating in a criminal court proceeding. Due process, as defined within these procedures, assures written notice and a resolution with an objective decision-maker. The campus student conduct process, as well as the possible outcomes, are different than those in a criminal or civil court proceeding. For those situations where a student's behavior may be a violation of law as well as College policy, the student conduct process may occur simultaneously, prior to, or following any criminal, employment, or other proceeding.

### Acknowledgements

Harper College would like to acknowledge the following as resources for the 2014-2015 revision of this document:

- Edward N. Stoner II and John Wesley Lowery, "Navigating Past the 'Spirit of Insubordination': A Twenty-First Century Model Student Code of Conduct with a Model Hearing Script," *Journal of College and University Law*, 31(1), (2004): 1-78.
- The General Order on Judicial Standards of Practice and Substance in Review of Student Discipline in Tax-Supported Institutions of Higher Education, 45 F.R.D. 133 C.F.R. (1968).
- Professional resources and guidance from the Association of Student Conduct Administration (ASCA), the Association for Title IX Administrators (ATIXA) and the NCHERM Group, LLC.
- The Student Codes of Conduct and related procedures from: Bowling Green State University, Joliet Junior College, The University of Florida, Waubesa Community College, and Wright State University

## College Authority and Jurisdiction

### Authority

In accordance with Board Policy 05.25.00, this Code outlines the behavioral expectations for students and the procedures for determining and addressing violations. The Dean of Student Affairs (or designee) has the ultimate authority for interpretation of this Code, including the determination of a person's status with the institution in a particular situation. The Student Conduct Officer serves as the primary investigator and hearing officer for reports of student misconduct. The Dean of Student Affairs may also serve and designate additional College officials to serve the College in one or more roles in the student conduct process, including investigator, hearing officer, appeals officer, and/or advisor. No college official will serve as both an investigator and a hearing officer in the same case. In the case that a College official is not available, his/her designee takes on the authority described for the duration of unavailability.

### Jurisdiction

A student's behavior may be subject to the student conduct procedures whenever he or she commits or attempts to commit a violation of the Student Code of Conduct on property belonging to or under control of Harper College, or at an activity, function or event sponsored or supervised by the College. In addition, if a student commits a violation of this Code while off-campus (including through technology or social media), the student's behavior may be subject to the student conduct process if the behavior adversely affects:

- the College community;
- the mission or reputation of the College;
- the ability of an individual member of the campus community to pursue his/her Harper College education and/or employment (including the creation of a hostile environment);
- or a function or operation of the College.

The College may address allegations of a student's misconduct through the Code when the alleged violation occurs within two years after any of the following: application for admission, attempt to register for or attend one or more courses, attempt to or is reasonably perceived as attempting to interact with the campus as a student, or while under sanction (other than expulsion) from the institution. This may extend to incidents that occur during breaks within or between semesters of enrollment, as well as between the time of application to the College and registration or participation in courses.

When students engage in misconduct as members of a student organization (as defined by the Office of Student Involvement), they may be held accountable as individual students and the student organization may also be held accountable. Student organizations may face consequences through the Office of Student Involvement, as well as through application of the Student Code of Conduct to members are found responsible for violating its provisions

A student charged with violating the Code of Conduct may not avoid the conduct process by withdrawing from the College. Student conduct proceedings may continue as described in this document without the student's participation, and/or a hold prohibiting further registration and/or release of transcripts may be placed on the student's record at the discretion of the Dean of Student Affairs until the matter is resolved.

### Continuing Education

Individuals enrolled solely as Continuing Education students are expected to uphold the standards of behavior outlined in this Code. Given the diverse forms of delivery of Continuing Education opportunities, additional guidelines for behavior may be provided by Continuing Education. Individuals who violate these standards are subject to action at the discretion of the Dean of Continuing Education or his/her designee. Such action may include restricting and/or dismissing students from Continuing Education programs or activities.

### Definitions

**College:** William Rainey Harper College, also known as Harper College or College

**Student:** Any individual who applies for admission and who is accepted to register for courses (as indicated by being assigned a Harper ID number)

**Faculty:** Any person employed by the College to conduct classroom or teaching activities or who is otherwise considered by the College to be a member of its faculty

**College Official:** Any person employed or designated by the College to perform a specific function on its behalf

**Member of the College Community:** Any person who is a student, College official, or any other person employed by the College. A person's status in a particular situation shall be determined by the person designated to have authority to interpret this Code.

**School Days:** Those weekdays (Monday through Friday) when classes are in session

**Complainant:** A person who initiates a complaint in the conduct process

**Respondent:** A student who is alleged of violating the Code and provided with the opportunity to respond to the complaint

**Advisor:** A person who supports a complainant or respondent as he/she participates in the conduct process. The advisor's supporting role is limited to conferring with and advising the student directly. The advisor may not participate in the conduct process as a representative or advocate for the student. The College also reserves the right to have an advisor present to advise the College officials during the student conduct process. Students seeking an advisor may request a list from the Student Conduct Officer of potential advisors who have received training about the campus conduct process.

**Hearing Body/Officer:** The person(s) who review the information in a case, make a determination of responsibility, and/or issue sanctions. Hearing bodies include panels as well as individual hearing officers, such as administrators, student affairs staff, and other employees appointed by the Dean of Student Affairs. The hearing body or officer will not also serve as the investigator for the same case.

**Sanction:** A consequence imposed as a result of a finding of responsibility.

**Standard of Proof:** The standard of proof used in all student conduct proceedings to determine if a violation occurred is the preponderance of the evidence, also known as more likely than not, or more than 50%.

**Outcome(s):** The finding of responsible or not responsible for each alleged violation, as well as any sanction(s) imposed

## Student Rights and Responsibilities

While the campus conduct process is different than criminal or civil proceedings, the following rights are provided to students, along with the expectation that students fulfill their responsibilities in the process. Students or others who fail to respect the rights of others or the process may be excused from a meeting or proceeding and the process will continue in his/her absence.

### Student Rights

- To be treated with respect and dignity
  - To be informed of the policies and procedures in the Student Code of Conduct, published online and available in hardcopy from the Office of the Dean of Student Affairs
  - To be provided with notice of charges, if the student conduct process is initiated, and to be informed of the procedures for resolution
  - To be provided with the opportunity to review materials, information, and relevant case information in a timely fashion
  - To be provided with an opportunity to be heard through the appropriate resolution process.
  - To be free from compulsory self-incrimination regarding behaviors that may also be the subject of criminal charges, and that the decision not to share information does not create a presumption of responsibility
  - To have an advisor of choice present with him/her to support/offer advice in any student conduct hearing or meeting
- Students seeking an advisor can request a list of potential

advisors (i.e. faculty and staff who have received training about the student conduct process) from the Student Conduct Officer)

- To contact and present witnesses to the incident(s) being investigated or reviewed
- To have his or her educational records related to the conduct process maintained as confidential except as otherwise required by law or permitted by College policy, to have all conduct proceedings and meetings be closed, and to inspect and review student conduct records, in accordance with FERPA.
- To have the information reviewed by an unbiased, trained, hearing body/officer who will use the preponderance of the evidence standard of proof
- To request appeals based on the grounds described in this Code

## Student Responsibilities

- To treat others with respect and dignity
- To review and abide by the Student Code of Conduct, including both policies and procedures
- To review the notice and seek clarification if there are any questions about the process
- To follow the procedures (including deadlines) to request such a review
- To follow the process as outlined by the College, as failure to do so does not constitute grounds for an appeal
- To understand that, if he/she chooses not to participate, the conduct process will still proceed and that decisions about responsibility and any sanctions will be made based on the available information
- To notify the College if an advisor will be present, and to understand that if the advisor does not comply with the College's expectations, he/she will be asked to leave the proceeding or meeting, which will continue without the advisor's presence
- To present only those who have relevant information to the incident/behavior in question (i.e. no character witnesses) within the guidelines presented by the College
- To understand the recordkeeping policies and that any information related to other students will be redacted from any records that are released, unless otherwise required by law
- To understand that the conduct process is designed to be educational, not adversarial, and that it is different than a court proceeding
- To submit appeals as instructed when applicable

## Behavioral Expectations For Students

Students are expected to uphold college policies towards pursuit of their educational objectives. The College reserves the right to set and communicate reasonable standards of behavior as needed. The following behaviors are prohibited. Examples are provided to illustrate the specific prohibition and are not intended to be all-inclusive.

### 1. Threat to personal safety - conduct that intentionally or recklessly causes physical harm or that otherwise threatens or endangers the health or safety of any person.

*Examples include:*

- a. Physical violence – hitting, pushing, use of a weapon, beating or other such activity resulting in or intended to cause physical harm
- b. Making a threat(s) of violence (including verbal, written, or virtual communication) that does or could cause(s) a reasonable expectation of harm to the health or safety of a specific person

c. Substantial or repeated acts directed at a person or group of people that would cause a reasonable person to feel fearful, including but not limited to:

- i. Bullying, defined as repeated and/or severe behavior that is aggressive and likely to intimidate or intentionally hurt, control, or degrade another person physically or mentally
- ii. Stalking, defined as engaging in two or more acts directed at a specific person that would cause a reasonable person to fear for the individual's safety or the safety of others, or suffer substantial emotional distress
- iii. Hazing, defined as acts likely to cause physical or psychological harm or social exclusion or humiliation
  - 1. d. Any form of retaliation towards a complainant or any participant in an investigation or conduct process. Retaliation will not be tolerated.

## 2. Gender-based or sexual misconduct.

*Examples include:*

- a. Sexual Harassment
- b. Non-Consensual Sexual Contact
- c. Non-Consensual Sexual Intercourse
- d. Sexual Exploitation
- e. Other Gender-Based Misconduct

*For complete definitions and examples, refer to the Guide to Gender Based & Sexual Misconduct*

## 3. Risk of the safety of the campus community.

*Examples include:*

- a. Illegal or unauthorized possession or use of weapons, including but not limited to: firearms, explosive devices, knives longer than 3 inches, or any other object used to threaten or cause harm. This includes violation of the College's procedures related to the Illinois Concealed Carry Act.
- b. Making a threat of violence (including verbal, written, or virtual communication) that causes a reasonable expectation of harm to the health or safety of the campus
- c. Behavior that can put physical safety at risk, including but not limited to:
  - i. Reckless driving
  - ii. Possessing flammable chemicals or fireworks or tampering with smoke detectors
  - iii. Climbing on roofs
  - iv. Leaving minors unattended on campus
  - v. Knowingly putting others at risk of a contagious disease

## 4. Conduct that threatens the services of the College or the property of the College or others.

*Examples include:*

- a. Misuse, theft, or unauthorized use of College services or property
- b. Trespassing or unauthorized access to physical or virtual/cyber property or services of the College

c. Attending classes without being registered for them, other than during the first week of the course or with permission from the instructor

- d. Theft of the property of a member of the College community
- e. Intentional destruction of property
- f. Use of recreational or outdoor equipment indoors, or reckless use of equipment outdoors
- g. Having an animal in a campus building, other than in accordance with campus policy and ADA laws, such as permitted service animals individually trained to perform tasks for the benefit of an individual with a disability

## 5. Disruption (substantial or repeated interference) of any operation of the College, including but not limited to teaching, research, administration, technology, meetings or proceedings, or any other College activity.

*Examples include:*

- a. Prohibiting classroom instruction or learning from occurring
- b. Prohibiting College sponsored events from occurring
- c. Infringing on the rights of other members of the College community, including violations of policies or procedures pertaining to expressive activity
- d. Leading or inciting others to interrupt scheduled or normal activities within any campus building or area
- e. Obstructing the free flow of pedestrian or vehicular traffic on College property or at a College sponsored or supervised event

## 6. Illegal, unauthorized or irresponsible substance use.

*Examples include:*

- a. Illegal or unauthorized possession, manufacturing, use or distribution of marijuana, heroin, narcotics, or any other illegal or controlled substance or look-alike drug except as expressly permitted by law and College policy
- b. Illegal or unauthorized possession, manufacturing, use or distribution of alcohol, except as expressly permitted by College policy. No person under 21 years of age may possess or consume alcoholic beverages, under any circumstances.
- c. Illegal possession or use of prescription medications
- d. Public intoxication, vomiting, or other such effects of irresponsible substance consumption
- e. Smoking tobacco products, using e-cigarettes, or any other violation of the College's Smoke-free campus policy

## 7. Academic dishonesty in an academic course or program.

*Examples include:*

- a. Cheating (accessing or using unauthorized materials or information)
- b. Plagiarism (reproducing someone else's words or ideas without accurate acknowledgment)
- c. Falsifying information (providing untrue information)
- d. Unauthorized collaboration (getting assistance or sharing work without permission)

e. Facilitating academic dishonesty (participating in an act that creates an unearned advantage for someone)

#### 8. Dishonesty.

*Examples include:*

- Providing false information in any form to any College official or office
- Forgery, alteration, or misuse of any College record, document, or form
- Misrepresentation of one's identity or misuse of the College's copyrighted content and trademark

#### 9. Unauthorized or irresponsible use of College computer, network, or other technology system resources.

*Examples include:*

- Unauthorized distribution of copyrighted material
- Unauthorized access or misuse of equipment, files, labs, or any other technological resource
- Violation of any College computing or technology policy, including use of College technology resources to violate a law

#### 10. Unauthorized use of personal electronic devices.

*Examples include:*

- Audio, photograph, or video recording of any person without his/her prior knowledge or consent if such a recording is likely to cause injury or distress. This includes recording in locker rooms or restrooms
- Audio, photograph, or video recording of any person when it is not permitted by law or College policy. This includes recording in classrooms or meetings, unless granted permission by the instructor or facilitator such as to provide an ADA/504 accommodation
- Use of a cell phone or other electronic device in a manner that disrupts educational activities, classrooms, offices, or other usual College operations

#### 11. Failure to comply.

*Examples include:*

- With the directions of an authorized College employee or representative who is performing his/her duties, or with a communicated College policy or procedure
- With any published reasonable guidelines for use of labs, offices, waiting areas, classrooms, or other common campus spaces, including the student center
- Any conduct that constitutes a violation of the student conduct process or any sanction imposed in accordance with this procedure
- Any conduct that constitutes a violation of any College handbooks, program guidelines, rules, or regulations
- Evidence of violation of any local, state, or federal law, when substantiated through the student conduct process, or when such conduct results in violation of another behavioral expectation in the Code or appears to pose a reasonable threat to the campus community

## Reporting Student Misconduct

The College encourages students, faculty, and staff to resolve conflicts informally and at the lowest level. When that is not possible or appropriate, any member of the campus community may report alleged student misconduct using the College's online reporting form. The report should describe the misconduct and identify the student(s) involved in the incident. Reports will be reviewed by staff in the Office of the Dean of Student Affairs and, if there appears to be reliable information indicating that a violation may have occurred (i.e. complaint), the student conduct process will be initiated, creating a conduct case. The College also reserves the right to initiate a case without a formal complaint, and to investigate anonymous reports. When appropriate, reports may also be addressed through the Harper Early Alert Team (HEAT) procedures or through other non-conduct procedures.

### Culture of Reporting

As the College is concerned about threats to personal or collective safety, including any form of sexual or gender-based misconduct, all reports will be taken seriously and reviewed. If a student may have violated another aspect of the Student Code of Conduct (such as consuming alcohol underage) and is concerned about consequences for him/herself when reporting a more egregious incident (such as sexual misconduct or a threat of violence), the reporting student should be assured that the College's interest is in addressing the more egregious behavior and maintaining the safety of individuals and the campus. Pending no threat to safety or other such compelling reason, other behaviors may be addressed through alternative means (such as informal discussions or referrals to counseling).

### Preliminary Actions

#### Preliminary Investigation and Review

A preliminary investigation may be necessary in order to determine if there is credible information that warrants charging a student with violating the Code. Preliminary meetings with the complainant and/or witnesses may occur prior to initiating the student conduct process or contacting the accused student. If the accused student is contacted about the case during the preliminary investigation, he/she will be made aware of the initiation of a preliminary investigation and that the incident could result in a student conduct process being initiated.

The preliminary investigation and review may result in any of the following:

**Case Not Pursued:** If there does not appear to be credible information to indicate a violation occurred, the case will not be pursued through the formal student conduct process. The information may still be retained by the College to document that the situation was reviewed.

**Informal Response:** If the situation is concerning but doesn't appear to be a violation (such as an incident which occurs outside of the College's jurisdiction, or repeated low-level behaviors), there may still be an institutional response without formal conduct charges. For example, the student may be asked to meet with a staff member to discuss the situation prior to registering for courses, may be requested to participate in a mediated conversation, or may receive a letter informing him/her that the behavior, were it to occur on Harper's campus, would constitute a violation.

**Initiation of Conduct Process:** If it appears that a student may have violated the Code, and that this occurred within the College's jurisdiction, the conduct process will be initiated.

## Interim Action

In some cases, interim action prior to the resolution of the case may be necessary. This may be imposed upon initial receipt of a report, when the College becomes aware of a concern, or at a later time in the student conduct process. The reasons that interim action may be issued are:

- to protect the health, welfare, or safety of a student or of the community,
- if the student poses a threat of significant disruption to the educational process and/or the normal operations of the College,
- to provide legally mandated interim remedies, such as may be required for the College to comply with Title IX;
- or if the student cannot be located and/or does not participate in the conduct process.

In that event, the student will be provided with written notice of the measures. Such notice will usually be provided electronically, but may be delivered by other means such as U.S. mail or in person. The interim action notice will state the specific action imposed and the reason for the action, as well as instructions regarding how to request an appeal review on the interim action decision. Such an appeal request must be submitted in writing generally no later than 5 school days from the date of the letter. A timely hearing will be scheduled with an appropriate hearing officer (usually the Dean of Student Affairs, unless he/she is unavailable or issued the interim action). This proceeding will be limited to determining 1) the reliability of the information regarding the student's alleged behavior and 2) whether the alleged behavior meets the above described criteria for interim action. Failure to request a hearing by the deadline provided constitutes a waiver of a hearing on the interim action, but is not an indication of responsibility for the charges.

Examples of interim action include but are not limited to:

- Ban from campus
- Restricted access to campus, limiting time or location
- Class section reassignment\*
- Campus no-contact orders\*

\*Campus no-contact orders and class section reassignment are not subject to appeal so long as equitable opportunity for the accused student to continue his/her education is provided.

## Notice of Charges

If there appears to be credible information indicating a student may have violated the Code and that the College has jurisdiction over the behavior, notice is sent to the accused student. This notice includes:

- The aspect(s) of the Code that it appears the student may have violated (i.e. "charges")
- A link to the Student Code of Conduct where the student can learn about the process
- Whether the case will be resolved through a hearing or investigation method
- Instructions as to how to proceed after the notice, such as:
  - How to schedule or otherwise participate in a hearing, including the opportunity to schedule the hearing or initial interview meeting at least 5 days after the date that the notice of charges was sent (unless the student and the hearing officer mutually agree to an earlier date and time or there is a health or safety emergency necessitating an earlier meeting)
  - How to review the case information
  - How to provide information, including witnesses, regarding the incident in question
- The right to bring an advisor to any student conduct meeting or hearing

## Procedural Guidelines

The standard of proof used in making decisions in student conduct matters, including in all findings of responsibility, is the "preponderance of the evidence" or "more likely than not" standard. This means that when all available information is considered, the College official or hearing body determines whether it is more likely than not that a violation occurred, based on what a reasonable person would consider.

Investigators and hearing bodies do not have the authority to subpoena but may receive information without regard to the legal rules of evidence, so long as the information is related to the questions of the case. Character witnesses are not permitted since decisions about responsibility relate to behaviors, not to character. Anonymous information (such as reports or statements) may be considered by the hearing body but the unknown identity of the source will be taken into account in evaluating the credibility of such information.

The College will communicate with participants in the student conduct process mainly via email through the use of an online case management system and the student's Harper email address. Depending on the circumstances of a given situation, communications may occur through other means, such as through phone, U.S. mail, or delivered in person.

Any participating complainant or respondent may bring an advisor to accompany him/her in student conduct meetings, including hearings and interviews, to serve as a support person to him/her. The advisor may not address the hearing body, provide information on behalf of the student, or otherwise participate in the meeting or hearing. Students may be required to provide notice that: an advisor will be attending a meeting or hearing and whether such a person is serving in the capacity of an attorney, and may also be required to sign a release granting permission for the advisor to have access to the student's education records. Students who qualify for an accommodation under ADA/504 that require a person to provide the accommodation or who may require a language translator to effectively understand the English language may also have such a person present in addition to an advisor.

## Postponement of Resolution

A student who files a report or who is charged with a violation of the Code may request in writing to have a resolution postponed because 1) there is pending or possible civil or criminal litigation which he/she feels may be jeopardized by the outcome of campus resolution process, or 2) the student is unavailable for communications due to being incarcerated or hospitalized. The College may grant this only when both of the following circumstances have been met:

- When interim action as determined by the Student Conduct Officer or designee is imposed to prevent further or additional incidents during the resolution process. Such interim action will include (at a minimum) a hold preventing registration for classes, but may also include other measures such as, but not limited to, suspension, a ban from campus, and a designation on the academic transcript that there is a pending conduct matter.
- The College does not have any compelling reason why the resolution process should proceed. Examples of compelling reasons include but are not limited to:
  - Concerns for the safety of the campus or its members if the situation is not resolved
  - The need to provide a timely response in cases alleging sexual or gender-based misconduct
  - The quality of the investigation or ability to hear from witnesses who have critical case information may be compromised

The College reserves the right to postpone indefinitely or for a finite period of time. The College may also independently decide to postpone resolution without a request from a student when the above conditions are met. The Dean of Student Affairs will review and respond to all requests, and there is no appeal of the Dean's decision concerning a requested postponement.

### Resolution Options

There are several forms of resolution available, depending on the nature of the incident and the time of the academic year. Other than as described below, the Dean of Student Affairs or his/her designee will determine the most appropriate resolution option to be used in a given case. The Dean of Student Affairs and the Student Conduct Officer will ensure that all investigators, hearing officials, and hearing bodies are appropriately trained to conduct proceedings in a fair, impartial, and timely manner.

### Academic Dishonesty

Incidents of academic dishonesty which occur within the context of a specific course are resolved by the academic department in accordance with the campus academic honesty policy. In such a case, the instructor or academic department determines if academic dishonesty occurred, and what the academic penalty should be. Possible outcomes within the course include but are not limited to a lower grade on the assignment or in the course, a zero for the assignment/exam, the opportunity to re-submit an assignment, or an F in the course. A student who receives an academic penalty is not permitted to withdraw from the course in order to avoid it. Students may follow the academic complaint process to appeal or challenge an instructor or a department's decisions. All incidents should be reported to the Student Conduct Officer to ensure that students do not engage in further academic dishonesty in other courses. Incidents occurring outside of a specific course should be referred through the student conduct process. Students who engage in dishonesty in more than one course may also face charges through the campus conduct process.

### Sexual Or Gender-Based Misconduct

Reports of sexual or gender-based misconduct are subject to the requirements of Title IX of the Higher Education Act of 1972, and require an investigation and adjudication conducted by College officials who are trained annually to review and resolve reports of this nature. These cases are often more time intensive and require more extensive training and experience to process and resolve. For these reasons, reports alleging sexual or gender-based misconduct will always proceed through the investigation resolution method, and participants seeking to have the outcome of such proceedings reviewed will have only one level of appeal, directly to the Provost. The Title IX Coordinator(s) will be informed and consulted on these cases throughout. In addition, the complainant and the respondent have equitable rights in the process and will be kept informed of key updates as the case is resolved.

### Student Organization Misconduct

Student organizations alleged of misconduct may proceed through one of the resolution methods outlined in this Code, and they may also be referred to the Office of Student Involvement for administrative review and response in lieu of or in addition to the student conduct process.

### Incidents Involving Multiple Students

In incidents where multiple students have been alleged of misconduct, the Dean of Student Affairs or designee will determine the best form of resolution that balances the protection of privacy of students' education records as well as the institutional resources available to provide a timely and fair resolution.

### Students With Special Relationships To The College

Students who are athletes, student leaders, student workers, or hold other unique relationships with the College whose behaviors violate the Student Code of Conduct may also face consequences outside of the student conduct process if their behaviors violate NJCAA guidelines, employment expectations, Office of Student Involvement procedures, or other pertinent standards. Employees who enter into a relationship with the College as students and whose alleged misconduct occurs in the context of the relationship as a student may also be held accountable through the student conduct process. In those cases, Human Resources may be consulted to ensure there are no conflicts with employee contracts or Human Resources procedures.

### Administrative Hearing Resolution Method

Administrative hearings occur when a designated College official reviews the information related to a case, makes a finding of responsible or not responsible for each alleged violation, and issues sanction(s) for any findings of responsibility. This is the most common form of complaint resolution, and the Student Conduct Officer serves as the administrative hearing officer for most cases. The Dean of Student Affairs may also designate additional hearing officers and may serve as a hearing officer. In this method, a student is informed of the opportunity and deadline to meet with the Student Conduct Officer (or other designated hearing officer) to:

- Ask questions about the student conduct process
- Review the complaint of misconduct, as well as any other relevant case information, such as the substance of information received from witnesses
- Respond to the information by providing his/her perspective on the incident and alleged behaviors. Bring forth witnesses to the incident in question to be interviewed
- Acknowledge or deny responsibility for the charged violation(s)
- Provide any information related to sanctions (if applicable), including what he/she may have learned from the incident or any factors to be considered at sanctioning

For some complex cases, a campus investigation may be done prior to the case proceeding to an administrative hearing. If the respondent chooses not to meet with the hearing officer by the given deadline, the hearing officer may proceed with the determination of responsibility and any sanctions. Depending on the nature of the case, the hearing officer may instead place a hold on the student's account, preventing registration until the student has met with the hearing officer.

### Panel Hearing Resolution Method

A panel hearing provides the College with a panel of members of the College community who collectively review the case information and issue a finding of responsible or not responsible for each alleged violation, as well as sanctions to be imposed under the authority of the Office of the Dean of Student Affairs. Panel hearings are composed of three members – one student, one faculty member, and one staff member. Panels with diverse perspectives and experiences are desired; and panel members are selected based on scheduling availability from a pool of trained volunteers. The Dean of Student Affairs reserves the right to determine whether an individual is qualified to serve on panel hearings. The Student Conduct Officer provides training and coordinates the logistics of the panel hearing process, which may include securing or serving as an advisor to the panel. The College also reserves the right to have the College's legal counsel attend a hearing when deemed appropriate by the Dean of Student Affairs. Panel hearings may be recorded. Recordings will be retained by the institution for the purposes of the appellate hearing body's review.

## Hearing Guidelines

The following outlines the general procedures for hearings. In order to provide the College with the most effective hearing process, the hearing body/officer reserves the right to adjust procedures as appropriate, including setting appropriate time limits, depending on the nature of the case. The hearing process provides the opportunities for a complainant and/or respondent to:

- Review the available case information
- Share perspective on what happened, including providing witnesses to the incident
- Describe any effects of the incident, including both harm and learning that may have occurred

Complainants and respondents will be provided notice of the hearing date and time at least five school days prior to the hearing date. The notice will include a description of the procedures to be followed at the hearing. The respondent and complainant both have the opportunity to provide written statements about the incident prior to the hearing, but must provide these by any deadline(s) provided by the College. In cases involving an alleged violation of 1 (threat to personal safety), both the respondent and the complainant may request to be able to review the relevant case information at least 24 hours prior to the hearing. The basic hearing agenda consists of:

- Introductions and guidelines from the panel chair or hearing officer
- Complaint is reviewed
- Investigation summary presented (if an investigation was done) Information shared by the complainant
- Information shared by the respondent
- Information shared by witnesses
- Closing comments from the complainant and the respondent

During the hearing, questions may be asked by the hearing body at any time. In cases that do not involve an alleged violation of 1 (threat to personal safety), the complainant and the respondent may be permitted to ask questions directly of each other. The hearing body reserves the right to require that questions be provided in writing instead of asked directly in other cases as well. In situations where physical safety or reasonable fear for retaliation exists, the College reserves the right to adjust the hearing format, including having police present and/or using technology to allow parties to participate in a manner that preserves physical safety.

All hearings occur in a closed session. A respondent and his/her advisor may be present for all of the information sharing at hearings. The complainant and his/her advisor also have the right to be present when the case involves alleged violations of 1 (threat to personal safety). If an individual chooses not to participate in any part of the hearing, the hearing will continue. The respondent and complainant and their advisors will be excused after the closing comments before the hearing body begins its deliberations.

During deliberations, the hearing body or officer will determine (based on a simple majority vote):

1. whether or not it has been shown, by a preponderance of the evidence, that the accused student(s) committed the charged violation(s) of the Student Code of Conduct, and
2. if so, what sanctions are appropriate.

If an accused student has any prior student conduct history, the hearing body will review this information only after making the determination of whether the student has committed the violation(s) charged.

Within ten school days of the conclusion of the hearing, the hearing officer or chair will provide a decision letter to the Student

Conduct Officer (or designee) providing the findings, rationale, and sanctions (if applicable).

## Investigation Resolution Method

This process is designed to provide a fair and equitable resolution process as required under Title IX of the Higher Education Amendments of 1972, and it may also be used in cases where the Dean of Student Affairs (or designee) determines it is appropriate. All cases involving allegations of violation 2 (sexual or gender-based misconduct), as well any as other situations the Dean of Student Affairs deems appropriate (such as when the risk of retaliation appears high or personal victimization is alleged of occurring) will be resolved through the investigation resolution process. Investigators and hearing officers involved in this process are trained on the student conduct process and also receive additional training including both annual training on issues related to crimes of sexual violence and how to conduct an investigation and resolution process that protects the safety of victims and promotes accountability as well as specialized training on:

- How to conduct and document adequate, reliable, and impartial investigations
- How to interview persons who may have been subjected to sexual violence
- What types of conduct constitute sexual violence, including same-sex violence
- How drugs and alcohol can affect the ability to consent
- The importance of accountability and remedial actions for individuals found responsible for sexual violence
- Cultural awareness regarding how sexual violence may affect students differently
- How trauma and defense mechanisms can appear in the conduct process
- Common societal misperceptions about sexual violence

In this method, students' rights are protected, although there may not be a face-to-face meeting involving both the complainant and the respondent. Instead, the parties have the opportunity to meet with the investigator, where they have the chance to review and respond to the case information at the designated time(s). The case information is summarized in a final report that contains the investigation summary as well as any refutation or response provided by either party after their review of it.

Investigators and hearing officers are designated by the Dean of Student Affairs and may include the Dean of Student Affairs. Investigations (including determination of outcomes) are generally completed within 60 calendar days. In the case of delays in the process, the complainant(s) and respondent(s) will be kept informed of the delays in the process. In cases alleging sexual or gender-based misconduct, the Title IX Coordinator(s) will be kept apprised of the process and will coordinate the resolution.

As this resolution process has the fewest but the most specially trained employees involved, this method provides the most private form of resolution for both the complainant and respondent and also promotes the timeliest response, depending on the responses of the involved parties and the complexities of the case.

## Investigation Guidelines

This is how the investigation process generally works:

- The College becomes aware of misconduct, usually through an online report.
- The complainant/victim is contacted for an initial meeting, where:
  - The policy and resolution procedures are reviewed and questions can be answered
  - Requests for interim action or remedies may be made

- Additional information may be obtained, including a list of possible witnesses
- Preliminary investigation occurs to determine if there is merit to charge a student under the Code.
- Interim action and/or remedies may be issued
- If the preliminary investigation indicates that the student conduct process will be initiated, written notice of the charges (as described on p. 9) is provided to the respondent, inviting him/her for a first meeting where:
  - The conduct process is reviewed and questions can be answered
  - The respondent may review the complaint of misconduct
  - The respondent is given the initial opportunity to respond to the complaint, including providing a list of possible witnesses
  - The respondent will be asked questions as part of the investigation of the complaint
- Witnesses with information about the incident in question may be interviewed by the investigator.
- Follow up interviews by the investigator with the complainant and/or respondent may occur.
- An investigation summary is prepared by the investigator.
- The complainant and the respondent are provided with separate opportunities to review and respond to the investigation summary.
- If additional investigation is needed, the complainant and respondent will be informed of this and addendums and/or updates may be made to the investigation summary.
- The investigator provides a final report to the hearing officer. The final report consists of the investigation summary, any response/rebuttal from the complainant and/or respondent, and a determination of responsibility based on the investigation regarding each of the alleged violations.
- The hearing officer reviews the final report and issues a decision as to whether the accused student is responsible or not for committing each alleged violation. If it is determined that any violations occurred, the hearing officer will be provided with any information related to sanctioning, including but not limited to relevant conduct history regarding a respondent's prior misconduct, sanctioning guidance from the Student Conduct Officer, and statement from the complainant and/or respondent if provided.
- Within ten school days of receiving the final report, the hearing officer provides a decision letter to the Student Conduct Officer (or designee) providing the notice of outcomes, which includes a determination of responsibility for each violation, rationale, and sanctions (if applicable).

### Written Notice of Outcomes

The Student Conduct Officer will provide written notice of the final resolution of charged violation(s) within ten school days of the hearing or decision issued by the hearing officer or body. In cases where the behaviors in question may also constitute a crime of violence (as described in the Clery Act), as well as in cases involving any allegation of 2 (sexual or gender-based misconduct), the complainant (or victim) will also receive notice of the outcomes. The written notice is customarily provided electronically and includes:

1. Each charged violation(s) and the determination of whether or not the accused student is responsible for committing the violation;
2. A rationale of the findings;
3. The sanction(s) imposed and the deadlines or time periods for which they are in effect;
4. A statement of the right to file an appeal and process for doing so;
5. A statement that failure to file a request for such an appeal within the time provided in Part III.G below shall be deemed a waiver of the right to an appeal.

College officials may also receive notice (in all or in part) of the outcomes when there is a legitimate educational reason for this, such as when their role is necessary for enforcement of the sanction(s).

### Appeals

The College offers the opportunity to appeal the outcomes of student conduct procedures as described below. Sanctions are in effect even while an appeal is being considered, unless otherwise stated in writing by the Dean of Student Affairs. An appeal is not a re-hearing of the case, but an evaluation of whether the ground(s) for an appeal are present and should alter the outcome of the case. Not participating in a conduct process is not grounds for an appeal. Appeals of administrative hearings, panel hearings, or the investigation resolution process may be requested based only on one or more of the following:

1. The College's procedures were not followed, and the deviance would substantially alter the outcome(s) of the case;
2. There is new relevant evidence not reasonably available at the time of the hearing or the imposition of the sanction(s) that would substantially alter the outcome(s) of the case;
3. The evidence does not clearly support the finding(s); or
4. The sanctions are inappropriate relative to the violation.

Appeals addressing one or more of the above grounds must be submitted in writing to the Dean of Student Affairs within ten school days of the sending of the notice of outcomes. If the Dean of Student Affairs has a conflict of interest in serving as the appellate officer, a different appellate officer will be designated. The appellate officer will review the appeal and will provide a response to the student within ten school days after receipt of the appeal. If the grounds for appeal are determined to be founded, the appellate officer may adjust the finding(s) and/or the sanction(s). If the initial appellate officer is not the Provost or Provost's designee, a second appeal may be made by submitting an appeal in writing to the Provost's Office within ten school days of the sending of the appeal response. The Provost will review and respond within ten school days of the receipt of the appeal, and the Provost's decision is final.

In cases where the behaviors in question may also constitute a crime of violence (as described in the Clery Act), as well as in cases involving any allegation of 2 (sexual or gender-based misconduct), both the respondent and the complainant (or victim) have the right to appeal the finding(s) of responsibility and/or sanctions based on the above criteria. If an appeal is received, the other party will be notified of the receipt of the appeal, the grounds upon which the appeal has been sought, and of the opportunity to provide information for consideration by the Provost (or designee) no later than ten school days from the receipt of the appeal. In these cases, the Provost will have an additional ten school days to provide a response. In all cases, the decision of the Provost (or designee) is final.

### Sanctions

Sanctions are designed to promote the College's educational mission and to promote safety or to deter students from behavior that harms, harasses, or threatens people or property. Some behavior may be so harmful or disruptive to the College community or to the educational process that it may require more serious sanctions, such as removal from specific courses or activities, suspension from Harper College, or expulsion. More than one sanction may be imposed in a case. The following factors are generally considered when determining sanctions for a particular case:

- The nature of the violation(s)
- Prior findings of responsibility and sanction(s)
- Mitigating circumstances surrounding the violation



- The student's motivation(s) for engaging in the behavior
- Impacts of the behavior
- Sanctions which have been imposed in similar cases in the past
- The developmental and educational impact on the student

### Standardized Sanctions

Standard sanctions pertain to a student's relationship with the College, and provide a form of consistency for the College in responding to acts of misconduct. One or more of these is usually issued when a student has been found responsible for violating the Code:

**Warning** – written notice to the student that the behavior is not acceptable at Harper College and that additional incidents may result in more severe sanctions. This notice exists in the student conduct file and is not reflected on an academic transcript.

**Disciplinary Probation** – a period of time (which may be indefinite) during which a student is under warning that any other violation of college policy may result in suspension. Disciplinary probation may also prohibit a student from participating in certain college activities or programs, as it is considered notice that the student is not in good standing due to behavior. This sanction is not reflected on the academic transcript.

**Suspension** – a defined period of time during which a student is not permitted to engage in any of the privileges, courses, organizations, events, or activities associated with being a student at Harper College. During the period of suspension, a hold designating such will be placed on the student's account and transcript prohibiting registration, enrollment, attendance, or ability to earn credit for any credit or non-credit courses offered by Harper College. This also prohibits receipt of a degree or certificate from Harper College during this time. This suspension does not prevent a student from attending another college or university, transferring any otherwise qualifying credits back to Harper at a later date, or receiving copies of Harper College transcripts reflecting academic credits previously earned. Once the period of suspension has been completed, the hold will be lifted from the student account, provided the student has completed any other requirements required prior to return. During the period of suspension, the student is also banned from Harper College property unless otherwise stated.

**Expulsion** – the indefinite termination of a student's status at the College. This prohibits engagement in any of the privileges, courses, organizations, events, or activities associated with being a student at Harper College. This does not prohibit the transferring of credits earned to another college or university, but the expulsion is designated permanently on the academic transcript. Unless otherwise stated, the student is also indefinitely banned from Harper College property. This is the most egregious sanction that Harper College can impose upon a student. Expulsion is designed to be a permanent separation from the institution; however, in those rare cases where a student seeks to return to Harper College at a later date after making significant behavioral changes, a student may petition for reinstatement. A petition for reinstatement may be submitted no earlier than 5 years after the date of expulsion. The petition should be submitted in writing to the Dean of Student Affairs and should describe 1) what actions the individual has taken to learn from the situation and prevent the behaviors from re-occurring, and 2) what educational pursuits the individual seeks at Harper College. The Dean of Student Affairs will convene a committee of faculty and staff to review the petition and provide a recommendation for the Dean's consideration. The Dean will make a decision and provide the outcome to the student. If denied, the former student may re-petition once one year has passed. There is no appeal process to this decision.

**Conditional Re-Enrollment** – A hold is placed on the student's account, prohibiting re-enrollment until certain activities or sanctions are completed. The student may also be under behavioral restrictions upon enrollment.

**Restriction of Access or Privileges** – Prohibition on accessing a specific area or building of campus, and/or prohibition from participating in certain activities. This sanction may or may not affect a student's ability to take a specific course, but it typically allows for the pursuit of educational programs overall.

**Ban from Campus** – prohibition on accessing any Harper College property, including satellite campuses.

### Individualized Sanctions

In addition to the standard sanctions above, individualized sanctions may be imposed that are designed to maximize the learning of a specific student. These sanctions take into account the student's learning style and stage of development, as well as the unique factors of a given situation. Multiple individualized sanctions may be imposed, including but not limited to one or more of the following:

- Reflective Activity:** an activity designed to promote reflection by the student about his/her behavior and its impacts. Examples can include: writing assignments, interviews, research projects, etc. Completion will be based on fulfilling the objective requirements of the assignment, not on whether the student adopts or expresses a particular perspective or point of view.
- Counseling Assessment:** Completion of an assessment with a licensed care provider as well as documentation of learning about possible resources for follow up
- Restitution:** Payment to a harmed party, such as to repair or replaced vandalized property
- Community and/or College Service:** Completion of a designated number of hours of service on campus or in the community
- Meetings with College Resources:** Meeting with a College employee or office to learn about resources offered to support students

### Student Conduct Records

The College maintains student conduct records as part of student education records in accordance with the Family Educational Rights and Privacy Act, 20 U.S.C.S. §1232g ("FERPA"). Students may request to review their student conduct record by contacting the Office of the Dean of Student Affairs, in writing.

No earlier than seven years following the resolution of any conduct case (including fulfillment of any relevant sanctions), a student's conduct record may be purged in accordance with campus procedures if there is no longer an administrative value to the record **and** the individual's relationship to the campus has ended.

Student conduct records will be disclosed only with written consent of the student's parents or the eligible student (in the case of a student 18 years of age or older), except as otherwise allowed pursuant to FERPA and its implementing regulations. Examples of appropriate disclosures of records without consent include disclosure of information:

- To other school officials within the institution when there is a legitimate educational interest in the information in order to exercise or complete their responsibilities on behalf of the institution;
- Records related to behavior that poses a significant risk to the safety or well-being of that student, other students, or

other members of the school community; including as part of emergency response, emergency notification, timely warning, or other notifications as required by law;

- To teachers and school officials, including teachers and school officials in other schools, who have legitimate educational interests in the behavior of the student (this includes release of records when another institution where the student seeks to enroll or has enrolled seeks information in relation to a behavioral risk or threat assessment);
- Regarding any violation of any Federal, State, or local law, or of any rule or policy of the institution governing the use or possession of alcohol or controlled substance to a parent or legal guardian of a student if the student is under the age of 21 and the institution determines that the student has committed a disciplinary violation with respect to such use or possession;
- In cases where the behaviors in question may also constitute a crime of violence (as described in the Clery Act), as well as in cases involving any allegation of 2 (sexual or gender-based misconduct), the victim and/or complainant will be informed of the outcome, including the determination of responsibility, rationale, and sanction(s); and
- Final results (the name of the student, the nature of the violation committed, and the sanction(s) imposed) of the student conduct process for any student who is found in violation of a College policy that is also determined to be a "crime of violence," as described in the Clery Act, may be released publicly.

### Student Academic Complaint Process

As members of the educational community, students have the right to express their concerns regarding the assessment of their academic progress through the grading process. Students shall express these concerns initially by contacting the appropriate faculty/staff member within ten (10) school days of the occurrence giving rise to the concerns, and requesting a conference to informally discuss the concerns.

If the concerns are not resolved to the student's satisfaction after the informal discussion, the student may submit a complaint in writing to the department chair, coordinator or director of the faculty/staff member involved within ten (10) school days after the informal discussion, or within ten (10) school days after the initial contact, whichever is later. In filing the written complaint, the student may request to meet with the department chair, coordinator or director. The written complaint must specify the specific complaint(s) together with the desired resolution(s).

The department chair, coordinator, or director who receives the complaint shall review it and respond in writing to the student within ten (10) school days after receiving the complaint or after holding the (optional) requested meeting, whichever is later.

If the student is not satisfied with the results of the departmental review, he or she may then appeal in writing to the dean of the appropriate division (if applicable) within ten (10) school days after receipt of the written departmental response. The dean shall review and respond in writing to the student's appeal within ten (10) school days of the date on which the appeal is received.

If the results of the review by the dean (if applicable) are unsatisfactory to the student, the student may appeal in writing to the Provost within ten (10) school days after receipt of the dean's written response. The student may request a meeting with the Provost. The Provost or designee shall issue a written response to the student within ten (10) school days after receipt of the appeal or after holding the (optional) requested meeting, whichever is later. The decision of the Provost shall be final.

If a student wishes to have a complaint considered through this process but does not follow the steps as outlined, (such as the

student sends an appeal to the Provost prior to the individual or departmental review), the student will be referred back to the steps in this process unless the Provost or Dean believes there is a compelling reason to consider it (e.g. the individual or departmental response did not occur within the 10 school days or the instructor is also the department chair).

*Students with questions about this process or how to contact the appropriate individuals can contact the Student Conduct Officer for more information.*

### Student Non-Academic Complaint Process

The Dean of Student Affairs or designee shall be responsible for responding to complaints from students on non-academic issues, or directing the student to the appropriate office. These issues include, but are not limited to, refunds, admissions, withdrawals, transcripts, and use of facilities.

**Note:** In situations where there is already an appeal or complaint process offered, students must use that in place of this process. For example, appeals of the student conduct process are outlined elsewhere in this Code, and financial aid appeals are handled through the Office for Financial Assistance.

Students shall express their concerns initially by contacting the faculty/staff member within ten (10) school days of the occurrence giving rise to the concerns, and requesting a meeting to discuss the concerns.

If the concerns are not resolved to the student's satisfaction after the informal discussion, the student may submit a complaint (and desired resolution) in writing to the department chair, coordinator or director of the faculty/staff member involved within ten (10) school days after the informal discussion, or within ten (10) school days after the request to meet with the department chair, coordinator or director. The written complaint must specify the specific complaint(s) together with the desired resolution(s).

The department chair, coordinator, or director who receives the complaint shall review it and respond in writing to the student within ten (10) school days after receiving the complaint or after holding the (optional) requested meeting, whichever is later.

If the student is not satisfied with the results of the departmental review, he or she may then appeal in writing to the dean of the appropriate division (if applicable) within ten (10) school days after receipt of the written departmental response. The dean shall review and respond in writing to the student's appeal within ten (10) school days of the date on which the appeal is received.

If the results of the review by the dean (if applicable) are unsatisfactory to the student, the student may appeal in writing to the Provost within ten (10) school days after receipt of the dean's written response. The student may request a meeting with the Provost. The Provost or designee shall issue a written response to the student within ten (10) school days after receipt of the appeal or after holding the (optional) requested meeting, whichever is later. The decision of the Provost shall be final.

If a student wishes to have a complaint considered through this process but does not follow the steps as outlined, (such as if the student sends an appeal to the Provost prior to the individual or departmental review), the student will be referred back to the steps in this process unless the Provost or Dean believes there is a compelling reason to consider it (e.g. the individual or departmental response did not occur within the 10 school days).

*Students with questions about this process or how to contact the appropriate individuals can contact the Student Conduct Officer for more information.*

## Student Dress Code

There is no formal dress code. However, shirts and shoes must be worn in the buildings. Any student whose dress disrupts the educational process may be subject to the Student Code of Conduct and asked to leave campus in the interim.

## Technology Resources

### I. Philosophy

Harper College provides for the use of technology resources, software and facilities to further the College's mission. Access and use of facilities is a privilege and must be treated as such by all users. Acceptable use is based on common sense, common decency, and civility. Users are subject to such procedures and processes established by the College. Responsibility for the provision and support of the resources resides with the Information Technology division.

### II. Risk and Responsibility: Email, Internet Resources, and Electronic Files

#### A. Security

Harper College utilizes industry standard tools, processes, and equipment to protect electronic files stored on its computer systems and to filter materials that are transmitted or received via the College computer resources. Harper College does not assume liability for offensive material that any user may encounter, such as material that is illegal, defamatory, obscene, inaccurate or controversial.

#### B. Privacy

Users are strictly prohibited from accessing files and information other than their own, those which were intended for the user, and those for which the user has permission from authorized College personnel to access.

The College reserves the right, to access its computer and network systems, including current and archival files of users' accounts; if that access would be imperative to conducting College business; if there is strong evidence of improper usage; or if there is strong evidence of impropriety. Under the Illinois Freedom of Information Act ("IFOIA"), electronic files are treated in the same way as paper files. Any inspection of electronic files, and any action based upon such inspection, will be governed by all applicable federal and state laws and by College policies.

#### C. Education and Training

All users have the responsibility to use the facilities and all forms of technology resources in an efficient, ethical, and legal manner. Users are expected to follow equipment and lab usage guidelines and, when necessary, receive training in the use of these resources. They should accept responsibility for their own work by learning appropriate uses of software to maintain the integrity of work created. Users should keep archives and backup copies of important work. They are responsible for learning and properly using the features of securing and/or sharing access to files.

#### D. Personal Use

As a result of agreements Harper College has with technology providers, employees may be offered technology for personal use. If employees take advantage of these offers, any agreement, conditions or terms of use are between the employee and the outside technology provider. Information resource providers outside the College may, in turn, impose additional conditions of appropriate use, which the user is responsible to observe when using those resources.

### III. Unacceptable Uses

It is the joint responsibility of all users to help avoid unacceptable uses such as but not limited to:

- Using the resources for any purpose, which violates federal laws, state laws or College policies.
- Using the resources for commercial purposes.
- Misrepresenting the user's identity or affiliation in the use of information technology resources.
- Creating, sending, storing or soliciting patently harassing, intimidating, abusive, or offensive material to or about others.
- Intercepting, disrupting, or altering electronic communications.
- Using another person's account, user ID, name, or password.
- Sharing of individual user accounts and resources with another person or another organization.
- Attempting to exceed, evade or change assigned specifications or limitation of an account without the approval of appropriate College personnel. Impeding the use of systems by others.
- Attempting to corrupt the system.
- Reproducing, copying, downloading or distributing copyrighted materials without authorization.

Use of networks, technology, and information resources accessed from the College, such as Internet, satellite teleconferencing and distance learning facilities, is subject to the same principles and guidelines that are present within the College. Networks, technology, or information resource providers outside the College may, in turn, impose additional conditions of appropriate use, which the user is responsible to observe when using those resources.

### IV. Consequences

Abuse of these guidelines will result in possible legal action and/or official campus disciplinary procedures. Incidents involving unacceptable uses will be handled through existing processes.

## Workplace Violence Policy

Harper College is committed to maintaining an environment for its students and employees which is free from violence, threats of violence, aggression, intimidation, harassment and sexual harassment of any sort from other students and employees, as well as outside parties, including visitors to the College, vendors and those having no legitimate purpose to be on the College's campus.

To ensure a safe environment for employees and students, Harper College prohibits the wearing, transporting, storage or presence of firearms or other dangerous weapons in its facilities or on its property. Any employee or student in possession of a firearm or other weapon within Harper facilities/ property or while otherwise fulfilling job responsibilities may face disciplinary action, including termination.

To the extent allowed by law and consistent with the FIREARM CONCEALED CARRY ACT, Harper College prohibits persons from carrying weapons in any of its facilities or on its property. This policy does not apply to any law enforcement personnel engaged in official duties.

Any acts of workplace violence will not be tolerated, and all reports of such incidents will be taken seriously and dealt with appropriately. Individuals who commit such acts may be removed from the premises and subject to disciplinary action, criminal penalties or both.

All members of the campus community are encouraged to report conflicts that compromise the health and effectiveness of

individual employees and their worksites before they become major problems.

Procedures to implement this policy and the process for determining violations to this policy will be published in the Administrative Services Procedure Manual, in the Student Handbook and other appropriate publications.

### Emergency Procedures

- Call Harper College Police at 911 or extension 6330.

### Immediate Physical Danger

- Get out of the area and away from the immediate threat.
- Call Harper College Police immediately after you are in a safe place.

### Violence Committed

- Call Harper College Police immediately if a person commits an act of violence against you or another person.

### Intimidating Situation

- Call Harper College Police if a person has communicated a direct or indirect threat of physical or mental harm against you in any form (i.e., oral or written statements, gestures, expressions). Call Harper College Police immediately from a location away from the person who is causing the intimidation. Be prepared to give the dispatcher all the facts, and remain on the line until the officers arrive.

### Non-Emergency Procedures

If you are not in immediate physical danger, but you have experienced or witnessed harassment (also see separate Sexual Harassment policy and procedures) or intimidation:

1. Report instances of intimidation or concerns about workplace violence to your direct supervisor.\* Determine with your supervisor if the issue can be resolved at this level. \*If your direct supervisor is the person with whom you are experiencing the conflict, report the incident to that person's direct supervisor. If that person is also involved in the conflict, you may report the concern to the Workplace Violence Investigation Officer (WVIO) who is the Chief Human Resource Officer.
2. If the conflict cannot be resolved with your direct supervisor, file a formal written complaint with the WVIO (appointed by the President). The complaint should describe the alleged violation, the person(s) against whom the complaint is being filed and dates of the action(s) as well as the remedy or relief sought (use Workplace Violence Incident Report Form).
3. Upon receipt of the written complaint, the WVIO will review and discuss the complaint with all parties directly involved. On the basis of the written complaint and discussion(s) the WVIO will determine what further investigative action is required.
4. After the initial discussion(s) with the complainant, the WVIO will conduct further investigation as deemed appropriate. Such investigation may include, but is not limited to:
  - a. Interviewing the party(ies) alleged to have committed the act;
  - b. Interviewing witnesses identified by the complaining or accused party; and
  - c. Reviewing documents relevant to the complaint.
5. As a result of the above initial steps, resolution with the parties will be explored. If resolution is not achieved, the WVIO will determine the appropriate actions to be taken.
6. The WVIO shall prepare a confidential report with regard to the investigation. The report shall state whether or not the WVIO believes a violation of the College's Workplace

Violence policy has occurred and whether or not resolution has been achieved. The WVIO's report shall be completed within 30 days of receipt of any complaint(s); however, such time may be extended for an additional 30 days if necessary.

7. If resolution is not achieved, the person accused of workplace violence may be subject to disciplinary action up to and including termination of employment.
8. A copy of the confidential report will be sent to and maintained by the Chief Human Resource Officer of the College. The WVIO's findings shall be sent to the complaining and accused parties.
9. Either party may appeal, in writing, the decision of the WVIO by filing an appeal with the President within five calendar days of receipt of the decision. The President shall respond within 30 calendar days of receipt of the appeal.
10. All reports of concerns made under this policy are confidential. The confidential records will be kept in the office of the WVIO. Supervisors, the WVIO and other necessary administrators are directed to limit disclosure of information to only those persons who, in their discretion, are required to be made aware of a complaint made under this policy. Investigations under this policy are to be made with the least amount of disclosure needed to effectively carry out the investigation. Further, the final report of the WVIO and all discussions concerning a resolution of a complaint will be kept confidential and released to only those persons who are required to have knowledge. Those making a report of misconduct under this Policy, those interviewed in an investigation under this Policy and those who are the subject of a report under this Policy are requested to limit their disclosure of information to their supervisor, the WVIO, and/or other necessary persons.

The Workplace Violence Complaint Procedure will be evaluated each year by the Chief Human Resource Officer. Recommendations for changes in this procedure will be brought to the Human Resources Committee.

## Federal and State Laws

This section includes information on applicable state and federal laws, as well as College policies and procedures.

Elsewhere in the Catalog, College academic regulations are delineated for students. These include Harper College Standards for Academic Performance, Assessment and Placement Policy, Repeat Policy, Forgiveness Policy, Grading and Grade Points, Incomplete Grades, Attendance Policy, Academic Honesty Policy, Auditing a Course, Tuition and Refunds, Academic Honors, Withdrawals, Honors Program, Transcripts and Transfer of Credits.

The Catalog also includes graduation requirements for degrees and certificates, and information on all programs and courses and their prerequisites. The current semester course schedule is online and provides specific information regarding class times and registration procedures.

## Americans with Disabilities Act

Reasonable accommodations and services are available for students, staff and visitors with disabilities in accord with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. Persons with disabilities, who may require accommodations and/or support services, should contact Access and Disability Services via telephone 847.925.6266 (voice), 224.836.5048 (VP), or email at ads@harpercollege.edu. While

mandated services will be offered at Harper College facilities, complete College support services such as tutoring, counseling and others may only be available at the Palatine campus. Employees seeking accommodations should contact Human Resources.

### Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act

The Clery Act requires colleges and universities to disclose data on certain crimes committed on and off campus and campus safety policies and procedures. An amendment, The Campus Sex Crimes Prevention Act, requires disclosure of where law enforcement agency information provided by the State concerning registered sex offenders may be obtained. Harper compliance information can be found in the Annual Campus Security Report, available online at <http://goforward.harpercollege.edu/about/police/pdf/acsr.pdf>

To request a hard copy email: [police@harpercollege.edu](mailto:police@harpercollege.edu)

### Campus Security Enhancement Act of 2008

The Campus Security Enhancement Act of 2008 (Public Act 095-0881, 110 ILCS 12 - 20) and its implementing regulations (29 Ill. Adm. Code 305) outline a variety of requirements designed to prevent violence on campus. One such requirement is that each Illinois college or university have a campus threat assessment team.

The Harper Early Alert Team (HEAT) serves this function for Harper College by guiding the campus community in assessing and addressing threatening and/or concerning behaviors, before a person resorts to violence. Anyone who is concerned about a threat of potential violence should report it to the HEAT. The HEAT is not to be used in an emergency or imminent threat situation – individuals should contact Harper Police in these situations.

Students and other members of the campus community should be aware that they are expected to comply with requests or recommendations from the HEAT during threat assessment investigations or to assist with the monitoring of any threatening behavior(s). For more information or to report a concern, visit [harpercollege.edu/heat](http://harpercollege.edu/heat)

### Equity in Athletics Disclosure Act

Harper College complies with the Equity in Athletics Disclosure Act by annually completing a report that contains participation rate, financial support and other information on men's and women's intercollegiate athletic programs. Such information can be found at <http://ope.ed.gov/athletics/>

Hard copies are available upon request.

More information on Title IX compliance at Harper College can be found at [harpercollege.edu](http://harpercollege.edu)

### Family Educational Rights and Privacy Act

The Family Educational Rights and Privacy Act of 1974 establishes the rights of students to inspect and review their education record; provides that personally identifiable information will not, with certain exceptions, be disclosed without the student's

permission; provides for guidelines for the correction of inaccurate or misleading data through informal or formal hearings; grants the right to file complaints with the Family Educational Rights and Privacy Act (FERPA) office concerning alleged failures by the institution to comply with the Act; and makes provision for notice to the students concerning their rights.

No one shall have access to, nor will the institution disclose, any information from students' education records — other than Directory Information — without the written consent of student, except to officials of other institutions in which student seeks to enroll; to persons or organizations providing the student financial aid; or providing enrollment and/or degree verification to accrediting agencies carrying out the accreditation function; in compliance with a judicial order; in emergency situations when necessary to protect the health or safety of students or other persons; or to those members of the College community with a legitimate educational interest.

"Legitimate educational interest" means and includes a demonstrable need to know by any college employee in terms of his or her assigned duties. Parents of a dependent child (as defined by IRS code) are also eligible to inspect that dependent student's record.

Educational records that are not governed by the Act and are not accessible to students include:

1. Records kept by Harper employees, which are used only by the maker or his or her substitute and are not available to any other person.
2. Law enforcement records which are kept apart from the student's other educational records and are maintained solely for law enforcement purposes. These records are made available for inspection by Harper College Police personnel only when acting in the line of duty and only to law enforcement officials of the same jurisdiction. Educational records maintained by the institution may not be disclosed to the personnel of the law enforcement unit.
3. Employment records for College employees, which are kept solely for business reasons.
4. Student records made or maintained by a physician, psychiatrist, psychologist or other recognized professional or para-professional acting in his or her professional or para-professional capacity, and which are made, maintained or used only in connection with the provision of treatment to the student and are not available to anyone other than persons providing such treatment, except that such records can be personally reviewed by a physician or other appropriate professional of the student's choice.

### Directory Information

The following items are hereby designated as "Directory Information," and as such may be disclosed or released by the College for any purpose, at its discretion:

The student's name, address, telephone listing, major field of study, participation in officially recognized activities and sports, weights and heights of members of athletic teams, dates of attendance, part-time/full-time enrollment status, degrees and awards received, the most recent previous educational institution attended and information sent to the National Student Clearinghouse.

Currently enrolled students have the right to withhold the release and disclosure of any or all of these items by giving written notice on the appropriate form to that effect to the Dean of Enrollment Services by the first day of each course or program, as the case may be, for which they enroll. Request for non-disclosure will be effective for only one academic year; therefore, authorization to withhold Directory Information must be filed annually.

## Review of Records

The law provides students with the right to inspect and review information contained in their education record; to a response to reasonable requests for explanations and interpretations of the record; to challenge the contents of their education record; to have a hearing if the outcome of the challenge is unsatisfactory; and to submit explanatory statements for inclusion in their files if they feel the decision of the hearing officer is unacceptable. The Dean of Student Affairs has been assigned by the College to coordinate the inspection and review procedures for student education records, which include admissions, personal, academic, and financial files, academic cooperative education, disclosure and placement records.

Students wishing to review their education records must make a written request to the official responsible for the records listing the item or items of interest.

Records covered by the Act will be made available within 45 days of the request. Students may have copies made of their records with certain exceptions (e.g., a copy of the academic record for which a financial "hold" exists, student conduct hearing recordings or student conduct records containing protected information about other students, or a transcript of an original or source document which exists elsewhere). Education records do not include records of instructional, administrative and educational personnel which are the sole possession of the maker and are not accessible or revealed to any individual except a temporary substitute, records of the law enforcement unit, student health records, employment records or alumni records. Health records, however, may be reviewed by physicians of the student's choosing.

Students may not inspect and review the following: financial information submitted by their parents; confidential letters and recommendations associated with admissions, employment or job placement, or honors to which they have waived their rights of inspection and review; educational records containing information about more than one student, in which case the institution will permit access ONLY to that part of the record which pertains to the inquiring student; and confidential letters and recommendations placed in their files prior to January 1, 1975, providing those letters were collected under established policies of confidentiality and were used only for the purposes for which they were collected.

## Procedures to Amend Records and Request Hearings

Students who believe that their education records contain information that is inaccurate or misleading, or is otherwise in violation of their privacy or other rights, may discuss their problems informally at a meeting with the author of the record and the Dean of Student Affairs. If the decisions are in agreement with the student's request, the appropriate records will be amended. If not, the students will be notified within a reasonable period of time that the records will not be amended, and they will be informed by the Dean of Student Affairs of their right to a formal hearing. Students' requests for a formal hearing must be made in writing to the Dean of Student Affairs who, within a reasonable period of time after receiving such requests, will inform students of the date, place and time of the hearing. Students may present evidence relevant to the issues raised and may be assisted or presented at the hearings by one or more persons of their choice, including attorneys, at the student's expense. The hearing officers who will adjudicate such challenges will be designated by the President of the College.

Decisions of the hearing officer will be final, will be based solely on the evidence presented at the hearing, will consist of written statements summarizing the evidence and stating the reasons for the decisions and will be delivered to all parties concerned. The education records will be corrected or amended in accordance

with the decisions of the hearing officer, if the decisions are in favor of the students.

If the decisions are unsatisfactory to the students, the students may submit statements commenting on the information in the records, or statements setting forth any reason for disagreeing with the decisions of the hearing officer. The statements will be placed in the education records, maintained as part of students' records, and released whenever the records in question are disclosed. Students who believe that their rights have been abridged may file complaints with the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave., SW, Washington, D.C., 20202-5901 concerning alleged failures of the College to comply with the Act.

Copies of the Act, Harper policies and procedures and forms for use in implementing the Act, are available upon request in the One Stop.

## Religious Observances Policy

In compliance with the Higher Education Religious Observances Act (110 ILCS 110/0.01), Harper College recognizes that on occasion examinations or other scheduled academic activities may conflict with the religious observances of some members of the academic community, the instructional and administrative staff are required to make reasonable accommodations to minimize the resulting difficulties for individuals concerned. This includes admissions, attendance, and scheduling of examples. Students seeking accommodations faced with such conflicts must make prior arrangements with the instructor at least five (5) school days\* in advance of the examination or other activity creating the conflict.

Accommodations must be provided so long as they are requested in advance, and so long as an unreasonable burden is not placed upon the institution. No fees or adverse effects may occur towards any student availing oneself of this.

Students believing that they have been unreasonably denied an educational benefit due to their religious beliefs or practices may appeal the decision in accordance with the College's Student Academic or Non-Academic Complaint Procedures.

\* School days are defined as those weekdays (Monday through Friday) when classes are in session.

## Student Right to Know Act

The Federal government, under the Student Right to Know Act, requires that all colleges and universities report graduation or completion rates and, if applicable, transfer-out rates for new full-time, degree or certificate-seeking students. Information for Harper College is available at [harpercollege.edu/about/consumer.shtml](http://harpercollege.edu/about/consumer.shtml)

*Hard copies are available upon request.*

## College Credit Programs and Requirements

- [Adult Educational Development \(AED\)](#)
- [Alternative Credit Programs](#)
- [Alternative Learning Modalities](#)
- [Cooperative Programs](#)
- [Distance Learning](#)
- [Dual Degree Partnerships](#)
- [English as a Second Language \(ESL\)](#)

- [General Education](#)
- [Graduation Requirements](#)
- [Honors Program](#)
- [International Education at Harper College](#)
- [Student Development Courses and Seminars](#)
- [World Cultures and Diversity Requirement](#)

### Transfer

- [Transfer Agreements](#)
- [Other Transfer Agreements](#)
- [Transfer Compact Agreements](#)
- [Transfer Options](#)
- [Transfer Degree Options](#)

## Adult Educational Development

The Adult Educational Development (AED) Department provides instruction for eligible students 16 years old and over who do not have a High School diploma or equivalency and are not currently enrolled in High School. Instruction prepares students for completion of the Illinois High School Equivalency exam through all approved tests (Pearson Vue GED, HiSET, and TASC). Students who qualify can enroll in an ICAPS (Integrated Career and Academic Preparation System) course, including a free AED support class, to complete a college certificate in Logistics, Office Assistant, or Certified Nursing Assistant at the same time they are taking High School Equivalency (HSE) classes.

Foundational classes in Social Studies, Science, English and Math give basic skills-level students the confidence to progress from the Foundation level to Pre-HSE and HSE-level classes. HSE students will be advised by their instructors as to when they are ready for the official HSE exams. The Bridge to College and Career Success class helps students explore careers, prepare them for college, and learn about academic success skills.

Second language learners with limited or interrupted schooling in their native countries can enroll in English Literacy Acquisition (ELA) classes which help achieve competence in reading, writing, speaking and comprehension skills and work toward attainment of a High School Equivalency diploma. Critical literacy, employability, math, and technology skills are also incorporated into the ELA classes to prepare learners for HSE classes and postsecondary success.

Eligible residents are served by the Citizenship preparation classes, which prepare students for the interview and literacy testing conducted by the USCIS.

The AED department is connected with the community and provides support, resources and referrals through faculty and staff contact with students. Students are tested and placed during AED registration. Funded through the Workforce Innovation and Opportunity Act of 2015, the AED program must report student outcomes and standardized test level gains to the State and Federal government. AED is committed to helping learners make academic progress, obtain completion, and to meet individual student goals.

Daytime and evening courses are offered at the Palatine Campus, the Harper College Learning and Career Center (LCC in Prospect Heights), the Palatine Opportunity Center, and the Hanover Park Education and Work Center. Qualifying students may opt to take some of their HSE courses online. For more information, call the AED department at 847.925.6223 (Palatine campus) or 847.925.6015 (Learning and Career Center)

## Alternative Credit Programs

Students with varied educational experience may convert this experience into college credits on the basis of satisfactory performance on proficiency examinations. A person who has been officially accepted as a Harper student may apply for and receive college credit by meeting the course objectives through alternative or transfer credit for up to 42 semester hours of the degree program requirements and up to one-half of the semester hours required for completion of a certificate program. Alternative credit could include Advanced Placement (AP) credit, College Level Examination Program (CLEP) credit, Harper College Proficiency Examination credit, the American Council on Education recommendations for Defense Activity of Non-traditional Educational Support (DANTES, previously USAFI).

Guidelines, policies and procedures for alternative credit programs explained below are available online and in the [Assessment and Testing Center](#).

### Advanced Placement Program (Offered Only in High School)

Credit and placement will be awarded to students with adequate Advanced Placement (AP) examination grades in areas comparable to the Harper curriculum. Criteria for granting credit have been determined by each academic division.

### College Level Examination Program

Credit through the College Level Examination Program (CLEP) is available to all students who feel they have acquired the necessary proficiency level to meet the requirements in a variety of subjects not covered by Harper College proficiency tests. Criteria for granting credit have been determined by each academic division. A student who has previously completed CLEP tests should request that the scores be sent to the Testing Center. Granting of CLEP credit by Harper College is contingent upon completion of application procedures.

### Harper College Proficiency Examination Program

Departmental proficiency tests have been created by Harper College faculty for many courses not available through the CLEP program. Written permission to take a proficiency test must be received from the appropriate program coordinator or department chairman and brought to the Testing Center. Permission forms are available in the office of each academic division.

### American Council on Education Credit Recommendations

Credit through Defense Activity for Non-traditional Education Support (DANTES) is available by submitting an official score report. DANTES tests equivalent to College Level Examination Program (CLEP) tests will be evaluated using Harper College CLEP standards.

## Alternative Learning Modalities

Harper College is committed to establishing and maintaining consistently high academic standards for instruction and learning outcomes across all teaching modalities while offering students the opportunity to choose the learning environments that best serve their educational interests.

### Fast Track - Accelerated Program

Fast Track is an accelerated, part-time certificate and degree completion program designed specifically for busy students.

- Most classes are offered in 5, 6 or 8-week sessions, or a combination of full semester and accelerated classes.
- Reduced classroom time in accelerated courses allows you to work more independently, outside of class and online, to meet all learning objectives.
- The cohort format allows you and your student colleagues to advance through the program by attending all courses together.
- Classes are pre-selected and pre-scheduled for your convenience.
- Depending upon the program, classes meet one or two nights each week between 6-10 p.m. at the Harper Professional Center (HPC) in Schaumburg or on the main Palatine campus.

Degrees that are currently available in a Fast Track format are an Associate in Applied Sciences (A.A.S.) degree in Business Administration and an Associate in Arts transfer degree toward Business Administration.

Various certificate programs also available include Advanced Accounting Bookkeeper/Clerk, Health Information Technology (HIT) Medical Coding Certificate (new in Fall 2015), Human Resource Management, and Supply Chain Management (with built-in Inventory/Production Control, Physical Distribution and Purchasing certificates).

To ensure that all students are ready to move forward at the same pace, we ask that everyone meet some minimum requirements. English and math placement testing may be required. Students with prior college credit need a minimum overall GPA of 2.0. Life experience and job history are equally important components for success in the program and will be considered for acceptance into the program. Don't worry if you've been out of the classroom for a while or if you feel a little rusty on basic skills; we can help you prepare—just ask us how. [www.harpercollege.edu/fasttrack](http://www.harpercollege.edu/fasttrack)

### Other Options

Additional alternative learning options meet the changing needs of people on the go, with courses that are more accessible, flexible and convenient. Special opportunities include:

- Blended Courses
- Internet/Online Courses
- Open Entry Classes

### Blended Courses

Blended courses offer two great ways to learn. The classroom experience is combined with online instruction to provide an effective learning environment. On-campus visits or actual classroom time is reduced because some learning is done via the Web. Participation in a Blended Course requires a working email account (provided by Harper College), specific computer hardware and software, and an off-campus Internet connection. Proctored testing on campus may be necessary. Sections are coded with a 'B'.

### Internet/Online Courses

A wide variety of courses are now available to students via the Web. Not only will you have the flexibility of class scheduling and testing dates and times, you'll also have the opportunity to communicate with your instructor and classmates via email or through special forum "chat" rooms, both an integral part of your online educational experience. If you have access to a computer with specific hardware and software requirements, modem and online access through an off-campus Internet Service Provider (ISP) then internet courses may be the perfect option for you. Harper will provide you with a working email account. Campus visits for orientation sessions and/or proctored testing may be necessary for some courses. Sections are coded with a 'W'.

### Open Entry

Harper has designed this unique class format to meet the needs of many students. Maybe you are unable to attend regularly scheduled classes. Or you want to finish the course work more quickly or you are just anxious to start, but the course has already begun. We require a one-hour orientation (some are mandatory) where the instructor will show you around the lab and website, hand out homework assignments and answer any questions. Open Entry classes are offered in remedial Mathematics; some Computer Science (CSC) classes, English as a Second Language (ESL) classes and Heating, Ventilation and Air Conditioning (RAC). The Computer Information Systems department offers flexible start classes that must be completed at the end of the term (CAS/CIS/NET).

## Cooperative Programs

Harper College has Joint Educational Agreements with various area community colleges. Under these agreements, Harper district residents, who are admitted to the programs listed below, will usually be allowed to attend at the sponsoring college's in-district tuition rate.

The cooperating college will issue all degrees or certificates for successful completion of the program. Program and admission information may be obtained by calling the Admissions Office at the college offering the program, as listed below:

#### College of DuPage

630.942.2800  
425 Fawell Boulevard  
Glen Ellyn, Illinois 60137-6599

- Automotive Technology
- CISCO Internet Technician
- Communication Art and Sciences–Multimedia Arts
- Horticulture
- Library Technical Assistant
- Media
- Nuclear Medicine
- Photography
- Respiratory Therapy Technician
- Therapeutic Massage
- Travel and Tourism
- Travel and Transportation

#### College of Lake County

847.543.2000  
19351 West Washington Street  
Grayslake, Illinois 60030

- Alcohol, Substance Abuse, and Addictive Disorders
- Applied Lasers
- Biophotonics
- Automotive Collision Repair
- Automotive Technology
- Civil and Environmental Technology
- Construction Management Technology
- Health and Wellness Promotion
- Horticulture
- Laser/Photonics/Optics
- Library Technical Assistant
- Personal Training
- Technical Communications
- Tool and Mold Maker
- Wellness Coaching



**Elgin Community College**

847.697.1000  
1700 Spartan Drive  
Elgin, Illinois 60123-7193

- Automotive Technology
- Clinical Laboratory Technology
- Computer Aided Design
- Culinary Arts
- Dental Assisting
- Family Violence Counseling
- Histotechnology
- Industrial Manufacturing
- Truck Driving
- Truck Driving Owner/Operator

**Kishwaukee College**

815.825.2086  
21193 Malta Road  
Malta, IL 60150-9699

- Horticulture

**Lincoln Land Community College**

217.786.2200  
5250 Shepherd Road  
Springfield, Illinois 62794-9256

- Airframe and Power Plant Mechanics

**McHenry County College**

815.455.3700  
8900 U.S. Highway 14  
Crystal Lake, Illinois 60014

- Automotive Technology
- Entrepreneurship
- International Business
- Horticulture

**Oakton Community College**

847.635.1600  
1600 East Golf Road  
Des Plaines, Illinois 60016

- Animation and Multimedia
- Automotive Service Excellence
- Automotive Technology
- Facilities Management and Engineering
- Machine Technology Apprentice
- Manufacturing Design Technology
- Medical Laboratory Technology
- Photography<sup>1</sup>
- Physical Therapy Assistant

**Rock Valley College**

815.921.4251  
3301 North Mulford Road  
Rockford, Illinois 61101

- Airframe Technician
- Aviation Maintenance Technology
- Power Plant Technician

**Triton College**

708.456.0300  
2000 Fifth Avenue  
River Grove, Illinois 60171

- Automotive Technology
- Ophthalmic Technician
- Respiratory Care
- Visual Communications

<sup>1</sup>Technical courses only.

Harper College programs available to residents of other college districts under cooperative agreements are as follows:

**Alternative Electrical Energy**

McHenry County district

**Bread and Pastry Arts**

Oakton and Rock Valley districts

**Building Codes and Enforcement**

DuPage, Lake County and Oakton districts

**Cardiographic Technician**

DuPage, Elgin, Kishwaukee, Lake County, McHenry County, Oakton, Rock Valley and Triton districts

**Computed Tomography**

McHenry County district

**Culinary Arts**

Oakton and Rock Valley districts

**Dental Hygiene**

Elgin, Kishwaukee, McHenry County, Oakton and Triton districts

**Diagnostic Cardiac Sonography**

DuPage, Elgin, Kishwaukee, Lake County, McHenry County, Oakton, Rock Valley and Triton districts

**Diagnostic Medical Sonography**

Elgin, Kishwaukee, Lake County, McHenry County, Oakton and Rock Valley districts

**Dietary Manager**

Elgin, Lake County, Oakton district

**Dietetic Technician**

DuPage, Elgin, Lake County, McHenry, Oakton and Triton districts

**Electronics Engineering Technology**

McHenry County district

**Electronics Certificate**

McHenry County district

**Electrical Maintenance Certificate**

McHenry County district

**Emergency and Disaster Management**

Lake County district

**Fashion Design**

Elgin, Kishwaukee, Lake County, McHenry County, Oakton and Triton districts

**Fashion Merchandising**

Elgin, Kishwaukee, Lake County, McHenry County and Oakton districts

**Fashion Graphic Arts**

McHenry County district

**Food Service Management**

McHenry County and Oakton districts

**Forensics Science**

Lake and McHenry County districts

**Graphic Arts Technology**

DuPage and Lake County districts

**Health Care Office Manager**

Elgin and McHenry districts

**Hospitality Management**

McHenry County and Oakton districts

**Hotel Management**

McHenry County and Oakton districts

**Human Resource Management**

DuPage, Lake and McHenry County districts

**Interior Design**

Elgin, Lake County, McHenry County and Oakton districts

**Maintenance Technology**

Lake County district

**Mammography**

Kishwaukee, Lake County, McHenry County and Oakton districts

**Management**

DuPage district

**Medical Assistant**

DuPage, Elgin, McHenry County and Oakton districts

**Paralegal Studies**

Rock Valley and Triton districts

**Phlebotomy**

McHenry County district

**Practical Nursing**

Lake County, McHenry County districts

**Radiologic Technology**

Kishwaukee, McHenry County and Oakton districts

**Refrigeration and Air Conditioning Technology**

McHenry County district

**Sign Language Interpreting**

DuPage, Elgin, Lake County, McHenry County and Triton districts

**Supply Chain Management**

DuPage, Elgin, Lake County and McHenry County districts

## Distance Learning Classes

**Center for Innovative Instruction**

A wide variety of courses are available to students via the World Wide Web. Online and blended (Internet component with reduced campus class time) courses offer the options of flexible learning time as well as communication with instructors and classmates via e-mail or through discussion forums. A personal computer, specific hardware and software requirements, online access through an Internet Service Provider (ISP) and a Harper email account are necessary. Many instructors offer an orientation session at the beginning of each semester. Students are strongly encouraged to attend these as they are critical to course success. Proctored testing may require a student to come to campus. Harper uses Blackboard (<http://harper.blackboard.com>) for courses offered via distance delivery.

Other distance learning options include selecting from a broad range of courses offered from other Illinois colleges and universities through the Internet Course Exchange (<http://www.ilcco.net/ice2>). Discussion with a Harper counselor prior to registration is advised as students who want to enroll in courses delivered from this source must follow specific enrollment procedures.

For information about current distance learning courses offered at Harper College, call 847.925.6586 or visit Harper Online at [harpercollege.edu/distancelearning](http://harpercollege.edu/distancelearning).

## Dual Degree Partnerships

Harper College has Dual Degree Partnerships with the University of Illinois at Urbana-Champaign College of Engineering, DePaul University, Roosevelt University, Governors State University, and Rasmussen College. These unique transfer partnerships provide students with benefits such as guaranteed admission upon completion of the associate's degree, joint advising, scholarships and/or tuition discounts, and locked in 4-year institution degree requirements and tuition from the time the student enters the program at Harper (typically by their second semester). Data is shared between institutions to track student participation and progress.

## English as a Second Language

English as a Second Language (ESL) courses are for individuals who are native speakers of another language and who need to improve their English language skills for academic or employment purposes. Courses are offered for credit at

beginning, intermediate and advanced levels. Both an intensive English program and part-time program are offered.

The ESL/Linguistics Department serves students from any language background. Some students are referred to the department from the Harper College assessment program. Student educational backgrounds range from nine grades completed through completion of graduate/professional programs. Students with fewer than nine years of education are referred to the Adult Educational Development Department for enrollment in the Nonnative Literacy Program.

Students are tested during registration and counseled for appropriate program and course placement. For more information, contact the department office in Building D Room D138 or call 847.925.6227.

### Intensive English Program

The Intensive English Program (IEP) at Harper College is dedicated to providing excellent comprehensive English language instruction for postsecondary students whose primary language is not English. Professionals in the field of teaching English to speakers of other languages (TESOL) will utilize proven English language teaching methods to prepare students for further academic study in the U.S. This learner-centered program is offered on a full-time basis for both international students and residents of the U.S.

Students completing the final level of the Intensive English Program are able to enroll in the highest-level English as a Second Language (ESL) reading and writing courses at Harper College while also enrolling in selected degree credit courses. Upon successful completion of these reading and writing courses, students will have the academic English language skills needed for success in all degree credit courses offered by Harper College and may enroll in any degree credit courses and programs for which they meet the prerequisites.

This program meets the DHS requirements for students on student visas. It is accredited by the Commission on English Language Program Accreditation (CEA) and agrees to uphold the CEA Standards for English Language Programs. For further information about this accreditation, please contact the Commission on English Language Program Accreditation, 1725 Duke St., Suite 500, Alexandria, VA 22314, 703.519.2070.

### English Language Program

The English Language Program (ELP) is for those students who wish to improve their English language skills for educational, professional or employment reasons on a part-time basis. Depending on their proficiency level, students may enroll in one or more classes, including integrated skills courses, as well as courses in reading, writing, grammar, conversation, TOEFL preparation and other supplemental courses. Students at the higher levels in this program may also enroll in other appropriate college courses.

### General Education

General education is that part of the college education that provides students with the foundations essential to lead personally fulfilling and responsible lives as productive citizens. General education cultivates the knowledge, skills and attitudes that educated persons use to shape their lives. It fosters the desire and capacity to continue learning throughout life. A general education “produces persons who are open-minded and free from provincialism, dogma, preconception and ideology; conscious of their opinions and judgments; reflective of their actions; and aware of their place in the social and natural worlds.”

An educated person is able to think clearly, communicate effectively, make reasoned and ethically aware judgments, respect human diversity and connect and apply fields of knowledge. These general abilities are required by all areas of specialization. The breadth of general education complements the rigor and depth of specialized education.

If education is a journey, as many have conceived it, then the curriculum is a map. The Harper College general education curriculum requirements provide a selection of diverse courses. Following the map of general education ensures that a student's education is a coherent, comprehensive journey.

### Graduation Requirements

1. For associate degrees, attainment of a minimum of 60-67 semester hours of credit, at least 18 of which must be earned in attendance at Harper College and be in courses numbered 100 or above. For certificates of completion, 50 percent of required credit hours must be earned at Harper. Up to two hours credit in physical education activity courses (100 level) may be included as free electives in the minimum 60 required hours for an associate degree, excluding the AGS degree. A maximum of four semester hours of Independent Study credit may be included as free electives in the minimum 60 required hours for an associate degree.
2. In order to earn an associate degree, students must attain a minimum cumulative grade point average (GPA) of 2.0. Attainment of a minimum GPA of 2.0 for any applicable course work is required for all certificate programs.
3. Requirement of 60 hours must be in courses numbered 100 or above for the degrees of Associate in Arts, Associate in Science, Associate in Fine Arts, Associate in General Studies or Associate in Engineering Science. (Courses below 100 level may be used only where an AAS program allows.)
4. Fulfillment of appropriate associate degree requirements as listed in the College Catalog at the time the student **first enrolled or any catalog thereafter except for courses no longer offered.**

Effective Fall 2009, students have a maximum of 10 years to complete requirements from the catalog edition under which they first enrolled. Students who do not complete requirements within 10 years must upgrade to the next available catalog edition. Students may choose to upgrade to a more recent catalog edition at any time; however, curricular degree requirements of more than one catalog edition cannot be combined to complete degree requirements without the written permission of the Assistant Provost or designee.

Students who are already admitted into or are in the process of fulfilling requirements for a career degree or certificate program under their original catalog may be required to upgrade to a more recent catalog edition, due to updates in industry, licensing, and/or accreditation standards.

Students who fail to complete their degree or certificate within the 10-year limit should meet with a Student Development counseling faculty member to determine if an extension can be granted or to help decide which catalog edition best meets their academic and career goals.

5. All of our associate degrees require a student to successfully complete a World Cultures and Diversity course as a graduation requirement. World Cultures courses that fulfill this requirement will be designated with this symbol: †

Fulfillment of this requirement for one associate degree and/or program of study does not guarantee it has been met for another.

- A student must apply for graduation in the Registrar's Office or online at [www.harpercollege.edu](http://www.harpercollege.edu) no later than one week after the midterm of the semester in which the student intends to graduate. Students are encouraged to participate in the formal graduation ceremony in May which includes fall, spring and summer graduates. Students are encouraged to complete their application for graduation when registering for the semester in which their graduation requirements will be fulfilled.

## Honors Program

Harper College seeks to stimulate, encourage and recognize work of depth, scope and originality by its students. A balanced curriculum of honors courses is offered in the major areas required for the General Education component of associate degrees.

Honors students enjoy the benefit of reduced class size and the challenge of social and intellectual interaction with other high achieving students while they acquire the breadth of understanding and develop leadership qualities that such settings enhance. Additionally, the Honors Program provides students a variety of opportunities to extend their learning beyond the classroom.

All honors courses are noted as such on the transcript. Additionally, upon fulfilling all other degree requirements, students who have completed at least 12 hours of honors course work (which must include either HUM 105 or HST 105) and maintain a GPA of 3.25 or higher will be designated as Honors Program graduates.

To be admitted to honors classes, students must meet specified criteria, complete an honors application and have an interview with the coordinator of honors. Applications are available on the Honors Program [website](#). Applications are accepted at any point during the year. For more information on our programs, visit <http://goforward.harpercollege.edu/academics/honors>

The College also offers several scholarships based primarily on academic achievement. [Scholarship information is in the Office of Student Financial Assistance.](#)

## International Education at Harper College

The mission of International Education at Harper College is to develop international awareness through collaborative programs that enhance knowledge of global dynamics, cultural diversity, and world issues for students, faculty, staff, and the surrounding community. International Education at Harper College serves as a resource to the College and surrounding communities to celebrate the many contributions of the world's cultures and traditions, and will foster the continuing global education of its citizenry. Furthermore, we are committed to educating students for leadership in an increasingly complex global society. To that end, International Education at Harper College strives to offer global education opportunities that provide students with the following:

- a curriculum that ensures that all of our students will be able to succeed in a world marked by interdependence, diversity, and rapid change,
- the knowledge and understanding of culture, language, geography, and global perspectives,

- the skills to understand the world through the eyes of others and how their actions can affect and be affected by people throughout the world.

Studying abroad is an exciting way to gain course credit. An educational experience abroad can help you develop skills that will give you an advantage transferring from Harper College. International experience, cross-cultural communication skills, global awareness and foreign language skills are becoming increasingly important in all areas of work and study, and your study abroad experience will prepare you for future challenges! If you are interested in short-term or semester-long programs, we have short-term programs offered by individual Harper faculty members as full-credit classes throughout the year. We also offer a range of more long-term study abroad opportunities through the Illinois Consortium for International Studies and Programs (ICISP). In addition, we provide information about available programs, resources about funding opportunities, support through the application process, pre-departure orientation, advice and assistance while overseas, and post-return support.

International Education at Harper College also sponsors the graduation Distinction in International Perspectives which is a new graduation honor designed to promote, acknowledge, and reward individual students' real, life-changing growth during their studies at Harper College. A student who earns the Distinction in International Perspectives will complete 12 hours in interdisciplinary academic studies at Harper College as well as a Portfolio and Capstone project. Students are supported through the Portfolio and Capstone activities by a coordinator and qualified faculty mentors. The Distinction offers students an opportunity to work closely with Harper faculty and exposes students to different cultures, creating a unique advantage for students' future employment, scholarship possibilities, and higher education experiences.

For more information about our programs, visit [dept.arpercollege.edu/international](http://dept.arpercollege.edu/international)

## Student Development Courses and Seminars

### Credit Courses

Several different classroom experiences are offered for academic credit by the Student Development Division. First Year Experience (FYE 101) provides exposure to strategies necessary to adapt to the college environment and assists students in developing initial career and educational goals. Humanistic Psychology (PSY 107) facilitates personal growth and development through the exploration of self-understanding, confidence, motivation, clarification of goals and relationships. Topics in Psychology (PSY 108) allows students the opportunity to examine current issues. Topics covered during a particular semester are listed in the semester course schedule. Career Development (CDV 110) provides students with the opportunity to explore career interests, experiences, skills, abilities and work related values and examine information about the world of work in order to develop educational and career goals. Exploring Diversity in the United States (DIV 101) focuses on culture and other diversity issues and topics; students will have the opportunity to discuss dimensions of their own cultures and cultures of others as well as examine discrimination and prejudice between groups and the impact of these power differences on people's lives.

### Noncredit Seminars

Noncredit group seminars on a variety of topics are also offered each semester. Mailings, posters and brochures will inform

students of these offerings. Students may request additional information by visiting any of the Student Development Centers.

## Transfer Agreements

### Illinois Articulation Initiative

Harper College is a participant in the Illinois Articulation Initiative (IAI), a statewide articulation effort to help Illinois college students transfer easily. This effort involves public community colleges, public universities and private colleges and universities, and includes the articulation of lower-division general education and major field courses. This agreement is in effect for students entering college as first-time freshmen in summer of 1998 (and thereafter). The following summary highlights the major features of the initiative.

1. One of the main features of the IAI is the General Education Core Curriculum and a list of statewide articulated general education courses that will be accepted for transfer by all participating colleges and universities in Illinois.
  - a. Students who complete the A.A. degree that contains the General Education Core Curriculum at a community college will have their lower-division general education core requirements satisfied at the participating Illinois college or university to which they transfer.
  - b. Students who complete the General Education Core Curriculum at any participating college or university in Illinois will have their lower-division general education requirements met upon transfer to another participating college or university in Illinois.
  - c. Students who have 30 semester credits of college level coursework can transfer to an IAI participating institution and have the option of completing the institution's lower-division general education requirements or the IAI General Education Core Curriculum.
  - d. The General Education Core Curriculum and the list of statewide articulated general education courses will be a great advantage for students who are undecided about what university they want to attend after transfer, as well as for students who are undecided about their major because the "core" will transfer to all participating colleges and universities in Illinois.
2. Another main feature of the initiative is a program guide and list of statewide articulated lower-division courses for each baccalaureate degree major field that will transfer and satisfy major field requirements at participating colleges or universities in Illinois that offer that degree.
3. The General Education Core Curriculum, the program guides for the major fields and the statewide list of articulated courses will greatly help counselors and advisors provide accurate information on the articulation of courses to students planning to transfer.

See the IAI Web site at [www.iTransfer.org](http://www.iTransfer.org) for more information.

### IAI General Education Core Curriculum Requirements

The IAI General Education Core Curriculum consists of courses that colleges and universities consider essential for students' success in college and life. Students are permitted to transfer this portion of an associate or a bachelor's degree program from one participating institution to another without loss of credit and with assurance that lower-division general education requirements have been satisfied. The curriculum comprises about two-thirds of an associate degree and about one-third of a bachelor's degree. This transferable curriculum is included within Harper's 1998 (and thereafter) A.A. degree.

**Specifically, the General Education Core Curriculum requires:**

#### Communications

- 3 courses (9 semester credits) Must include a two-course sequence in writing completed with grades of C or better (6 semester credits) and one course (3 semester credits) in oral communication.

#### Mathematics

- 1 to 2 courses (3-6 semester credits)

#### Physical and Life Sciences

- 2 courses (7-8 semester credits) Must include one course selected from the life sciences and one course from the physical sciences. One course must be a lab.

#### Humanities and Fine Arts

- 3 courses (9 semester credits) Must include at least one course selected from humanities and at least one course from the fine arts.

#### Social and Behavioral Sciences

- 3 courses (9 semester credits) Must include courses selected from at least two disciplines.

#### TOTAL: 12 -13 courses (37-41 credits)

Refer to specific approved courses under course descriptions listed in the catalog or see the IAI Web site at [www.iTransfer.org](http://www.iTransfer.org).

### Illinois Articulation Initiative Transcribing Requirements

As a participant of the Illinois Articulation Initiative (IAI), Harper College requires the following for completion of the core to be noted on the official transcript:

1. Initial enrollment date at an IAI participating institution effective summer 1998 (and thereafter).
2. Completion of the Associate in Arts (A.A.) degree starting with the 1998-99 catalog and/or completion of the General Education Core Curriculum requirements and attainment of a minimum of 37 semester hours.
3. Attainment of a minimum cumulative grade point average of 2.0.
4. Students who are completing a degree under these requirements will have completion of the core transcribed at the time of the degree certification.
5. Students who are not completing a degree must formally request the Registrar's Office to certify the completion of the core by submitting a "Petition to Certify the Illinois Transferable Education Core Curriculum."

## Transfer Compact Agreements

Some four-year colleges accept the Associate in Arts or Associate in Science degrees as meeting all lower division general education requirements and grant automatic junior standing upon transfer. Students may have to meet additional requirements for some majors at these colleges. Contact a Student Development Center for more information. Schools with which Harper has a compact agreement are:

- Chicago State University
- Eastern Illinois University
- Governors State University
- Illinois State University
- Northeastern Illinois University

- Northern Illinois University
- Southern Illinois University
- University of Illinois at Springfield
- Western Illinois University

## Transfer Degree Options

### Associate in Arts (AA)

The Associate in Arts degree is the first two years of a baccalaureate degree. Students take 100 and 200 level courses in areas such as communication, humanities, social science, mathematics and science as well as courses related to their major or area of interest. Completion of the AA fulfills the requirements of the Illinois Articulation Initiative (IAI) and the Illinois Articulation Initiative General Education (IAI GECC). The IAI GECC is a package of general education courses that satisfy lower-division general education requirements at other IAI participating schools.

It is important to keep in mind that baccalaureate majors often require specific general education courses.

### Associate in Science (AS)

The Associate in Science degree is the first two years of a science-related baccalaureate degree. Students take 100 and 200 level courses in areas such as communication, humanities, social science, mathematics and science as well as courses related to their major or area of interest. Science related baccalaureate programs are often highly structured and require extensive sequential mathematics and science courses. In order to take courses in a similar pattern to those at a 4-year college of university, some general education courses are postponed until junior or senior year. While the general education courses included in the AS degree are approved by the IAI, completion of the AS does not fulfill the requirements of the Illinois Articulation Initiative (IAI) and the Illinois Articulation Initiative General Education (IAI GECC). After transfer students will either complete the general education requirements of the transfer institution or are given the opportunity to complete the IAI GECC. Consult with an academic counselor or specialist for additional information.

Note: On September 18, 2015 the Illinois Community College Board approved the changes to the AS degree. The changes are effective beginning with the 2016-2017 academic year. The new AS model requires fewer humanities and fine arts and social and behavioral sciences and requires additional mathematics and science. Effective the 2016-2017 catalog the AS will no longer include the IAI GECC package.

### Associate in Engineering Science (AES)

The Associate in Engineering Science degree is the first two years of an engineering baccalaureate degree. Engineering baccalaureate programs are often highly structured and require extensive sequential mathematics and science courses. In order to take courses in a similar pattern to those at a 4-year college of university, some general education courses are postponed until junior or senior year. Completion of the AES does not fulfill the requirements of the Illinois Articulation Initiative (IAI) and the Illinois Articulation Initiative General Education (IAI GECC). After transfer students will either complete the general education requirements of the transfer institution or are given the opportunity to complete the IAI GECC. Consult with an academic counselor or specialist for additional information.

### Associate in Fine Arts (AFA) – Art or Music Emphasis

The Associate in Fine Arts is the first two years of a Bachelor of Fine Arts degree. Baccalaureate programs in fine/performing arts are often highly structured and require extensive sequential

courses in the major field. In order to take courses in a similar pattern to those at a 4-year college of university, some general education courses are postponed until junior or senior year. Completion of the AFA does not fulfill the requirements of the Illinois Articulation Initiative (IAI) and the Illinois Articulation Initiative General Education (IAI GECC). After transfer students will either complete the general education requirements of the transfer institution or are given the opportunity to complete the IAI GECC. Consult with an academic counselor or specialist for additional information.

## Transfer Options

An important role of a community college is to provide plans of study to allow students to complete the requirements for the first two years of a baccalaureate degree. Harper defines these plans as transfer options. In most cases, students are better served by earning the associate in arts, associate in science, associate in engineering science, associate in fine arts—art or associate in fine arts—music before transfer. Individual baccalaureate-oriented credits earned at Harper are also transferable to other institutions of higher learning.

As a guide for students, sample plans that meet Harper degree requirements are available in the Student Development Centers and on the Harper College website. These plans include general freshman and sophomore level course work to prepare for transfer into specific baccalaureate majors. These guides are “samples” as transfer institution requirements may vary. Students are responsible for knowing the specific requirements of the institutions they are considering for transfer and should consult with those institutions directly.

In addition, students should see a Harper Student Development counselor to discuss their transfer plans prior to registering for courses each semester. Resource materials and counseling assistance are available in Harper’s Student Development Centers.

## Other Transfer Agreements

In addition to the IAI and Compact Agreement, Harper College has developed course transfer guides or agreements with the following public and private colleges and universities. Those designated (DD) represent dual degree partnerships and include benefits such as guaranteed admission and locked-in tuition and degree requirements at the 4-year institution. Benefits vary per partnership and apply only to students meeting specified requirements.

- Academy of Art University
- American InterContinental University
- Appalachian State University
- Argosy University
- Arizona State University
- Arkansas State University
- Ashford University
- Augustana College
- Aurora University
- Benedictine University (DD)
- Bradley University
- Brigham Young University
- California University of Pennsylvania
- Carthage College
- Central Michigan University
- Chamberlain College of Nursing
- Columbia College – Chicago
- Columbia College of Missouri

- Concordia University
- DePaul University (DD)
- DeVry University
- Dominican University
- Elmhurst College
- Ferris State University
- Fort Lewis College, Colorado
- Franklin University
- Gallaudet University
- Governors State University (DD)
- Grand Valley State University
- Hawaii Pacific University
- Illinois Institute of Art
- Illinois Institute of Technology
- Indiana State University
- Indiana University – Bloomington
- Indiana Wesleyan University
- Iowa State University
- Judson University
- Kansas State University
- Kaplan University
- Kendall College
- Lake Forest College
- Lewis University
- Loyola University of Chicago
- Marquette University
- Michigan State University
- Michigan Technological University
- Midwestern University
- Millikin University
- Milwaukee School of Engineering
- Monmouth College
- National-Louis University
- National University of Health Sciences
- North Central College
- North Park University
- Northern Michigan University
- Northwestern University – School of Professional Studies
- Northwood University
- Oklahoma State University
- Olivet-Nazarene University
- Palmer College of Chiropractic
- Peirce College
- Purdue University
- Purdue University Calumet
- Quincy University
- Rasmussen University (DD)
- Regis University
- Resurrection University
- Robert Morris University
- Rockford University
- Roosevelt University (DD)
- Rush University
- Saint Anthony College of Nursing
- Saint Joseph's College
- Saint Louis University
- Saint Mary's University of Minnesota
- Saint Xavier University
- San Diego State University
- Savannah College of Art & Design
- Shimer College
- St. Louis College of Pharmacy
- State University of New York - Canton
- Strayer University
- Trinity International University
- Truman State University
- University of Hawaii – Manoa
- University of Illinois – Chicago
- University of Illinois – Urbana/Champaign (DD – Engineering)
- University of Iowa
- University of Kansas

- University of Kentucky
- University of Maryland
- University of Maryland University College
- University of Michigan
- University of Minnesota – Twin Cities
- University of Missouri – St. Louis
- University of Nebraska - Lincoln
- University of New Mexico
- University of North Carolina – Chapel Hill
- University of Phoenix
- University of St. Francis
- University of Tampa
- University of Wisconsin – Green Bay
- University of Wisconsin – Madison
- University of Wisconsin – Oshkosh
- University of Wisconsin – Parkside
- University of Wisconsin – Platteville
- University of Wisconsin – Stout
- University of Wisconsin – Whitewater
- Valparaiso University
- Western International University
- Western Michigan University

Contact the Student Development Center for more information.

### World Cultures and Diversity Requirement

Effective Fall 2005, all of our degrees require a student to successfully complete a World Culture and Diversity course as a graduation requirement. The courses listed below have met the standards set by the College to be designated as a World Culture course.

**ANT** 101, 202, 203, 206, 207

**ARC** 223

**ART** 133

**DIT** 205

**DIV**101

**EDU** 220

**FAS** 110

**FIS** 280

**FRN** 205, 210

**GEG** 100, 101, 103, 104

**GER** 205, 210, 230

**HED** 200, 202, 204

**HMS** 121

**HST** 121, 210, 214, 231, 232, 241, 242, 243, 245

**HUM** 104, 106, 107, 110, 125

**LNG** 205, 225

**LIT** 208, 220, 223, 224

**MCM** 200

**MGT** 165

**MUS** 104

**PHI** 160, 190, 205, 215

**PSC** 250, 260, 270, 280

**SGN** 210

**SOC** 101, 120, 205, 215, 230, 235

**SPA** 205, 210

**THE** 121



## Requirements for Associate in Arts Degree A.A.

These requirements apply to students who first enrolled for Fall 2016 or later. Students who first enrolled prior to Fall 2016 should obtain the appropriate sheet of requirements from a Student Development Center.

The Associate in Arts degree is a transfer-oriented option which fulfills most general education requirements and the first two years of many (but not all) baccalaureate programs at four-year institutions. Students pursuing the Associate in Arts degree are encouraged to seek the advice of a Student Development Faculty Counselor to determine the most appropriate or required course selections for their desired major and transfer institution.

Spring-17 Core Curriculum	Hours Required	Harper Courses
<b>Group 1 Communications</b> 3 courses. A grade of C or better is required for ENG 101 and 102.	9	ENG 101, 102; SPE 101
<b>Group 2 Mathematics</b> 1 course.	3	MGT 225 or MTH 162 or MTH 165 <sup>1</sup> , 101, 124 <sup>2</sup> , 131, 134 or 200, 201, 202, 220
<b>Group 3 Physical and Life Sciences</b> 2 courses with 1 course from the Life Sciences and 1 from the Physical Sciences. 1 course must be a lab science (marked with an *).	7	<b>Life Science:</b> BIO 101, 103, 104*, 105, 110*, 115*, 116*, 120*, 140*, 150* <b>Physical Science:</b> AST 100, 101*, 112*, 115*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, 112*; GEO 101*, 102*, 103*; PHS 101, 105*, 111*, 112*, 115*, 170*; PHY 100, 121*, 201*
<b>Group 4 Humanities and Fine Arts**</b> 3 courses with at least 1 course selected from the Humanities and at least 1 from the Fine Arts. Interdisciplinary courses may be used for both categories. Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.	9	<b>Humanities:</b> CHN 202 or FRN 202 or GER 202 or JPN 202 or SGN 202 or SPA 202; HST 105 or HUM 105; HUM 104+, 120, 125+; LIT 105, 110, 115, 206, 207, 208+, 210, 220+, 221, 222, 223+, 224+, 231, 232; PHI 101, 105, 115, 160+, 205+, 215+, 220, 225, 231, 232; FRN 210+ or GER 210+ or SGN 210+ or SPA 210+ <b>Fine Arts:</b> ART 105, 114, 130, 131 or 132, 133+; MCM 200+; MUS 103, 104+, 107, 120; THE 111, 121+ <b>Interdisciplinary:</b> HUM 101, 102, 106+, 107+, 110+; LIT 112
<b>Group 5 Social and Behavioral Sciences**</b> 3 courses with courses selected from at least 2 departments. May not choose SOC 215 and two PSY courses. Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.	9	ANT 101+, 202+, 205, 206+; ECO 200, 211, 212; GEG 100+ or 101+, 103+, 104+, 210; HST 111, 112, 121+, 141, 142, 231+, 232+, 241+, 242+, 243+, 245+; PSC 101, 220, 250+, 270+, 280+; PSY 101, 216, 217, 218, 228; SOC 101+, 120+, 205+, 215+, 230+, 235+
<b>Total General Education</b> No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.	37	

Spring-17 Core Curriculum	Hours Required	Harper Courses
<p><b>Group 6 Major Discipline and Transfer Electives</b>            Courses must be selected from:            1. Additional credit hours from Groups 1-5 from the A.A. degree            2. Credit hours from Transfer elective courses            3. Up to 10 credits hours from 100 to 200 level courses not included in 1. and 2. above            4. Up to two hours of 100-level KIN activity courses may be used to fulfill degree requirements            5. Up to four hours of Independent Study credit            Consult <a href="#">sample transfer plans</a> with suggested courses for specific transfer majors.</p>	<p>23</p>	<p><b>Liberal Arts and Languages</b>  <b>Chinese:</b> CHN 101, 102, 201  <b>English:</b> ENG 200, 201, 220, 221, 222, 230  <b>French:</b> FRN 101, 102, 201, 205+  <b>German:</b> GER 101, 102, 201, 205+, 230+  <b>Humanities:</b> HUM 115  <b>Japanese:</b> JPN 101, 102, 201, 205  <b>Literature:</b> LIT 215, 216, 217, 219, 241, 250  <b>Linguistics:</b> LNG 105, 205+, 220, 225+  <b>Mass Communication:</b> MCM 120, 130, 156, 205, 233  <b>Philosophy:</b> PHI 102, 120, 150, 170, 180, 190+, 210  <b>Sign Language:</b> SGN 101, 102, 212  <b>Spanish:</b> SPA 101, 102, 112, 113, 121, 122, 201, 205+</p> <p><b>Fine and Performing Arts</b>  <b>Art:</b> ART 100, 110, 111, 121, 122, 150, 151, 206, 225, 261, 280, 281, 291, 296  <b>Music:</b> MUS 100, 101, 102, 106, 111, 112, 115, 116, 130, 136, 140, 145, 150, 165, 166, 167, 169, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 211, 212, 215, 216, 223, 224, 261, 262, 263, 265, 266, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299  <b>Speech:</b> SPE 102, 107, 180, 181, 182, 183, 200, 205  <b>Theatre:</b> THE 190, 191, 192, 193, 212, 213, 216</p> <p><b>Sciences and Mathematics</b>  <b>Astronomy:</b> AST 150, 201  <b>Biology:</b> BIO 130, 135, 136, 160, 161, 295, 296, 297  <b>Chemistry:</b> CHM 122, 125, 201, 204, 205, 210, 220, 295, 296, 297  <b>Computer Science:</b> CSC 121, 122, 208, 211, 214, 216, 217  <b>Engineering:</b> EGR 100, 110, 120, 121, 210, 211, 212, 240, 260, 262, 270  <b>Mathematics:</b> MTH 103, 130, 140, 203, 212  <b>Physics:</b> PHY 122, 202, 203</p> <p><b>Social Sciences</b>  <b>Anthropology:</b> ANT 203+, 207+, 208, 209, 210, 215, 220, 250, 255  <b>Early Childhood Education:</b> ECE 101, 102, 250, 252, 291  <b>Economics:</b> ECO 115, 210  <b>Education:</b> EDU 201, 202, 211, 219, 220+, 230, 250, 290, 999  <b>Geography:</b> GEG 150, 151, 152, 153  <b>History:</b> HST 151, 152, 153, 202, 210+, 212, 214+, 219, 261, 270, 281, 282  <b>Law Enforcement Justice:</b> LEJ 101, 104, 201, 202, 205, 210  <b>Political Science:</b> PSC 210, 260+  <b>Psychology:</b> PSY 210, 220, 225, 230, 235, 245  <b>Sociology:</b> SOC 210, 220</p> <p><b>Wellness and Life Skills</b>  <b>Dietetic Technology:</b> DIT 101, 110, 205+, 225  <b>Diversity:</b> DIV 101+  <b>First Year Experience:</b> FYE 101  <b>First Year Seminar:</b> FYS 101  <b>Health Education:</b> HED 200+, 201, 202+, 203, 204+, 206, 250  <b>Health Science Core:</b> HSC 213  <b>Kinesiology:</b> KIN 120, 200, 201, 202, 203, 204, 205, 207, 208, 209, 210, 211, 212, 220, 221, 222, 223, 224, 225, 230, 231, 234, 250  <b>Psychology:</b> PSY 106, 107, 108  <b>Reading:</b> RDG 106</p> <p><b>Business and Work Skills</b>  <b>Accounting:</b> ACC 101, 102, 201, 202, 203, 211, 213  <b>Architecture:</b> ARC 105, 106, 110, 113, 125, 201, 202, 213, 223+  <b>Career Development:</b> CDV 110  <b>Computer Information Systems:</b> CIS 100, 101  <b>Management:</b> MGT 111, 218, 275  <b>Marketing:</b> MKT 217, 245</p>

Spring-17 Core Curriculum	Hours Required	Harper Courses
<b>World Cultures and Diversity Requirement</b> One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4-6.		<b>Select one course marked with a + from the above Groups.</b>
<b>Total Hours Required</b>	60	

1 Credit will not be granted for MGT 225 and MTH 162 and MTH 165, only one.

2 MTH 124 may be used if taken Spring 1999 or later.

\*\*3 additional hours of Social and Behavioral Sciences AND 3 additional hours of Humanities and Fine Arts will be required at the transfer institution to complete the Illinois Articulation Initiative General Education Core Curriculum (IAI GECC)

**Requirements for Associate in Science Degree A.S.**

These requirements apply to students who first enrolled for Fall 2016 or later. Students who first enrolled prior to Fall 2016 should obtain the appropriate sheet of requirements from a Student Development Center.

The Associate in Science degree is a transfer-oriented option which fulfills most general education requirements and the first two years of many (but not all) baccalaureate programs at four-year institutions. Students pursuing the Associate in Science degree are encouraged to seek the advice of a Student Development Faculty Counselor to determine the most appropriate or required course selections for their desired major and transfer institution.

Spring-17 Core Curriculum	Hours Required	Harper Courses
<p><b>Group 1 Communications</b> 3 courses. A grade of C or better is required for ENG 101 and 102.</p>	9	ENG 101, 102; SPE 101
<p><b>Group 2 Mathematics</b> 1 course.</p>	3	MGT 225 or MTH 162 or MTH 165 <sup>1</sup> , 124 <sup>2</sup> , 131, 134 or 200, 201, 202, 220
<p><b>Group 3 Physical and Life Sciences</b> At least 1 course from the Life Sciences and 1 from the Physical Sciences. 1 course must be a lab science (marked with an *). With appropriate prerequisites an initial course for science majors or advanced level course may be substituted.</p>	7	<p><b>Life Science:</b> BIO 101, 103, 104*, 105, 110*, 115*, 116*, 120*, 140*, 150*  <b>Physical Science</b> AST 100, 101*, 112*, 115*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, 112*; GEO 101*, 102*, 103*; PHS 101, 105*, 111*, 112*, 115*, 170*; PHY 100, 121*, 201*</p>
<p><b>Group 4 Humanities and Fine Arts*</b> 1 course selected from the Humanities and at least 1 from the Fine Arts. Interdisciplinary courses may be used for both categories. Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.</p>	6	<p><b>Humanities</b> CHN 202 or FRN 202 or GER 202 or JPN 202 or SGN 202 or SPA 202; FRN 210+ or GER 210+ or SGN 210+ or SPA 210+; HST 105 or HUM 105; HUM 104+, 120, 125+; LIT 105, 110, 115, 206, 207, 208+, 210, 220+, 221, 222, 223+, 224+, 231, 232; PHI 101, 105, 115, 160+, 205+, 215+, 220, 225, 231, 232  <b>Fine Arts</b> ART 105, 114, 130, 131 or 132, 133+; MCM 200+; MUS 103, 104+, 107, 120; THE 111, 121+  <b>Interdisciplinary Studies</b> HUM 101, 102, 106+, 107+, 110+; LIT 112</p>
<p><b>Group 5 Social and Behavioral Sciences**</b> 2 courses selected from at least two departments. May not choose SOC 215 and two PSY courses. Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.</p>	6	ANT 101+, 202+, 205, 206+; ECO 200, 211, 212; GEG 100+ or 101+, 103+, 104+, 210; HST 111, 112, 121+, 141, 142, 231+, 232+, 241+, 242+, 243+, 245+; PSC 101, 220, 250+, 270+, 280+; PSY 101, 216, 217, 218, 228; SOC 101+, 120+, 205+, 215+, 230+, 235+
<p><b>Total General Education</b> No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.</p>	31	
<p><b>Additional Mathematics Course</b> At least one course, 100 level or above, must be selected in mathematics.</p>	3	MGT 225 or MTH 162 or MTH 165, 101, 103, 124, 130, 131, 134 or 200, 140, 201, 202, 203, 212, 220
<p><b>Additional Science Course</b> At least one course, 100 level or above, must be selected in science.</p>	3	AST 100, 101, 112, 115, 150, 201; BIO 101, 103, 104, 105, 110, 115, 116, 120, 130, 135, 136, 140, 150, 160, 161, 295, 296, 297; CHM 100, 103, 105, 110, 121, 122, 125, 201, 204, 205, 210, 220, 295, 296, 297; CSC 121, 122, 208, 211, 214, 216, 217; EGR 100, 110, 120, 121, 210, 211, 240, 260, 262, 270; GEG 111, 112; GEO 101, 102, 103; PHS 101, 105, 111, 112, 115, 170; PHY 100, 121, 122, 201, 202, 203

Spring-17 Core Curriculum	Hours Required	Harper Courses
<p><b>Group 6 Major Discipline and Transfer Electives</b></p> <p>Courses must be selected from:</p> <ol style="list-style-type: none"> <li>1. Additional credit hours from Groups 1-5 or Additional Mathematics and Science Course groups from the A.S. degree</li> <li>2. Credit hours from Transfer elective courses</li> <li>3. Up to 10 credits hours from 100 to 200 level courses not included in 1. and 2. above</li> <li>4. Up to two hours of 100-level KIN activity courses may be used to fulfill degree requirements</li> <li>5. Up to four hours of Independent Study credit</li> </ol> <p>Consult <a href="#">sample transfer plans</a> with suggested courses for specific transfer majors.</p>	23	<p><b>Liberal Arts and Languages</b></p> <p><b>Chinese:</b> CHN 101, 102, 201  <b>English:</b> ENG 200, 201, 220, 221, 222, 230  <b>French:</b> FRN 101, 102, 201, 205+  <b>German:</b> GER 101, 102, 201, 205+, 230+  <b>Humanities:</b> HUM 115  <b>Japanese:</b> JPN 101, 102, 201, 205  <b>Literature:</b> LIT 215, 216, 217, 219, 241, 250  <b>Linguistics:</b> LNG 105, 205+, 220, 225+  <b>Mass Communication:</b> MCM 120, 130, 156, 205, 233  <b>Philosophy:</b> PHI 102, 120, 150, 170, 180, 190+, 210  <b>Sign Language:</b> SGN 101, 102, 212  <b>Spanish:</b> SPA 101, 102, 112, 113, 121, 122, 201, 205+</p> <p><b>Fine and Performing Arts</b></p> <p><b>Art:</b> ART 100, 110, 111, 121, 122, 150, 151, 206, 225, 261, 280, 281, 291, 296  <b>Music:</b> MUS 100, 101, 102, 106, 111, 112, 115, 116, 130, 136, 140, 145, 150, 165, 166, 167, 169, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 211, 212, 215, 216, 223, 224, 261, 262, 263, 265, 266, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299  <b>Speech:</b> SPE 102, 107, 180, 181, 182, 183, 200, 205  <b>Theatre:</b> THE 190, 191, 192, 193, 212, 213, 216</p> <p><b>Sciences and Mathematics</b></p> <p><b>Astronomy:</b> AST 150, 201  <b>Biology:</b> BIO 130, 135, 136, 160, 161, 295, 296, 297  <b>Chemistry:</b> CHM 122, 125, 201, 204, 205, 210, 220, 295, 296, 297  <b>Computer Science:</b> CSC 121, 122, 208, 211, 214, 216, 217  <b>Engineering:</b> EGR 100, 110, 120, 121, 210, 211, 212, 240, 260, 262, 270  <b>Mathematics:</b> MTH 103, 130, 140, 203, 212  <b>Physics:</b> PHY 122, 202, 203</p> <p><b>Social Sciences</b></p> <p><b>Anthropology:</b> ANT 203+, 207+, 208, 209, 210, 215, 220, 250, 255  <b>Early Childhood Education:</b> ECE 101, 102, 250, 252, 291  <b>Economics:</b> ECO 115, 210  <b>Education:</b> EDU 201, 202, 211, 219, 220+, 230, 250, 290, 999  <b>Geography:</b> GEG 150, 151, 152, 153  <b>History:</b> HST 151, 152, 153, 202, 210+, 212, 214+, 219, 261, 270, 281, 282  <b>Law Enforcement Justice:</b> LEJ 101, 201, 104, 202, 205, 210  <b>Political Science:</b> PSC 210, 260+  <b>Psychology:</b> PSY 210, 220, 225, 230, 235, 245  <b>Sociology:</b> SOC 210, 220</p> <p><b>Wellness and Life Skills</b></p> <p><b>Dietetic Technology:</b> DIT 101, 110, 205+, 225  <b>Diversity:</b> DIV 101+  <b>First Year Experience:</b> FYE 101  <b>First Year Seminar:</b> FYS 101  <b>Health Education:</b> HED 200+, 201, 202+, 203, 204+, 206, 250  <b>Health Science Core:</b> HSC 213  <b>Kinesiology:</b> KIN 120, 200, 201, 202, 203, 204, 205, 207, 208, 209, 210, 211, 212, 220, 221, 222, 223, 224, 225, 230, 231, 234, 250  <b>Psychology:</b> PSY 106, 107, 108  <b>Reading:</b> RDG 106</p> <p><b>Business and Work Skills</b></p> <p><b>Accounting:</b> ACC 101, 102, 201, 202, 203, 211, 213  <b>Architecture:</b> ARC 105, 106, 110, 113, 125, 201, 202, 213, 223+  <b>Career Development:</b> CDV 110  <b>Computer Information Systems:</b> CIS 100, 101  <b>Management:</b> MGT 111, 218, 275  <b>Marketing:</b> MKT 245</p>

**TRANSFER PROGRAMS**

<b>Spring-17 Core Curriculum</b>	<b>Hours Required</b>	<b>Harper Courses</b>
<b>World Cultures and Diversity Requirement</b> One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4-6.		<b>Select one course marked with a + from the above Groups.</b>
<b>Total Hours Required</b>	60	

1 Credit will not be granted for MGT 225 and MTH 162 and MTH 165, only one.

2 MTH 124 may be used if taken Spring 1999 or later.

\*\*3 additional hours of Social and Behavioral Sciences AND 3 additional hours of Humanities and Fine Arts will be required at the transfer institution to complete the Illinois Articulation Initiative General Education Core Curriculum (IAI GECC)

## Requirements for Associate in Arts in Teaching A.A.T.

These requirements apply to students who first enrolled for Fall 2016 or later. Students who first enrolled prior to Fall 2016 should obtain the appropriate sheet of requirements from a Student Development Center.

### Admission Requirements

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit harpercollege.edu

Students who apply for this program are obligated to meet current admission requirements and follow the program curriculum as defined at the time of acceptance into the program. Students must meet with a Student Development advisor or the Education department chair to determine the appropriateness of this degree option before being allowed to enroll in the program. Students accepted into this program will be required to meet with their assigned advisor each semester prior to registration to assess progress and determine course selection.

Spring-17 Core Curriculum	Hours Required	Harper Courses
<b>Group 1 Communications</b> 3 courses. A grade of C or better is required for ENG 101 and 102.	9	ENG 101, 102; SPE 101
<b>Group 2 Mathematics</b>	5	MTH 200 <sup>1</sup>
<b>Group 3 Physical and Life Sciences</b> 2 courses with 1 course from the Life Sciences and 1 from the Physical Sciences. 1 course must be a lab science (marked with an *).	7	<b>Life Science:</b> BIO 101, 103, 104*, 105, 110*, 115*, 116*, 120*, 140*, 150* <b>Physical Sciences:</b> AST 100, 101*, 112*, 115*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, 112*; GEO 101*, 102*, 103*; PHS 101, 105*, 111*, 112*, 115*, 170*; PHY 100, 121*, 201*
<b>Group 4 Humanities and Fine Arts</b> 3 courses with at least 1 course selected from the Humanities and at least 1 from the Fine Arts. Interdisciplinary courses may be used for both categories. Harper College's diversity requirement must be selected from Group 4 or 5 (marked with a +).	9	<b>Humanities:</b> CHN 202 or FRN 202 or GER 202 or JPN 202 or SGN 202 or SPA 202; HST 105 or HUM 105; HUM 104*, 120, 125*; LIT 105, 110, 115, 206, 207, 208*, 210, 220*, 221, 222, 223*, 224*, 231, 232; PHI 101, 105, 115, 160*, 205*, 215*, 220, 225, 231, 232; FRN 210* or GER 210* or SGN 210* or SPA 210* <b>Fine Arts:</b> ART 105, 114, 130, 131 or 132, 133*; MCM 200*; MUS 103, 104*, 120; THE 111, 121* <b>Interdisciplinary Studies:</b> HUM 101, 102, 106*, 107*, 110*; LIT 112
<b>Group 5 Social and Behavioral Sciences</b> 3 courses with courses selected from at least 2 departments. May not choose SOC 215 and two PSY courses. HST 111 or HST 112, PSC 101, and PSY 101 are strongly recommended as they meet the requirements for Illinois secondary certification. Harper College's diversity requirement must be selected from Group 4 or 5 (marked with a +).	9	ANT 101*, 202*, 205, 206*; ECO 200, 211, 212; GEG 100* or 101*, 103*, 104*, 210; HST 111, 112, 121*, 141, 142, 231*, 232*, 241*, 242*, 243*, 245*; PSC 101, 220, 250*, 270*, 280*; PSY 101, 216, 217, 218, 228; SOC 101*, 120*, 205*, 215*, 230*, 235*
<b>Total General Education</b>	39	
<b>Group 6 Professional Education Courses</b> 3 courses, EDU 201 is required.	9	ECE 102; EDU 201, 211, 219, 250
<b>Group 7 Mathematics Major Courses</b> 3 courses, all are required.	14	MTH 201, 202, 203
<b>World Cultures and Diversity Requirement</b> One course is required. Select one course marked with a + from Group 4 or 5. Courses that fulfill this requirement may also be used to fulfill requirements in Group 4 or 5.		<b>Select one course marked with a + from the above Groups.</b>
<b>Total Hours Required</b>	62	

<sup>1</sup> MTH 200 prerequisite: MTH 070 (or equivalent) with a grade of C or better or Geometry placement test and MTH 140 with a grade of C or better or placement test or consent of Mathematics Department chair. An ACT Math score of 28 or more and a trigonometry course with a grade of C or better will satisfy all the previous prerequisites mentioned for this course.

## Requirements for Associate in Engineering Science A.E.S.

These requirements apply to students who first enrolled for Fall 2016 or later. Students who first enrolled prior to Fall 2016 should obtain the appropriate sheet of requirements from a Student Development Center.

Completion of the Associate in Engineering Science degree does not fulfill the requirements of the Illinois General Education core curriculum. After transfer, AES students will need to complete the general education requirements of the institution to which they transfer.

No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-6.

Spring-17 Core Curriculum	Hours Required	Harper Courses
<b>Group 1 Communications</b> 2 courses A grade of C or better is required for ENG 101 and 102	6	ENG 101, 102
<b>Group 2 Mathematics</b>	18	MTH 200, 201, 202, 212
<b>Group 3 Computer Science</b> Computer Science elective should be chosen based on engineering specialty and requirements of institution to which students transfer.	4	CSC 121, 208
<b>Group 4 Physical and Life Sciences</b>	15	CHM 121; PHY 201, 202
<b>Group 5 Humanities and Fine Arts</b> Minimum of 3 hours required from Group 5. Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour + course is required for graduation and must be from either the Humanities/Fine Arts or the Social Behavioral Sciences. An additional Humanities/Fine Arts course may be required at the transfer institution.	3	<b>Humanities:</b> CHN 202 or FRN 202 or GER 202 or JPN 202 or SGN 202 or SPA 202; HST 105 or HUM 105; HUM 104 <sup>+</sup> , 120, 125 <sup>+</sup> ; LIT 105, 110, 115, 206, 207, 208 <sup>+</sup> , 210, 220 <sup>+</sup> , 221, 222, 223 <sup>+</sup> , 224 <sup>+</sup> , 231, 232; PHI 101, 105, 115, 160 <sup>+</sup> , 205 <sup>+</sup> , 215 <sup>+</sup> , 220, 225, 231, 232; FRN 210 <sup>+</sup> or GER 210 <sup>+</sup> or SGN 210 <sup>+</sup> or SPA 210 <sup>+</sup> <b>Fine Arts:</b> ART 105, 114, 130, 131 or 132, 133 <sup>+</sup> ; MCM 200 <sup>+</sup> ; MUS 103, 104 <sup>+</sup> , 120; THE 111, 121 <sup>+</sup> <b>Interdisciplinary Studies:</b> HUM 101, 102, 106 <sup>+</sup> , 107 <sup>+</sup> , 110 <sup>+</sup> ; LIT 112
<b>Group 6 Social and Behavioral Sciences</b> Minimum of 3 hours required from Group 6.. Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation and must be from either the Humanities/Fine Arts or the Social Behavioral Sciences. An additional Social/ Behavioral Science course may be required at the transfer institution.	3	ANT 101 <sup>+</sup> , 202 <sup>+</sup> , 205, 206 <sup>+</sup> ; ECO 200, 211, 212; GEG 100 <sup>+</sup> or 101 <sup>+</sup> , 103 <sup>+</sup> , 104 <sup>+</sup> , 210; HST 111, 112, 121 <sup>+</sup> , 141, 142, 231 <sup>+</sup> , 232 <sup>+</sup> , 241 <sup>+</sup> , 242 <sup>+</sup> , 243 <sup>+</sup> , 245 <sup>+</sup> ; PSC 101, 220, 250 <sup>+</sup> , 270 <sup>+</sup> , 280 <sup>+</sup> ; PSY 101, 216, 217, 218, 228; SOC 101 <sup>+</sup> , 120 <sup>+</sup> , 205 <sup>+</sup> , 215 <sup>+</sup> , 230 <sup>+</sup> , 235 <sup>+</sup>
<b>Group 7 Engineering</b> Specialty courses approved in consultation with the engineering department chair.	13	CHM 122, 204, 205; CSC 122, 211, 214, 216, 217; EGR 100, 110, 120, 210, 211, 212, 240, 260, 262, 270; MTH 203, 220; PHY 203
<b>World Cultures and Diversity Requirement</b> One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 5-6.		<b>Select one course marked with a + from the above Groups.</b>
<b>Total Hours Required</b>	62	



## Requirements for Associate in Fine Arts Degree A.F.A.

These requirements apply to the Associate in Fine Arts-Art Emphasis degree.

These requirements apply to students who first enrolled for Fall 2016. Students who first enrolled prior to Fall 2016 should obtain the appropriate sheet of requirements from a Student Development Center.

Completion of the Associate in Fine Arts-Art degree does not fulfill the requirements of the Illinois General Education core curriculum. After transfer, Associate in Fine Arts-Art students will need to complete the general education requirements of the institution to which they transfer.

Spring-17 Core Curriculum	Hours Required	Harper Courses
<b>Group 1 Communications</b> 3 courses A grade of C or better is required for ENG 101 and 102.	9	ENG 101, 102; SPE 101
<b>Group 2 Mathematics</b> 1 course	3	MGT 225 or MTH 162 or MTH 165 <sup>1</sup> , 101, 124, 131, 134 or 200, 201, 202, 220
<b>Group 3 Physical and Life Sciences</b> 2 courses with 1 course from the Life Sciences and 1 from the Physical Sciences. 1 course must be a lab science (marked with an *).	7	<b>Life Science:</b> BIO 101, 103, 104*, 105, 110*, 115*, 116*, 120*, 140*, 150* <b>Physical Sciences:</b> AST 100, 101*, 112*, 115*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, 112*; GEO 101*, 102*, 103*; PHS 101, 105*, 111*, 112*, 115*, 170*; PHY 100, 121*, 201*
<b>Group 4 Humanities</b> 2 courses Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.	6	CHN 202 or FRN 202 or GER 202 or JPN 202 or SGN 202 or SPA 202; HST 105 or HUM 105; HUM 101, 102, 104+, 106+, 107+, 110+, 120, 125+; LIT 105, 110, 112, 115, 206, 207, 208+, 210, 220+, 221, 222, 223+, 224+, 231, 232; PHI 101, 105, 115, 160+, 205+, 215+, 220, 225, 231, 232; FRN 210+ or GER 210+ or SGN 210+ or SPA 210+; THE 121+
<b>Group 5 Social and Behavioral Sciences</b> 2 courses with courses selected from at least two departments. Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.	6	ANT 101+, 202+, 205, 206+; ECO 200, 211, 212; GEG 100+ or 101+, 103+, 104+, 210; HST 111, 112, 121+, 141, 142, 212, 231+, 232+, 241+, 242+, 243+, 245+; PSC 101, 220, 250+, 270+, 280+; PSY 101, 216, 217, 218, 228; SOC 101+, 120+, 205+, 215+, 230+, 235+
<b>Total General Education</b> No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.	31	
<b>Group 6 Core Courses</b> A portfolio review is required with an art advisor after the completion of the first two semesters of art course requirements before starting any other art courses. The Art Department strongly recommends that Associate in Fine Arts-Art candidates also take two semesters of ART 100 for its professional career content.	24	ART 110, 111, 121, 122, 130, 131, 132, 225
<b>Group 7 Media Specific Courses</b>	9	ART 150, 151, 206, 261, 291, 296
<b>World Cultures and Diversity Requirement</b> One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4-5.		<b>Select one course marked with a + from the above Groups.</b>
<b>Total Hours Required:</b>	64	

<sup>1</sup> Credit will not be granted for MGT 225 and MTH 162 and MTH 165, only one.

## Requirements for Associate in Fine Arts Degree A.F.A.

These requirements apply to the Associate in Fine Arts-Music Emphasis degree.

These requirements apply to students who first enrolled for Fall 2016. Students who first enrolled prior to Fall 2016 should obtain the appropriate sheet of requirements from a Student Development Center.

Completion of the Associate in Fine Arts-Music degree does not fulfill the requirements of the Illinois General Education core curriculum. After transfer, Associate in Fine Arts-Music students will need to complete the general education requirements of the institution to which they transfer.

Spring-17 Core Curriculum	Hours Required	Harper Courses
<b>Group 1 Communications</b> 3 courses A grade of C or better is required for ENG 101 and 102.	9	ENG 101, 102; SPE 101
<b>Group 2 Mathematics</b> 1 course MTH 101, 124 or 134 preferred.	3	MGT 225 or MTH 162 or MTH 165 <sup>1</sup> , 101, 124, 131, 134 or 200, 201, 202, 220
<b>Group 3 Physical and Life Sciences</b> 2 courses with 1 course from the Life Sciences and 1 from the Physical Sciences. 1 course must be a lab science (marked with an *).	7	<b>Life Sciences:</b> BIO 101, 103, 104*, 105, 110*, 115*, 116*, 120*, 140*, 150* <b>Physical Sciences:</b> AST 100, 101*, 112*, 115*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, 112*; GEO 101*, 102*, 103*; PHS 101, 105*, 111*, 112*, 115*, 170*; PHY 100, 121*, 201*
<b>Group 4 Humanities and Fine Arts</b> 3 courses with at least one course from Humanities and one course from Fine Arts. Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.	9	<b>Humanities:</b> CHN 202 or FRN 202 or GER 202 or JPN 202 or SGN 202 or SPA 202; HST 105 or HUM 105; HUM 101, 102, 104+, 106+, 107+, 110+, 120, 125+; LIT 105, 110, 112, 115, 206, 207, 208+, 210, 220+, 221, 222, 223+, 224+, 231, 232; PHI 101, 105, 115, 160+, 205+, 215+, 220, 225, 231, 232; FRN 210+ or GER 210+ or SGN 210+ or SPA 210+; THE 121+ <b>Fine Arts:</b> MUS 120
<b>Group 5 Social and Behavioral Sciences</b> 1 course Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.	3	ANT 101+, 202+, 205, 206+; ECO 200, 211, 212; GEG 100+ or 101+, 103+, 104+, 210; HST 111, 112, 121+, 141, 142, 212, 231+, 232+, 241+, 242+, 243+, 245+; PSC 101, 220, 250+, 270+, 280+; PSY 101, 216, 217, 218, 228; SOC 101+, 120+, 205+, 215+, 230+, 235+
<b>Total General Education</b> No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.	31	
<b>Group 6 Core Courses:</b>	36	<b>Music Theory - 12 credit hours required</b> MUS 111, 112, 211, 212 <b>Keyboard Skills - 8 credit hours required</b> MUS 165 <sup>2</sup> , 166 <sup>2</sup> , 265 <sup>2</sup> , 266 <b>Aural Skills - 4 credit hours required</b> MUS 115, 116, 215, 216 <b>Ensemble - 4 credit hours required</b> MUS 130, 136, 140, 145, 150 <b>Applied Instruction - 8 credit hours required</b> MUS 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299
<b>World Cultures and Diversity Requirement</b> One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4-5.		<b>Select one course marked with a + from the above Groups.</b>
<b>Total Hours Required</b>	67	

<sup>1</sup> Credit will not be granted for MGT 225 and MTH 162 and MTH 165, only one.

<sup>2</sup> All music majors must demonstrate piano proficiency: MUS 165, 166 and 265 may be passed by proficiency exam. Music majors are also advised to take MUS 100 as part of their elective credit.

## Requirements for Associate in General Studies A.G.S.

These requirements apply to students who first enrolled for Fall 2016 or later. Students who enrolled prior to Fall 2016 have the option of upgrading their degree plan to access the AGS degree option.

The Associate in General Studies degree is a flexible, individually designed option for those individuals who do not intend to transfer but who can benefit from having earned a degree, whether for career purposes or for personal satisfaction. Students should be aware that transfer options for the degree as a whole are limited. Students are strongly encouraged to meet with a Student Development Faculty Counselor to make course selections and to learn about possible transfer options.

Spring-17 Core Curriculum	Hours Required	Harper Courses
<b>Group 1 Communications</b>	6	ENG 100, 101, 102, 103, 130; MCM 130; SPE 101
<b>Group 2 Mathematics</b>	3	MGT 150, 225 <sup>1</sup> ; MTH 101, 103, 124, 130, 131, 134, 140, 162 <sup>1</sup> , 165 <sup>1</sup> , 200, 201, 202, 203, 212, 220
<b>Group 3 Physical and Life Sciences</b>	3	AST 100, 101, 112, 115, 150, 201; BIO 101, 103, 104, 105, 110, 115, 116, 120, 130, 135, 136, 140, 150, 160, 161; CHM 100, 103, 105, 110, 121, 122, 125, 201, 204, 205, 210, 220; GEG 111, 112; GEO 101, 102, 103; PHS 101, 105, 111, 112, 115, 170; PHY 100, 121, 122, 201, 202, 203
<b>Group 4 Humanities and Fine Arts</b> Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour is required for graduation.	6	ART 105, 110, 111, 114, 121, 122, 130, 131, 132, 133 <sup>+</sup> , 150, 151, 206, 225, 261, 291, 296; CHN 101, 102, 201, 202; ENG 230; FRN 101, 102, 201, 202, 205 <sup>+</sup> , 210 <sup>+</sup> ; GER 101, 102, 201, 202, 205 <sup>+</sup> , 210 <sup>+</sup> , 230 <sup>+</sup> ; HST 105 or HUM 105; HUM 101, 102, 104 <sup>+</sup> , 106 <sup>+</sup> , 107 <sup>+</sup> , 110 <sup>+</sup> , 115, 120, 125 <sup>+</sup> ; JPN 101, 102, 201, 202, 205; LIT 105, 110, 112, 115, 206, 207, 208 <sup>+</sup> , 210, 216, 217, 219, 220 <sup>+</sup> , 221, 222, 223 <sup>+</sup> , 224 <sup>+</sup> , 231, 232, 241, 250; LNG 105; MCM 156, 200 <sup>+</sup> , 205; MUS 101, 102, 103, 104 <sup>+</sup> , 107, 120, 130, 136, 140, 145, 150, 165, 166, 167, 169, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 223, 224; PHI 101, 102, 105, 115, 120, 150, 160 <sup>+</sup> , 170, 180, 190 <sup>+</sup> , 205 <sup>+</sup> , 210, 215 <sup>+</sup> , 220, 225, 231, 232; SGN 101, 102, 201, 202, 205, 210 <sup>+</sup> , 212; SPA 101, 102, 112, 113, 121, 122, 201, 202, 205 <sup>+</sup> , 210 <sup>+</sup> ; SPE 107; THE 111, 121 <sup>+</sup> , 212, 216
<b>Group 5 Social and Behavioral Sciences</b> Courses marked with a + meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.	6	ANT 101 <sup>+</sup> , 202 <sup>+</sup> , 203 <sup>+</sup> , 205, 206 <sup>+</sup> , 207 <sup>+</sup> , 208, 210, 215, 220; ECO 115, 200, 210, 211, 212; GEG 100 <sup>+</sup> or 101 <sup>+</sup> , 103 <sup>+</sup> , 104 <sup>+</sup> , 210; HST 111, 112, 121 <sup>+</sup> , 141, 142, 151, 152, 153, 202, 210 <sup>+</sup> , 212, 214 <sup>+</sup> , 219, 231 <sup>+</sup> , 232 <sup>+</sup> , 241 <sup>+</sup> , 242 <sup>+</sup> , 243 <sup>+</sup> , 245 <sup>+</sup> , 261, 270, 281, 282; LNG 205 <sup>+</sup> ; PSC 101, 220, 250 <sup>+</sup> , 270 <sup>+</sup> , 280 <sup>+</sup> ; PSY 101, 107, 108, 210, 216, 217, 218, 220, 225, 228, 230, 235, 245; SOC 101 <sup>+</sup> , 120 <sup>+</sup> , 205 <sup>+</sup> , 210, 215 <sup>+</sup> , 220, 230 <sup>+</sup> , 235 <sup>+</sup>
<b>Total General Education</b>	24	
<b>Group 6 Liberal Studies, Certificates, or elective coursework</b>	36	Courses must be selected from: - Additional credit hours in one or more departments included in the General Education Groups 1-5. This includes courses not designated as meeting general education requirements in these departments. - One or more certificates may be included as part of these credit hours. - Any 100 or 200 level elective courses in any discipline that fit specific educational goals of an individual student. (IDS 290 is limited to 4 credit hours total.)
<b>World Cultures and Diversity Requirement</b> One 3-credit hour course is required. Some courses that fulfill this requirement may also be used to fulfill requirements in Groups 4-5.		<b>Select one course marked with a + from the above Groups.</b>
<b>Total Hours Required</b>	60	

<sup>1</sup> Students may earn credit in either MGT 225 or MTH 162 or MTH 165, only one.

## Requirements for Associate in Applied Science Degree Options

The Associate in Applied Science degree is designed for those students who wish to focus primarily on obtaining vocational skills for the workplace. The outline shown here provides the general requirements needed to complete the degree, but it is an outline only, and does not provide complete course planning. Those interested in career program options should refer to the detailed information on the individual AAS pages in the catalog, since most programs have specific course requirements. If the student wishes to transfer to a four-year institution, they should be aware that the AAS degree does not fulfill the Illinois General Education core curriculum. After transfer, AAS students will need to complete the general education requirements of the school to which they transfer. Students should be aware that although they can use credits earned toward the AAS to transfer, the transferability of the degree as a whole may be limited, depending upon the four-year institution the student wishes to attend. A number of programs have articulation agreements with four-year institutions. Students are encouraged to meet with a program coordinator or a Student Development Faculty Counselor to learn about possible transfer options.

Spring-17 Core Curriculum	Hours Required	Harper Courses
<b>Group 1 Communications</b> ENG 101 or 130 and a second course, as approved for your curriculum	6	ENG 100, 101, 102, 103, 130; MCM 130; SPE 101
<b>Group 2 Mathematics</b> 1 course A competency test, available in the Testing Center, may be utilized to meet the mathematics requirement for some programs. Students who utilize the competency test to meet the mathematics requirement must complete a three credit hour elective with approval of the program coordinator.	3	MGT 150, 225 <sup>1</sup> ; MTH 060, 065, 070, 080, 082, 097, 101, 103, 124, 130, 131, 134, 140, 162 <sup>1</sup> , 165 <sup>1</sup> , 200, 201, 202, 203, 212, 220
<b>Group 3 Natural Sciences</b> 9 hours must be taken from a minimum of two of Groups 3, 4 and 5		AST 100, 101, 112, 115, 150, 201; BIO 101, 103, 104, 105, 110, 115, 116, 120, 130, 135, 136, 140, 150, 160, 161; CHM 100, 103, 105, 110, 121, 122, 125, 201, 204, 205, 210, 220; DIT 101; GEG 111, 112; GEO 101, 102, 103; PHS 101, 105, 111, 112, 115, 170; PHY 100, 121, 122, 201, 202, 203
<b>Group 4 Humanities</b> 9 hours must be taken from a minimum of two of Groups 3, 4, and 5		ART 105, 110, 111, 114, 121, 122, 130, 131, 132, 133 <sup>+</sup> , 150, 151, 206, 225, 261, 291, 296; CHN 101, 102, 201, 202; ENG 230; FRN 101, 102, 201, 202, 205 <sup>+</sup> , 210 <sup>+</sup> ; GER 101, 102, 201, 202, 205 <sup>+</sup> , 210 <sup>+</sup> , 230 <sup>+</sup> ; HST 105 or HUM 105; HST 111, 112, 121 <sup>+</sup> , 141, 142, 151, 152, 153, 202, 210 <sup>+</sup> , 212, 214 <sup>+</sup> , 219, 231 <sup>+</sup> , 232 <sup>+</sup> , 241 <sup>+</sup> , 242 <sup>+</sup> , 243 <sup>+</sup> , 245 <sup>+</sup> , 261, 270, 281, 282; HUM 101, 102, 104 <sup>+</sup> , 106 <sup>+</sup> , 107 <sup>+</sup> , 110 <sup>+</sup> , 115, 120, 125 <sup>+</sup> ; JPN 101, 102, 201, 202, 205; LIT 105, 110, 112, 115, 206, 207, 208 <sup>+</sup> , 210, 215, 216, 217, 219, 220 <sup>+</sup> , 221, 222, 223 <sup>+</sup> , 224 <sup>+</sup> , 231, 232, 241, 250; LNG 105; MCM 156, 200 <sup>+</sup> , 205; MUS 101, 103, 104 <sup>+</sup> , 107, 120, 130, 136, 140, 145, 150, 165, 166, 167, 169, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199; PHI 101, 105, 115, 120, 150, 160 <sup>+</sup> , 170, 180, 190 <sup>+</sup> , 205 <sup>+</sup> , 210, 215 <sup>+</sup> , 225, 220, 231, 232; SGN 101, 102, 201, 202, 205, 210 <sup>+</sup> ; SPA 101, 102, 112, 113, 201, 202, 205 <sup>+</sup> , 210 <sup>+</sup> ; SPE 107; THE 111, 121 <sup>+</sup> , 212, 216
<b>Group 5 Social and Behavioral Sciences</b> 9 hours must be taken from a minimum of two of Groups 3, 4 and 5.		ANT 101 <sup>+</sup> , 202 <sup>+</sup> , 203 <sup>+</sup> , 205, 206 <sup>+</sup> , 207 <sup>+</sup> , 208, 210, 215, 220; ECO 115, 200, 210, 211, 212; EDU 211; GEG 100 <sup>+</sup> , 101 <sup>+</sup> , 103 <sup>+</sup> , 104 <sup>+</sup> , 210; LNG 205 <sup>+</sup> ; PSC 101, 220, 250 <sup>+</sup> , 270 <sup>+</sup> , 280 <sup>+</sup> ; PSY 101, 107, 108, 210, 216, 217, 218, 220, 225, 228, 230, 235, 245; SOC 101 <sup>+</sup> , 120 <sup>+</sup> , 205 <sup>+</sup> , 210, 215 <sup>+</sup> , 220, 230 <sup>+</sup> , 235 <sup>+</sup>
<b>Total General Education</b>	15	
<b>Group 6 Technical Requirements and Electives</b>	45	
<b>World Cultures and Diversity Requirement</b> One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4-6.		<b>Refer to specific career program curriculum to determine which course marked with a + is appropriate.</b>

Spring-17 Core Curriculum	Hours Required	Harper Courses
<p><b>Total Hours Minimum</b>            In addition to the requirements listed, students enrolled in a specific career program must fulfill the requirements outlined in that program. Any changes in program requirements necessitated by licensing and/or accrediting agencies must be observed by students who are already admitted and in process in programs.</p>	60	

1 Credit will not be granted for MGT 225 and MTH 162 and MTH 165, only one.

+ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

## Art: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative art baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required

Refer to the Associate in Arts degree for approved courses in this category.

### Physical and Life Sciences:

7 credits required.

Select one Physical and one Life Science course. At least one must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required

Refer to the Associate in Arts degree for approved courses in this category.

One course from Humanities and Fine Arts or Social and Behavioral Sciences must meet the World Culture and Diversity requirement for the Associate in Arts degree.

Number	Course Title	Credits
ART 130	Ancient and Medieval Art .....	3
ART 131	Gothic Through Romantic Art .....	3
	Humanities .....	3

### Social and Behavioral Sciences:

9 credit hours required.

Refer to the Associate in Arts degree for approved courses in this category.

One course from Humanities and Fine Arts or Social and Behavioral Sciences must meet the World Cultures and Diversity requirement for the Associate in Arts degree.

### Major Discipline and Transfer Electives:

23 credit hours required.

Number	Course Title	Credits
ART 110	Drawing I .....	3
ART 111	Drawing II .....	3
ART 121	Design I .....	3
ART 122	Design II .....	3
	Studio courses <sup>1</sup> .....	3-9
	Additional credits .....	2-8

<sup>1</sup> Select at least one media-specific course from the following in consultation with an art department advisor: ART 150, ART 151, ART 206, ART 225, ART 261, ART 291, ART 296. If two or more courses are selected, they should be from different media.

## Biology: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Science degree and follows the Illinois Articulation Initiative biological sciences baccalaureate major recommendations. Students should decide the specialization within the biological sciences major as early as possible, preferably by the beginning of the sophomore year. Students choosing to follow this sample plan need to choose the major of Associate in Science if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Number	Course Title	Credits
MTH 200	Calculus With Analytic Geometry I .....	5

### Physical and Life Sciences:

7 credit hours required.

Number	Course Title	Credits
BIO 115	Fundamentals of Cellular Biology .....	4
CHM 121	General Chemistry I .....	5

### Humanities and Fine Arts:

6 credits hours required.

Select at least one course from Humanities and one from Fine Arts. Interdisciplinary courses may count in either category.

Refer to the Associate in Science degree for approved courses in this category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement for the Associate in Science degree.

### Social and Behavioral Sciences:

6 credit hours required.

Refer to the Associate in Science degree for approved courses in this category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement for the Associate in Science degree.

### Additional Mathematics Course:

3 credit hours required.

Number	Course Title	Credits
MGT 225	Applied General Statistics or	
MTH 165	Elementary Statistics .....	4

### Additional Science Course:

3 credit hours required.

Number	Course Title	Credits
CHM 122	General Chemistry II .....	5

### Major Discipline and Transfer Electives:

23 credit hours required. Any additional hours from above will be included in this category.

Number	Course Title	Credits
BIO 116	Fundamentals of Organismal Biology .....	4
CHM 204	Organic Chemistry I .....	5
CHM 205	Organic Chemistry II .....	5
	Additional credits <sup>1</sup> .....	2

<sup>1</sup> Refer to the Associate in Science degree for the approved courses in this category.

## Business Administration: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative business administration baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Students will choose a major within the business field at the four-year institution they attend. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 hours required.

Number	Course Title	Credits
MTH 134	Calculus for Social Scientists or	
MTH 200	Calculus With Analytic Geometry I .....	5

### Physical and Life Sciences:

7 credit hours required.

Select one Physical and one Life Science course. At least one must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

PHI 115 is recommended.

Select at least one course from Humanities and one from Fine Arts. Interdisciplinary courses may count in either category. One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement of the Associate in Arts degree. Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required. One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement of the Associate in Arts degree. Refer to the Associate in Arts degree for approved courses in this category.

Number	Course Title	Credits
ECO 211	Microeconomics .....	3
ECO 212	Macroeconomics .....	3
	Social and Behavioral Sciences elective. PSY 101 is recommended. ....	3

### Major Discipline and Transfer Electives:

23 credit hours required.

Number	Course Title	Credits
ACC 101	Introduction to Financial Accounting .....	4
ACC 102	Introduction to Managerial Accounting .....	3
ACC 213	Legal Environment of Business <sup>1</sup> .....	3
CIS 101	Introduction to Computer Information Systems .....	3
MGT 225	Applied General Statistics .....	4
	Additional credits .....	1-2

<sup>1</sup> Check with transfer school before taking this course.



## Chemistry: Sample Transfer Plan

This sample transfer planning guide meets the requirements of the Associate in Science degree and follows the Illinois Articulation Initiative chemistry baccalaureate major recommendations. Students are also encouraged to complete course sequences at the same institution prior to transfer. Students choosing to follow this sample plan need to choose the major of Associate in Science if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Number	Course Title	Credits
MTH 200	Calculus With Analytic Geometry I .....	5

### Physical and Life Sciences:

7 credit hours required.

Number	Course Title	Credits
PHY 201	General Physics I: Mechanics .....	5
	Life Science .....	3

### Humanities and Fine Arts:

6 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Science degree for approved courses in this category.

### Social and Behavioral Sciences:

6 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Science degree for approved courses in this category.

### Additional Mathematics Course:

3 credit hours required.

Number	Course Title	Credits
MTH 201	Calculus With Analytic Geometry II .....	5

### Additional Science Course:

3 credit hours required.

Refer to the Associate in Science degree for approved courses in this category.

### Major Discipline and Transfer Electives:

23 credit hours required. Any additional hours from above will be included in this category.

Number	Course Title	Credits
CHM 121	General Chemistry I .....	5
CHM 122	General Chemistry II .....	5
CHM 204	Organic Chemistry I .....	5
CHM 205	Organic Chemistry II .....	5

## Computer Science - Technical Emphasis: Sample Transfer Plan

*This sample transfer guide meets the requirements of the Associate in Science degree and follows the Illinois Articulation Initiative computer science - technical emphasis baccalaureate major recommendations. Bachelor's degree programs in computer science encompass two distinct emphases: the information systems emphasis and the technical emphasis. The technical emphasis focuses on algorithms, theoretical foundations of computer science and development of software. Students choosing to follow this sample plan need to choose the major of Associate in Science if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Number	Course Title	Credits
MTH 200	Calculus With Analytic Geometry I .....	5

### Physical and Life Sciences:

7 credit hours required.

Number	Course Title	Credits
PHY 201	General Physics I: Mechanics .....	5
	Life Science .....	3

### Humanities and Fine Arts:

6 credit hours required.

Select one course from Humanities and one from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Science degree for approved courses in this category.

### Social and Behavioral Sciences:

6 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Science degree for approved courses in this category.

### Additional Mathematics Course:

3 credit hours required.

Number	Course Title	Credits
MTH 201	Calculus With Analytic Geometry II .....	5

### Additional Science Course:

3 credit hours required.

Number	Course Title	Credits
PHY 202	General Physics II Electricity and Magnetism .....	5

### Major Discipline and Transfer Electives:

23 credit hours required. Any additional hours from above will be included in this category.

Number	Course Title	Credits
CSC 121	Computer Science I .....	4
CSC 122	Computer Science II .....	4
MTH 220	Discrete Mathematics .....	3
	Additional credits <sup>1</sup> .....	5

<sup>1</sup> Refer to the Associate in Science degree for the approved courses in this category.

## Early Childhood Education: Sample Transfer Plan

This sample transfer planning guide meets the requirements of the Associate of Arts degree and follows the Illinois Articulation Initiative early childhood education baccalaureate major recommendations. Harper also offers an associate in applied science degree in early childhood education. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Refer to the Associate in Arts degree for approved courses in this category.  
Students should check the curriculum of the transfer school they are considering.

### Physical and Life Sciences:

7 credits hours required.

Select one Physical and one Life Science course. At least one must include a lab.  
Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.  
One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.  
Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required. One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Number	Course Title	Credits
HST 111	The American Experience to 1877 or	
HST 112	The American Experience Since 1877 .....	3
PSC 101	American Politics and Government .....	3
	Social and Behavioral Sciences <sup>1</sup> .....	3

### Major Discipline and Transfer Electives:

23 credit hours required.

These credits, while transferable to participating institutions, may or may not substitute for upper-division professional coursework required for certification.

Number	Course Title	Credits
ECE 102	Child Development .....	3
EDU 219	Students With Disabilities in School .....	3

#### Additional electives:

Number	Course Title	Credits
ECE 101	Introduction to Early Childhood Education .....	3
EDU 201	Introduction to Education .....	3
EDU 220	Diversity in Schools and Society .....	3
ECE 250	Health, Nutrition and Safety .....	3
	Additional credits <sup>1</sup> .....	5

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.

## Elementary Education: Sample Transfer Plan

This sample transfer planning guide meets the requirements of the Associate of Arts degree. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.

Additional sample transfer plans exist for Special Education and Secondary Education. Please visit the transfer website for viewing.

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Number	Course Title	Credits
MTH 131	Mathematics for Elementary Teaching II .....	4

### Physical and Life Sciences:

7 credit hours required.

CHM 105 recommended.

Select one Physical and one Life Science course. At least one must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select at least one course from Humanities and one from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Number	Course Title	Credits
HST 111	The American Experience to 1877 or	
HST 112	The American Experience Since 1877 .....	3
PSC 101	American Politics and Government .....	3
	Social and Behavioral Sciences <sup>1</sup> .....	3

### Major Discipline and Transfer Electives:

23 credit hours required.

Number	Course Title	Credits
ECE 102	Child Development .....	3
EDU 211	Educational Psychology .....	3
EDU 201	Introduction to Education .....	3
EDU 202	Pre-Student Teaching Clinical Experience .....	1
EDU 219	Students With Disabilities in School .....	3
EDU 220	Diversity in Schools and Society .....	3
EDU 250	Introduction to Technology in Education .....	3
HED 200	Health .....	3
MTH 130	Mathematics for Elementary Teaching I .....	4

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.

## Engineering Science: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Engineering Science degree and follows the Illinois Articulation Initiative engineering baccalaureate major recommendations. Students should have a strong background in mathematics and the physical sciences. Students choosing to follow this sample plan need to choose the major of Associate in Engineering Science if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

Completion of the Associate in Engineering Science (AES) degree does not fulfill the requirements of the Illinois General Education Core Curriculum. After transfer, AES students will need to complete the general education requirements of the institution to which they transfer.

### Communications:

6 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3

### Mathematics:

18 credit hours required.

Number	Course Title	Credits
MTH 200	Calculus With Analytic Geometry I .....	5
MTH 201	Calculus With Analytic Geometry II .....	5
MTH 202	Calculus With Analytic Geometry III .....	5
MTH 212	Differential Equations .....	3

### Computer Science:

4 credit hours required.

Number	Course Title	Credits
CSC 121	Computer Science I .....	4

### Physical and Life Sciences:

15 credit hours required.

Number	Course Title	Credits
CHM 121	General Chemistry I .....	5
PHY 201	General Physics I: Mechanics .....	5
PHY 202	General Physics II Electricity and Magnetism .....	5

### Humanities and Fine Arts:

3 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement for the Associate in Engineering Science degree.

Refer to the Associate in Engineering Science degree for the approved courses in this category.

### Social and Behavioral Sciences:

3 credit hours required.

One course from Humanities and Fine Arts or Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Engineering Science degree for the approved courses in this category.

### Engineering:

13 credit hours required.

#### Engineering Specialties (Specialty courses must be approved in consultation with the engineering chair):

#### Chemical

Number	Course Title	Credits
CHM 122	General Chemistry II .....	5
CHM 204	Organic Chemistry I .....	5
CHM 205	Organic Chemistry II .....	5

#### Civil

Number	Course Title	Credits
EGR 120	Engineering Graphics I (CAD) .....	4
EGR 210	Analytical Mechanics - Statics .....	3
EGR 211	Analytical Mechanics - Dynamics .....	3
EGR 212	Mechanics of Solids .....	3

**Computer**

Number	Course Title	Credits
CSC 122	Computer Science II .....	4
EGR 260	Introduction to Circuit Analysis .....	4
EGR 262	Electrical Circuits Laboratory .....	2
EGR 270	Introduction to Digital Systems .....	4
MTH 220	Discrete Mathematics .....	3

**Electrical**

Number	Course Title	Credits
EGR 260	Introduction to Circuit Analysis .....	4
EGR 262	Electrical Circuits Laboratory .....	2
EGR 270	Introduction to Digital Systems .....	4
PHY 203	General Physics III Thermal and Quantum Physics .....	5

**Industrial**

Number	Course Title	Credits
EGR 120	Engineering Graphics I (CAD) .....	4
EGR 210	Analytical Mechanics - Statics .....	3
EGR 211	Analytical Mechanics - Dynamics .....	3
EGR 212	Mechanics of Solids .....	3

**Mechanical**

Number	Course Title	Credits
EGR 120	Engineering Graphics I (CAD) .....	4
EGR 210	Analytical Mechanics - Statics .....	3
EGR 211	Analytical Mechanics - Dynamics .....	3
EGR 212	Mechanics of Solids .....	3
EGR 240	Thermodynamics .....	3
EGR 260	Introduction to Circuit Analysis .....	4
EGR 262	Electrical Circuits Laboratory .....	2

**English: Sample Transfer Plan**

*This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative English baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

**Communications:**

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

**Mathematics:**

3 credit hours required.

Refer to the Associate in Arts degree for approved courses in this category.

**Physical and Life Sciences:**

7 credit hours required.

Select one Physical and one Life Science course. One course must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

**Humanities and Fine Arts:**

9 credit hours required. One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Number	Course Title	Credits
	Select two courses from the following LIT courses: .....	
LIT 105	Poetry .....	3
LIT 110	Drama .....	3
LIT 115	Fiction .....	3
	Fine Arts <sup>1</sup> .....	3

**Social and Behavioral Sciences:**

9 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

**Major Discipline and Transfer Electives:**

23 credit hours required.

Number	Course Title	Credits
LIT 222	American Literature--the Civil War to Present .....	3

**Additional electives:**

Number	Course Title	Credits
LIT 221	American Literature-Colonial Days to Civil War .....	3
LIT 231	English Literature to 1800 .....	3
LIT 232	English Literature 1800-1914 .....	3
	Additional credits <sup>1</sup> .....	11

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.

## History: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative history baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Refer to the Associate in Arts degree for approved courses in this category.

### Physical and Life Sciences:

7 credit hours required.

Select one Physical and one Life Science course. One must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select at least one course from Humanities and one from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required.

One course from Humanities and Fine Arts or Social and Behavioral Sciences must meet the World Cultures and Diversity requirement for the Associate in Arts degree. Refer to the Associate in Arts degree for the approved courses in this category.

### Major Discipline and Transfer Electives:

23 credit hours required.

Number	Course Title	Credits
HST 111	The American Experience to 1877 .....	3
HST 112	The American Experience Since 1877 .....	3
HST 141	History of Western Civilization to 1650 .....	4
HST 142	History of Western Civilization Since 1650 .....	4
	Additional credits <sup>1</sup> .....	9

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.



## Law Enforcement and Justice Administration: Sample Transfer Plan

This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative law enforcement (criminal justice) baccalaureate major recommendations. Harper also offers an associate in applied science degree in law enforcement. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Refer to the Associate in Arts degree for the approved courses in this category.

### Physical and Life Sciences:

7 credit hours required.

Select one physical and one life science course. At least one course must include a lab.

Refer to the Associate in Arts degree for the approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select at least one course from Humanities and one from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or Social and Behavioral Sciences must meet the World Cultures and Diversity requirement for the Associate in Arts degree. Refer to the Associate in Arts degree for the approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required.

One course from Humanities and Fine Arts or Social and Behavioral Sciences must meet the World Cultures and Diversity requirement for the Associate in Arts degree. Refer to the Associate in Arts degree for the approved courses in this category.

Number	Course Title	Credits
PSY 101	Introduction to Psychology .....	3
SOC 101	Introduction to Sociology .....	3
	Social and Behavioral Sciences <sup>1</sup> .....	3

### Major Discipline and Transfer Electives:

23 credit hours required.

Number	Course Title	Credits
LEJ 101	Introduction to Criminal Justice .....	3
LEJ 104	Corrections .....	3
LEJ 205	Juvenile Justice .....	3
LEJ 210	Criminology .....	3
	Additional credits <sup>1</sup> .....	11

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.

## Mass Communication: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative mass communication baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Refer to the Associate in Arts degree for approved courses in this category.

### Physical and Life Sciences:

7 credit hours required.

Select one Physical and one Life Science course. At least one must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Major Discipline and Transfer Electives:

23 credit hours required.

Bachelor degree programs in Mass Communication encompass four major program areas Journalism/News Editorial/Photojournalism, Radio/TV/Film, Advertising/Public Relations, and Multimedia. For each specialty, 9 credit hours in the desired major are recommended.

#### Journalism/News Editorial/Photojournalism

Number	Course Title	Credits
MCM 120	Introduction to Mass Communication .....	3

#### Choose one or two courses from:

Number	Course Title	Credits
MCM 130	Introduction to Journalism .....	3
MCM 205	Multi-Platform Photojournalism .....	3
	Additional credits! .....	14

#### Radio/TV/Film

Number	Course Title	Credits
MCM 120	Introduction to Mass Communication .....	3

#### Choose one or two courses from:

Number	Course Title	Credits
ART 114	Introduction to Film .....	3
LIT 112	Literature and Film .....	3
	Additional credits! .....	11

#### Advertising/Public Relations

Number	Course Title	Credits
MKT 217	Advertising .....	3
MCM 233	Introduction to Public Relations .....	3

#### Choose one or two courses from:

Number	Course Title	Credits
MCM 120	Introduction to Mass Communication .....	3
MCM 130	Introduction to Journalism .....	3
	Additional credits! .....	8

**Multimedia**

Number	Course Title	Credits
MCM 120	Introduction to Mass Communication .....	3

**Choose from:**

Number	Course Title	Credits
WEB 150	Web Foundations .....	3
	Additional credits <sup>1</sup> .....	17

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.

## Mathematics: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Science degree and follows the Illinois Articulation Initiative mathematics baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Science if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Number	Course Title	Credits
MTH 200	Calculus With Analytic Geometry I .....	5

### Physical and Life Sciences:

7 credit hours required.

Select one Physical and one Life Science course. At least one must include a lab.  
Refer to the Associate in Science degree for approved courses in this category.

### Humanities and Fine Arts:

6 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.  
One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.  
Refer to the Associate in Science degree for approved courses in this category.

### Social and Behavioral Sciences:

6 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.  
Refer to the Associate in Science degree for approved courses in this category.

### Additional Mathematics Course:

3 credit hours required.

Number	Course Title	Credits
MTH 201	Calculus With Analytic Geometry II .....	5

### Additional Science Course:

3 credit hours required.

Number	Course Title	Credits
PHY 201	General Physics I: Mechanics .....	5

### Major Discipline and Transfer Electives:

23 credit hours required. Any additional hours from above will be included in this category.

Number	Course Title	Credits
MTH 202	Calculus With Analytic Geometry III .....	5
MTH 212	Differential Equations .....	3

#### Additional recommended courses:

Number	Course Title	Credits
CSC 121	Computer Science I .....	4
	Additional credits <sup>1</sup> .....	5

<sup>1</sup> Refer to the Associate in Science degree for approved courses in this category.

## Music - Music Emphasis: Sample Transfer Plan

This sample transfer planning guide meet the requirements of the Associate in Fine Arts - Music degree. The music emphasis at Harper College is designed to provide the student with a program equivalent to the first two years of most four-year college programs, with emphasis in music education, musicology, composition, applied music, and theory and literature. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.

Completion of the Associate in Fine Arts degree does not fulfill the requirements of the Illinois General Education Core Curriculum. After transfer, Associate in Fine Arts - Music students will need to complete the General Education requirements of the institution to which they transfer.

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Refer to the Associate in Fine Arts - Music degree for approved courses in this category.

### Physical and Life Sciences:

7 credit hours required.

Refer to the Associate in Fine Arts - Music degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Fine Arts - Music degree for approved courses in this category.

### Social and Behavioral Sciences:

3 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Fine Arts - Music degree for approved courses in this category.

### Core Music Courses:

36 credit hours required.

Number	Course Title	Credits
MUS 111	Theory of Music I .....	3
MUS 112	Theory of Music II .....	3
MUS 115	Aural Skills I .....	1
MUS 116	Aural Skills II .....	1
MUS 120	Introduction to Music Literature .....	3
MUS 165	Class Piano I <sup>1</sup> .....	2
MUS 166	Class Piano II <sup>1</sup> .....	2
MUS 211	Theory of Music III .....	3
MUS 212	Theory of Music IV .....	3
MUS 215	Aural Skills III .....	1
MUS 216	Aural Skills IV .....	1
MUS 265	Class Piano III <sup>1</sup> .....	2
MUS 266	Class Piano IV .....	2
	Applied Music <sup>2</sup> .....	8
	Ensemble <sup>3</sup> .....	4

1 All music majors must demonstrate piano proficiency; MUS 165, MUS 166 and MUS 265 may be passed by proficiency exam. Music majors are also advised to take MUS 100 as part of their elective credit.

2 To be selected from MUS 280 through MUS 299.

3 To be selected from MUS 130, MUS 136, MUS 140, MUS 145 and MUS 150.

## Physics: Sample Transfer Plan

This sample transfer planning guide meets the requirements of the Associate in Science degree. Students choosing to follow this sample plan need to choose the major of Associate in Science if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Number	Course Title	Credits
MTH 200	Calculus With Analytic Geometry I .....	5

### Physical and Life Sciences:

7 credit hours required.

Number	Course Title	Credits
PHY 201	General Physics I: Mechanics .....	5
	Life Science .....	3

### Humanities and Fine Arts:

6 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category. One course from Humanities and Fine Arts or Social and Behavioral Sciences must meet the World Cultures and Diversity requirement. Refer to the Associate in Science degree for approved courses in this category.

### Social and Behavioral Sciences:

6 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement. Refer to the Associate in Science degree for approved courses in this category.

### Additional Mathematics Course:

3 credit hours required.

Number	Course Title	Credits
MTH 201	Calculus With Analytic Geometry II .....	5

### Additional Science Course:

3 credit hours required.

Number	Course Title	Credits
CHM 121	General Chemistry I .....	5

### Major Discipline and Transfer Electives:

23 credit hours required. Any additional hours from above will be included in this category.

Number	Course Title	Credits
CHM 122	General Chemistry II .....	5
MTH 202	Calculus With Analytic Geometry III .....	5
MTH 212	Differential Equations .....	3
PHY 202	General Physics II Electricity and Magnetism .....	5
PHY 203	General Physics III Thermal and Quantum Physics .....	5

## Political Science: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative political science baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Refer to the Associate in Arts degree for approved courses in this category.

### Physical and Life Sciences:

7 credit hours required.

Select one Physical and one Life Science course. One course must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Major Discipline and Transfer Electives:

23 credit hours required.

Number	Course Title	Credits
PSC 101	American Politics and Government .....	3

#### Additional electives:

Number	Course Title	Credits
PSC 220	State and Local Government in the United States .....	3
PSC 250	Comparative Politics .....	3
PSC 270	Global Politics .....	3
PSC 280	Non-Western Comparative Politics .....	3
	Additional credits <sup>1</sup> .....	8

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.

## Psychology: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative psychology baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Number	Course Title	Credits
MTH 165	Elementary Statistics .....	4

### Physical and Life Sciences:

7 credit hours required.

Select one Physical and one Life Science course. At least one must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

Number	Course Title	Credits
PSY 101	Introduction to Psychology .....	3
	Social and Behavioral Sciences .....	6

### Major Discipline and Transfer Electives:

23 credit hours required. Any additional hours from above will be included in this category.

Number	Course Title	Credits
PSY 230	Abnormal Psychology .....	3

#### Choose one from

Number	Course Title	Credits
PSY 216	Child Psychology .....	3
PSY 217	Adolescent Psychology .....	3
PSY 218	Adult Psychology .....	3
PSY 228	Psychology of Human Development .....	3
	Additional credits <sup>1</sup> .....	8

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.



## Sociology: Sample Transfer Plan

This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative sociology baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Number	Course Title	Credits
MTH 124	Finite Mathematics or	
MTH 165	Elementary Statistics .....	4

### Physical and Life Sciences:

7 credit hours required.

Select at least one Physical and one Life Science. One course must include a lab.  
Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.  
One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.  
Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.  
Refer to the Associate in Arts degree for approved courses in this category.

Number	Course Title	Credits
SOC 101	Introduction to Sociology .....	3
ANT 101	Introduction to Anthropology or	
ANT 202	Cultural Anthropology .....	3
	Social and Behavioral Sciences <sup>1</sup> .....	3

### Major Discipline and Transfer Electives:

23 credit hours required.

Number	Course Title	Credits
SOC 120	The Family in Contemporary Society .....	3
SOC 205	Social Problems .....	3
SOC 230	Sociology of Sex and Gender .....	3
SOC 235	Race and Ethnicity .....	3
	Additional credits <sup>1</sup> .....	11

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.

## Theatre Arts: Sample Transfer Plan

*This sample transfer planning guide meets the requirements of the Associate in Arts degree and follows the Illinois Articulation Initiative theatre arts baccalaureate major recommendations. Students choosing to follow this sample plan need to choose the major of Associate in Arts if needing financial aid. Transfer institution requirements may vary - students should check individual college/university requirements before completing the sample plan as outlined. Baccalaureate admission may be competitive. Completion of these courses alone does not guarantee admission.*

### Communications:

9 credit hours required.

Number	Course Title	Credits
ENG 101	Composition .....	3
ENG 102	Composition .....	3
SPE 101	Fundamentals of Speech Communication .....	3

### Mathematics:

3 credit hours required.

Refer to the Associate in Arts degree for approved courses in this category.

### Physical and Life Sciences:

7 credit hours required.

Select one Physical and one Life Science course. One course must include a lab.

Refer to the Associate in Arts degree for approved courses in this category.

### Humanities and Fine Arts:

9 credit hours required.

Select one course from Humanities and one course from Fine Arts. Interdisciplinary courses may count in either category.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Social and Behavioral Sciences:

9 credit hours required.

One course from Humanities and Fine Arts or from Social and Behavioral Sciences must meet the World Cultures and Diversity requirement.

Refer to the Associate in Arts degree for approved courses in this category.

### Major Discipline and Transfer Electives:

23 credit hours required.

Number	Course Title	Credits
THE 212	Acting I .....	3
THE 213	Acting II .....	3
THE 216	Stagecraft .....	3
	Additional credits <sup>1</sup> .....	14

<sup>1</sup> Refer to the Associate in Arts degree for approved courses in this category.

## ACCOUNTING

### Associate in Applied Science A.A.S.: Accounting Associate Degree

This 62 credit-hour program is designed to prepare students for employment as junior accountants in business, industry and government.

The curriculum includes the study of accounting theory and practice, corporation accounting, and cost accounting. Required business course work provides for an overview of the corporate community and includes economics, business law and management classes. Computer information skills are essential to today's accountants and are also required in this degree.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ACC 101	Introduction to Financial Accounting .....	4	Program Requirement
CAS 160	Introduction to Business Software Packages <sup>1</sup> .....	3	Program Requirement
ENG 101	Composition or		
ENG 130	Business Writing .....	3	Communications
MGT 111	Introduction to Business Organization .....	3	Program Requirement
	Mathematics <sup>2</sup> .....	3	Mathematics

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ACC 102	Introduction to Managerial Accounting .....	3	Program Requirement
ACC 112	Quickbooks .....	2	Program Requirement
ACC 155	Payroll Accounting .....	2	Program Requirement
ECO 211	Microeconomics or		
ECO 212	Macroeconomics .....	3	Social and Behavioral Science
	Communications <sup>3</sup> .....	3	Communications
	Humanities <sup>4</sup> .....	3	Humanities

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ACC 201	Intermediate Accounting I .....	3	Program Requirement
ACC 211	Business Law I .....	3	Program Requirement
ACC 250	Individual Tax Accounting .....	3	Program Requirement
	Accounting elective <sup>4</sup> .....	3	Program Requirement
	Business elective <sup>5</sup> .....	3	Program Requirement

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ACC 203	Introductory Cost Accounting .....	3	Program Requirement
	Accounting electives <sup>4</sup> .....	6	Program Requirement
	Business elective <sup>5</sup> .....	3	Program Requirement
	Social and Behavioral Science* .....	3	Social and Behavioral Science

1 Students may substitute three (3) total credit hours from CAS 105, CAS 115, CAS 125 or CAS 215.

2 Only MGT 150 or MTH 103 or higher will satisfy this requirement.

3 Students may elect ENG 101, ENG 102, ENG 130, or SPE 101.

+ At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

4 ACC electives (students must satisfy prerequisite for each course elected): ACC 202, ACC 251, ACC 253, ACC 254, ACC 265, ACC 295 (limit 4 hours).

5 Business electives (students must satisfy prerequisites for each course elected): ACC 213, CIS 101, FIN 215, MGT 160, MGT 218, MGT 270, MGT 280, MKT 245, PHI 150.

### Accounting Assistant Certificate

This 29 credit-hour certificate program is designed for persons interested in pursuing careers as junior accountants in business, government and industry. There is an acute shortage of persons with the training needed to be successful in accounting.

#### Required:

Number	Course Title	Credits
ACC 101	Introduction to Financial Accounting .....	4
ACC 102	Introduction to Managerial Accounting .....	3
ACC 112	Quickbooks .....	2
ACC 155	Payroll Accounting .....	2
ENG 101	Composition or	
ENG 130	Business Writing .....	3
MGT 111	Introduction to Business Organization .....	3
CAS 160	Introduction to Business Software Packages or Three total credit hours from the following four CAS courses: .....	

## ACCOUNTING

CAS 105	Word Processing Software .....	1
CAS 115	Spreadsheet Software .....	1
CAS 125	Database Software .....	1
CAS 215	Advanced Spreadsheet Software .....	1

### Electives: Select any three courses from the following:

Number	Course Title	Credits
ACC 201	Intermediate Accounting I .....	3
ACC 202	Intermediate Accounting II .....	3
ACC 203	Introductory Cost Accounting .....	3
ACC 250	Individual Tax Accounting .....	3
ACC 251	Business Tax Accounting .....	3
ACC 253	Advanced Accounting I .....	3
ACC 254	Auditing .....	3
ACC 265	Fraud Examination .....	3

### Accounting Bookkeeper/Clerk Certificate

*This 8 credit-hour certificate program will provide the student with the courses needed for an entry-level position in this particular area.*

#### Required:

Number	Course Title	Credits
ACC 100	Introductory Accounting or	
ACC 101	Introduction to Financial Accounting .....	4
ACC 112	Quickbooks .....	2
CAS 160	Introduction to Business Software Packages or Three total credit hours from the following four CAS courses: .....	
CAS 105	Word Processing Software .....	1
CAS 115	Spreadsheet Software .....	1
CAS 125	Database Software .....	1
CAS 215	Advanced Spreadsheet Software .....	1

### Advanced Accounting Bookkeeper/Clerk Certificate

*This 20 credit-hour certificate program will provide the student with the courses needed for an entry-level position in such areas as accounts payable, accounts receivable and inventory accounting.*

#### Required:

Number	Course Title	Credits
ACC 101	Introduction to Financial Accounting .....	4
ACC 102	Introduction to Managerial Accounting .....	3
ACC 112	Quickbooks .....	2
ACC 155	Payroll Accounting .....	2
ENG 101	Composition or	
ENG 130	Business Writing .....	3
MGT 111	Introduction to Business Organization .....	3
CAS 160	Introduction to Business Software Packages or Three total credit hours from the following four CAS courses: .....	
CAS 105	Word Processing Software .....	1
CAS 115	Spreadsheet Software .....	1
CAS 125	Database Software .....	1
CAS 215	Advanced Spreadsheet Software .....	1

### Professional ACCTG-CPA Preparation Certificate

*This 30 credit-hour certificate is designed to provide individuals with the necessary accounting courses to qualify for the Certified Public Accountant (CPA) exam. The program is intended for individuals who already have a bachelor's degree and wish to transition to a career in the field of accounting.*

*To qualify for the CPA exam, a candidate must have a bachelor's degree and a total of 150 semester hours of credit, including 24 hours in business and a minimum of 30 hours in accounting. The 24 hours in business must include two hours in business communication (ENG 130, Business Writing) and three hours in business ethics (PHI 150, Business Ethics). Additionally, it is strongly recommended that the 24 business hours include at least three hours in business law. At Harper, ACC 211 (Business Law I) and ACC 213 (Legal Environment of*

## ACCOUNTING

Business ) are available. The Illinois Board of Examiners provides more detailed information on educational requirements at [www.illinois-cpa-exam.com](http://www.illinois-cpa-exam.com). Harper will accept up to 15 credit hours in equivalent courses from regionally accredited institutions.

[Requirements for the Illinois CPA Certificate:

To sit for the CPA examination in Illinois effective July 1, 2013, the candidate must have a total of 150 hours of acceptable college-level education including at least a bachelor's degree. Thirty semester hours must be in accounting. An additional 24 hours in business courses are required, including two hours in business communications and three hours in business ethics. (Business law is also included in the business requirements).

At Harper College, acceptable accounting courses include: ACC 101, ACC 102, ACC 201, ACC 202, ACC 203, ACC 211, ACC 251, ACC 253, ACC 254, ACC 260, ACC 261.

A wide variety of business courses are offered including ACC 211, ACC 213, CIS 101, ECO 210, ECO 211, ECO 212, FIN 215, MGT 111, MGT 218, MGT 225, MGT 270, MTH 124, PHI 150.]

[Requirements for the Illinois CMA Certificate:

The Certified Management Accountant (CMA) is a national program with no state affiliates. The candidate must have senior standing at an accredited college or university, or must hold a baccalaureate degree, in any field, or have passed the U.S. CPA examination. Anyone who has passed the U.S. CPA examination is given credit for part two of the CMA examination.]

### Required:

Number	Course Title	Credits
ACC 101	Introduction to Financial Accounting .....	4
ACC 102	Introduction to Managerial Accounting .....	3
ACC 201	Intermediate Accounting I .....	3
ACC 202	Intermediate Accounting II .....	3
ACC 250	Individual Tax Accounting .....	3
ACC 251	Business Tax Accounting .....	3
ACC 254	Auditing .....	3
ACC 260	Financial Research .....	1
ACC 261	Tax Research .....	1

### Electives: Select two courses from the following:

Number	Course Title	Credits
ACC 203	Introductory Cost Accounting .....	3
ACC 253	Advanced Accounting I .....	3
ACC 265	Fraud Examination .....	3

### Tax Accounting Assistant Certificate

This 18 credit-hour certificate program provides students with a basic understanding of tax law and tax procedures. The certificate includes coursework needed to obtain an entry-level position in national "chain" tax preparation companies as well as in CPA and accounting firms.

### Required:

Number	Course Title	Credits
ACC 101	Introduction to Financial Accounting .....	4
ACC 112	Quickbooks .....	2
ACC 155	Payroll Accounting .....	2
ACC 250	Individual Tax Accounting .....	3
ACC 251	Business Tax Accounting .....	3
ACC 261	Tax Research .....	1
CAS 160	Introduction to Business Software Packages <sup>1</sup> or	
ENG 130	Business Writing .....	3

<sup>1</sup> Students may substitute 3 credit hours from CAS 105, CAS 115, CAS 125, or CAS 215.

## BUSINESS ADMINISTRATION

### Associate in Applied Science A.A.S.: Business Administration Degree - Entrepreneurship

*This 61 credit-hour degree program is designed to assist students who are exploring entrepreneurial ventures and/or starting new businesses. This degree focuses on leadership, creativity, innovation and funding sources. It also provides the fundamental management skills needed by the successful owner-manager of a business.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
MGT 111	Introduction to Business Organization .....	3	Program Requirement
MGT 150	Business Math or Mathematics <sup>1</sup> .....	3	Mathematics
MGT 154	Entrepreneurship .....	3	Program Requirement
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ACC 101	Introduction to Financial Accounting <sup>2</sup> .....	4	Program Requirement
CIS 100	Computer and Digital Literacy or Introduction to Computer Information Systems .....	3	Program Requirement
MGT 254	Applied Entrepreneurship .....	3	Program Requirement
MKT 245	Principles of Marketing .....	3	Program Requirement
PSY 245	Industrial/Organizational Psychology .....	3	Social and Behavioral Science

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ACC 102	Introduction to Managerial Accounting or Global Business <sup>+</sup> .....	3	Program Requirement
ECO 211	Microeconomics .....	3	Program Requirement
	Humanities <sup>3</sup> .....	3	Humanities
MGT 270	Principles of Management .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ACC 211	Business Law I .....	3	Program Requirement
ECO 212	Macroeconomics .....	3	Program Requirement
MGT 205	Leadership .....	3	Program Requirement
MGT 218	Introduction to Finance .....	3	Program Requirement
MGT 255	Entrepreneurial Financing .....	3	Program Requirement

1 The mathematics elective must be MTH 103 or above. Students should meet with a Student Development Faculty Counselor or the program coordinator for an appropriate math course.

2 Students should strongly consider enrolling in ACC 102 as well.

+ This course meets the World Cultures and Diversity graduation requirement.

3 Students must take a course that meets the World Cultures and Diversity graduation requirement. If students have taken MGT 165 (Global Business), then PHI 150 (Business Ethics) is recommended as the Humanities course.

### Associate in Applied Science A.A.S.: Business Administration Degree - Financial Management

*This 61 credit-hour degree program is designed for those currently employed in or seeking employment in finance departments, banks, investment companies or other finance-related enterprises. The curriculum emphasizes developing the competencies necessary for supervisory and public contact positions in the finance field.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
FIN 101	Financial Institution Operations .....	3	Program Requirement
MGT 111	Introduction to Business Organization .....	3	Program Requirement
MGT 150	Business Math or Mathematics <sup>1</sup> .....	3	Mathematics
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

## BUSINESS ADMINISTRATION

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ACC 101	Introduction to Financial Accounting <sup>2</sup> .....	4	Program Requirement
CIS 100	Computer and Digital Literacy or		
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
FIN 200	Investment Management .....	3	Program Requirement
MKT 245	Principles of Marketing .....	3	Program Requirement
PSY 245	Industrial/Organizational Psychology .....	3	Social and Behavioral Science

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ACC 102	Introduction to Managerial Accounting or		
MGT 165	Global Business <sup>+</sup> .....	3	Program Requirement
ECO 211	Microeconomics .....	3	Program Requirement
MGT 218	Introduction to Finance .....	3	Program Requirement
MGT 270	Principles of Management .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ACC 211	Business Law I .....	3	Program Requirement
ECO 212	Macroeconomics .....	3	Program Requirement
FIN 215	Financial Statements Interpretation and Analysis .....	3	Program Requirement
FIN 225	International Finance .....	3	Program Requirement
	Humanities <sup>3</sup> .....	3	Humanities

- 1 The mathematics elective must be MTH 103 or above. Students should meet with a Student Development Faculty Counselor or the program coordinator for the appropriate math course.
- 2 Students should strongly consider enrolling in ACC 102 as well.
- + This course meets the World Cultures and Diversity graduation requirement.
- 3 Students must take a course that meets the World Cultures and Diversity graduation requirement. If students have taken MGT 165 (Global Business), then PHI 150 (Business Ethics) is recommended for this Humanities course.

### Associate in Applied Science A.A.S.: Business Administration Degree - Human Resources Management

*This 61 credit-hour degree program is designed to assist students in a wide variety of business occupations. The curriculum is structured to meet the needs of individuals interested in gaining or improving business knowledge and management skills. The program develops abilities that will help organize, coordinate and evaluate the functions of the Human Resources Department or branch of an organization in either an industrial or administrative management capacity. This degree also provides the fundamental management skills needed by the successful owner-manager of a business.*

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
	Humanities <sup>1</sup> .....	3	Humanities
MGT 111	Introduction to Business Organization .....	3	Program Requirement
MGT 150	Business Math or		
	Mathematics <sup>2</sup> .....	3	Mathematics
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ACC 101	Introduction to Financial Accounting <sup>3</sup> .....	4	Program Requirement
ACC 216	Employment Law .....	3	Program Requirement
CIS 100	Computer and Digital Literacy or		
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
MGT 265	Human Resources Management .....	3	Program Requirement
PSY 245	Industrial/Organizational Psychology .....	3	Social and Behavioral Science

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ACC 102	Introduction to Managerial Accounting or		
MGT 165	Global Business <sup>+</sup> .....	3	Program Requirement

## BUSINESS ADMINISTRATION

ECO 211	Microeconomics .....	3	Program Requirement
MGT 204	Training and Development .....	3	Program Requirement
MGT 270	Principles of Management .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ACC 211	Business Law I .....	3	Program Requirement
ECO 212	Macroeconomics .....	3	Program Requirement
MGT 218	Introduction to Finance .....	3	Program Requirement
MGT 280	Organizational Behavior .....	3	Program Requirement
MKT 245	Principles of Marketing .....	3	Program Requirement

- 1 Students must take a course that meets the World Cultures and Diversity graduation requirement. If MGT 165 (Global Business) is taken, then PHI 150 (Business Ethics) is recommended for the Humanities course.
- 2 The mathematics elective must be MTH 103 or higher. Students should meet with a Student Development Faculty Counselor or the program coordinator for an appropriate math course.
- 3 Students should strongly consider enrolling in ACC 102 as well.
- + This course fulfills the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Business Administration Degree - Insurance

*This 61 credit-hour degree program is designed to assist students who are either exploring an insurance career or are in the insurance field looking to expand their managerial and business skills. Students will gain knowledge and practical skills in property, liability, commercial and personal insurance as they earn industry certification.*

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
INS 110	Insurance Fundamentals .....	3	Program Requirement
MGT 111	Introduction to Business Organization .....	3	Program Requirement
MGT 150	Business Math or Mathematics <sup>1</sup> .....	3	Mathematics
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ACC 101	Introduction to Financial Accounting <sup>2</sup> .....	4	Program Requirement
CIS 100	Computer and Digital Literacy or		
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
	Humanities <sup>3</sup> .....	3	Humanities
INS 120	Property and Liability Insurance Principles .....	3	Program Requirement
PSY 245	Industrial/Organizational Psychology .....	3	Social and Behavioral Science

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ACC 102	Introduction to Managerial Accounting or		
MGT 165	Global Business <sup>+</sup> .....	3	Program Requirement
ECO 211	Microeconomics .....	3	Program Requirement
INS 220	Personal Insurance .....	3	Program Requirement
MGT 270	Principles of Management .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ACC 211	Business Law I .....	3	Program Requirement
ECO 212	Macroeconomics .....	3	Program Requirement
INS 240	Commercial Insurance .....	3	Program Requirement
MGT 218	Introduction to Finance .....	3	Program Requirement
MKT 245	Principles of Marketing .....	3	Program Requirement

- 1 The mathematics elective must be MTH 103 or above. Students should meet with a Student Development Faculty Counselor or the program coordinator for an appropriate math course.



## BUSINESS ADMINISTRATION

- 2 Students should strongly consider enrolling in ACC 102 as well.
- 3 Students must take a course that meets the World Cultures and Diversity graduation requirement. If MGT 165 (Global Business) is taken, then PHI 150 (Business Ethics) is recommended as this Humanities course.
- + This course meets the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Business Administration Degree - Management

*This 61 credit-hour program is designed to assist students in a wide variety of business occupations. The curriculum is structured to meet the needs of individuals interested in gaining or improving business knowledge and management skills. The program develops abilities that will help organize, coordinate and evaluate the functions of a unit, department or branch of an organization in either an industrial or administrative management capacity. This degree also provides the fundamental management skills needed by the successful owner-manager of a business.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
	Humanities <sup>1</sup> .....	3	Humanities
MGT 111	Introduction to Business Organization .....	3	Program Requirement
MGT 150	Business Math or Mathematics <sup>2</sup> .....	3	Mathematics
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ACC 101	Introduction to Financial Accounting <sup>3</sup> .....	4	Program Requirement
CIS 100	Computer and Digital Literacy or Introduction to Computer Information Systems .....	3	Program Requirement
MGT 265	Human Resources Management .....	3	Program Requirement
MGT 280	Organizational Behavior .....	3	Program Requirement
PSY 245	Industrial/Organizational Psychology .....	3	Social and Behavioral Science

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ACC 102	Introduction to Managerial Accounting or Global Business <sup>+</sup> .....	3	Program Requirement
ECO 211	Microeconomics .....	3	Program Requirement
MGT 160	Principles of Supervision or Management or Business Administration elective <sup>4</sup> .....	3	Program Requirement
MGT 270	Principles of Management .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ACC 211	Business Law I .....	3	Program Requirement
ECO 212	Macroeconomics .....	3	Program Requirement
MGT 218	Introduction to Finance .....	3	Program Requirement
MGT 291	Problems in Management and Supervision .....	3	Program Requirement
MKT 245	Principles of Marketing .....	3	Program Requirement

- 1 Students must take a course that meets the World Cultures and Diversity graduation requirement. If MGT 165 (Global Business) is taken, then PHI 150 (Business Ethics) is recommended as this Humanities course.
- 2 The Mathematics course must be MTH 103 or above. Students should meet with a Student Development Faculty Counselor or the program coordinator for an appropriate math course.
- 3 Students should strongly consider enrolling in ACC 102 as well.
- + This course meets the World Cultures and Diversity graduation requirement.
- 4 Management electives: MGT 154, MGT 254, MKT 140, MKT 217, MKT 240, MKT 247, MKT 281, MKT 285, SCM 101, SCM 120. Business Administration electives: ACC 216, MCM 233, MGT 165, MGT 170, MGT 204, MGT 205, MGT 211, MGT 225, MGT 266, MGT 274, MGT 275, MGT 276, MKT 105, MKT 106, MKT 141, MKT 251, MKT 252, MKT 255, MKT 285, SCM 122, SCM 123, SCM 124, SCM 125, SCM 226, SCM 259.

### Associate in Applied Science A.A.S.: Business Administration Degree - Marketing

*This 61 credit-hour program is designed to assist students in a wide variety of business occupations. The curriculum is structured to meet the needs of individuals interested in gaining or improving business knowledge and management skills. The program develops abilities that will help organize, coordinate and evaluate the functions of a marketing department or branch of an organization in either an industrial or administrative management capacity. This degree also provides the fundamental management skills needed by the successful owner-manager of a business.*

## BUSINESS ADMINISTRATION

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
MGT 111	Introduction to Business Organization .....	3	Program Requirement
MGT 150	Business Math or Mathematics <sup>1</sup> .....	3	Mathematics
MKT 140	Principles of Professional Selling .....	3	Program Requirement
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ACC 101	Introduction to Financial Accounting <sup>2</sup> .....	4	Program Requirement
CIS 100	Computer and Digital Literacy or		
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
	Humanities <sup>3</sup> .....	3	Humanities
MKT 245	Principles of Marketing .....	3	Program Requirement
PSY 245	Industrial/Organizational Psychology .....	3	Social and Behavioral Science

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ACC 102	Introduction to Managerial Accounting or		
MGT 165	Global Business <sup>+</sup> .....	3	Program Requirement
ECO 211	Microeconomics .....	3	Program Requirement
MGT 270	Principles of Management .....	3	Program Requirement
MKT 247	Consumer Buying Behavior .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ACC 211	Business Law I .....	3	Program Requirement
ECO 212	Macroeconomics .....	3	Program Requirement
MGT 218	Introduction to Finance .....	3	Program Requirement
MKT 217	Advertising .....	3	Program Requirement
MKT 281	Internship in Marketing .....	3	Program Requirement

- 1 The mathematics elective must be MTH 103 or above. Students should meet with a Student Development Faculty Counselor or the program coordinator for an appropriate math course.
- 2 Students should strongly consider taking ACC 102 as well.
- 3 Students must take a course that meets the World Cultures and Diversity graduation requirement. If MGT 165 (Global Business) is taken, then PHI 150 (Business Ethics) is recommended for this Humanities course.
- + This course meets the World Cultures and Diversity graduation requirement.

## CARDIOGRAPHIC TECHNICIAN

### Cardiographic Technician Certificate

This 17 credit-hour certificate prepares students or graduates of direct patient care programs to perform and interpret rhythm and 12 lead ECGs. It provides training in telemetry surveillance, holter monitoring and maximal stress testing. This certificate enhances the skill set and employability of direct patient care providers such as nurses and medical office assistants working in the cardiology arena. It also prepares graduates for the Cardiographic Technician examination and credential offered by Cardiovascular Credentialing International.

Due to the nature of clinical experiences and individualized instruction required in this program, and the specialized technology and equipment necessary, a higher tuition rate will be assessed for the career-specific courses with the CGT prefix. Tuition for these courses will be 200 percent of the standard tuition rate.

#### Admission Requirements:

Cardiographic Technician is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit [harpercollege.edu](http://harpercollege.edu)

Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

### PREREQUISITES

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
BIO 135	Introduction to Human Anatomy and Physiology <sup>1</sup>	4
ENG 101	Composition	3

### REQUIRED

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
CGT 101	Electrocardiography I	2
CGT 102	Electrocardiography II	2
HSC 104	Health Care Technology and Informatics <sup>2</sup>	2
HSC 107	Basic Health Care Skills <sup>3</sup>	1
HSC 112	Medical Terminology	2
HSC 165	Basic Pharmacology	1

### OPTIONAL

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
CGT 204	Cardiovascular Principles	3

<sup>1</sup> Students may substitute BIO160 and BIO161 for BIO135.

<sup>2</sup> Students may substitute 2-3 credit hours of CAS/CIS courses completed within the last five years.

<sup>3</sup> See the Health Science Coordinator for course substitutions, waivers or proficiency testing.

## COMMUNITY HEALTH WORKER

### Community Health Worker Certificate

*This 18 credit-hour certificate program provides entry level education and field experience for students wishing to obtain a position as a Community Health Worker. This program prepares students for community health positions such as community health advocates, lay health educators, community health representatives, patient navigators, and Promotores de Salud. The certificate can be completed in two semesters with full-time study in the first semester and professional practice experience in semester two, or on a part-time basis over three semesters.*

#### First Semester

A grade of C or better is required in all courses.

Number	Course Title	Credits
CHW 101	Introduction to Community Health Work .....	3
HED 203	Community Health .....	3
HMS 102	Helping Skills in Human Services .....	3
HMS 121	Multiculturalism in the Helping Professions .....	3
HSC 112	Medical Terminology .....	2

#### Second Semester

A grade of C or better is required in all courses.

Number	Course Title	Credits
CHW 210	Professional Practice Experience .....	4

## COMPUTER INFORMATION SYSTEMS

### Associate in Applied Science A.A.S.: Computers in Business Degree - Computer Support

The 60 credit-hour technical curriculum prepares students for various positions in the field of computers. The student will take courses in business, computer information systems and general education.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics
NET 105	IT Fundamentals .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
CAS 175	Desktop Publishing Software .....	1	Program Requirement
CAS 205	Advanced Word Processing Software .....	1	Program Requirement
CAS 215	Advanced Spreadsheet Software .....	1	Program Requirement
ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
NET 111	A+ Hardware .....	3	Program Requirement
NET 112	A+ Operating Systems Technologies .....	3	Program Requirement
	Humanities, Natural Science or Social/Behavioral Science* .....	3	Humanities, Natural Science or Social and Behavioral Science

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
NET 121	Introduction to Networking .....	3	Program Requirement
NET 122	Internet Protocols .....	3	Program Requirement
NET 201	Service Desk and Service Management .....	3	Program Requirement
NET 231	Windows Scripting or		
NET 236	Linux Shell Scripting .....	3	Program Requirement
NET 260	Windows Server Administration .....	3	Program Requirement

#### FOURTH SEMESTER

Number	Course Title	Credits	Course Category
CIS 143	Introduction to Database Systems .....	3	Program Requirement
	Humanities, Natural Science or Social/Behavioral Science* .....	6	Humanities, Natural Science or Social and Behavioral Science
NET 240	Linux Fundamentals .....	3	Program Requirement
WEB 150	Web Foundations .....	3	Program Requirement

<sup>1</sup> Students must take at least three credit hours at the level of MTH 101 or above.

+ Students must take nine credit hours in a minimum of two of these areas; three hours must be in a course that meets the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Computers in Business Degree - Database Management

The 60 credit-hour technical curriculum prepares students for various positions in the field of computers.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics
NET 105	IT Fundamentals .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
CIS 143	Introduction to Database Systems .....	3	Program Requirement

## COMPUTER INFORMATION SYSTEMS

ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
	Humanities, Natural Science or Social/Behavioral Science* .....	3	Humanities, Natural Science or Social and Behavioral Science
NET 111	A+ Hardware .....	3	Program Requirement
NET 112	A+ Operating Systems Technologies .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
CIS 106	Computer Logic and Programming Technology .....	3	Program Requirement
CIS 243	Database Administration .....	3	Program Requirement
	Database Management electives <sup>2</sup> .....	3	Program Requirement
NET 121	Introduction to Networking .....	3	Program Requirement
NET 122	Internet Protocols .....	3	Program Requirement

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
CIS 244	Database Design and Implementation .....	3	Program Requirement
	Database Management electives <sup>2</sup> .....	6	Program Requirement
	Humanities, Natural Science or Social/Behavioral Science* .....	6	Humanities, Natural Science or Social and Behavioral Science

<sup>1</sup> Students must take at least three credit hours in a mathematics course at the level of MTH 101 or above.

<sup>+</sup> Students must take nine credit hours in a minimum of two of these areas; three hours must be in a course that meets the World Cultures and Diversity graduation requirement.

<sup>2</sup> Students must take nine credit hours from CIS 168, CIS 181, CIS 182, CIS 203, CIS 211, CIS 268, CIS 281, MGT 111, NET 240, NET 260, WEB 200 or WEB 250.

### Associate in Applied Science A.A.S.: Computers in Business Degree - Healthcare

*The 61 credit-hour technical curriculum prepares students for various positions in the field of computers.*

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics
NET 105	IT Fundamentals .....	3	Program Requirement

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
BIO 135	Introduction to Human Anatomy and Physiology .....	4	Natural Science
ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
HSC 112	Medical Terminology .....	2	Program Requirement
NET 111	A+ Hardware .....	3	Program Requirement
NET 112	A+ Operating Systems Technologies .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
BIO 136	Introduction to Human Disease .....	3	Natural Science
HIT 200	Introduction to Health Information Systems .....	3	Program Requirement
	Humanities or Social and Behavioral Science* .....	3	Humanities or Social and Behavioral Science
NET 121	Introduction to Networking .....	3	Program Requirement
NET 122	Internet Protocols .....	3	Program Requirement

## COMPUTER INFORMATION SYSTEMS

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
CIS 211	IT Project Management Design .....	3	Program Requirement
	Healthcare electives <sup>2</sup> .....	4	Program Requirement
HIT 220	Health Care Information Management .....	3	Program Requirement
NET 231	Windows Scripting or		
NET 236	Linux Shell Scripting .....	3	Program Requirement
NET 280	Network Security Fundamentals .....	3	Program Requirement

- 1 Students must take at least three credit hours in a mathematics course at the level of MTH 101 or above.  
 + Students must take a Humanities or Social and Behavioral Science course that meets the World Cultures and Diversity graduation requirement.  
 2 Students must take four credit hours selected from HSC 104, HSC 105, HSC 213, HIT 225 or HIT 250.

### Associate in Applied Science A.A.S.: Computers in Business Degree - Management Information Systems

The 61 credit-hour technical curriculum prepares students for various positions in the field of computers. The student will take courses in business, computer information systems and general education.

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics
NET 105	IT Fundamentals .....	3	Program Requirement

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ACC 101	Introduction to Financial Accounting .....	4	Program Requirement
CIS 143	Introduction to Database Systems .....	3	Program Requirement
ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
	Humanities, Natural Science or Social/Behavioral Science* .....	3	Humanities, Natural Science or Social and Behavioral Science
NET 121	Introduction to Networking .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
CIS 106	Computer Logic and Programming Technology .....	3	Program Requirement
ACC 102	Introduction to Managerial Accounting .....	3	Program Requirement
	Humanities, Natural Science or Social/Behavioral Science* .....	3	Humanities, Natural Science or Social and Behavioral Science
MGT 111	Introduction to Business Organization .....	3	Program Requirement
WEB 150	Web Foundations or		
WEB 240	E-Commerce Strategies/Technologies .....	3	Program Requirement

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ACC 211	Business Law I .....	3	Program Requirement
CIS 211	IT Project Management Design .....	3	Program Requirement
	Humanities, Natural Science or Social/Behavioral Science* .....	3	Humanities, Natural Science, or Social and Behavioral Science
MGT 270	Principles of Management .....	3	Program Requirement
MKT 245	Principles of Marketing .....	3	Program Requirement

- 1 Students must take at least three credit hours at the level of MTH 101 or above.  
 + Students must take nine credit hours in a minimum of two of these areas; three hours must be in a course that meets the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Computers in Business Degree - Network Administration

## COMPUTER INFORMATION SYSTEMS

The 60 credit-hour technical curriculum prepares students for various positions in the field of computers.

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics
NET 105	IT Fundamentals .....	3	Program Requirement

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
	Humanities, Natural Science or Social/Behavioral Science* .....	6	Humanities, Natural Science or Social and Behavioral Science
NET 111	A+ Hardware .....	3	Program Requirement
NET 112	A+ Operating Systems Technologies .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
	Humanities, Natural Science or Social/Behavioral Science* .....	3	Humanities, Natural Science or Social and Behavioral Science
NET 121	Introduction to Networking .....	3	Program Requirement
NET 122	Internet Protocols .....	3	Program Requirement
NET 231	Windows Scripting or		
NET 236	Linux Shell Scripting .....	3	Program Requirement
	Network Administration elective <sup>2</sup> .....	3	Program Requirement

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
NET 240	Linux Fundamentals .....	3	Program Requirement
NET 260	Windows Server Administration .....	3	Program Requirement
NET 270	Cisco Networking (CCNET) .....	3	Program Requirement
NET 280	Network Security Fundamentals .....	3	Program Requirement
NET 299	Networking Capstone .....	3	Program Requirement

1 Students must take at least three credit hours in a mathematics course at the level of MTH 101 or above.

+ Students must take nine credit hours in a minimum of two of these areas; three hours must be in a course that meets the World Cultures and Diversity graduation requirement.

2 Students must take three credits hours selected from NET 182, NET 201, NET 221, NET 222, NET 223. NET 201 is recommended.

### Associate in Applied Science A.A.S.: Software Development Degree

The 60 credit-hour curriculum prepares students for various software development positions in the field of computer information systems. The student will take courses in computer information systems, Java and Microsoft .NET software development, Web development, system analysis and design, and general education. Graduates of the program may find employment as software developers, systems analysts, or consultants.

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
CIS 106	Computer Logic and Programming Technology .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
CIS 143	Introduction to Database Systems .....	3	Program Requirement
CIS 182	Visual C# Software Development .....	4	Program Requirement



## COMPUTER INFORMATION SYSTEMS

ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
NET 105	IT Fundamentals .....	3	Program Requirement
WEB 150	Web Foundations .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
CIS 168	Java Software Development I .....	4	Program Requirement
CIS 211	IT Project Management Design .....	3	Program Requirement
	Computer Information Systems elective <sup>2</sup> .....	3	Program Requirement
	Humanities, Natural Science or Social/Behavioral Science* .....	6	Humanities, Natural Science or Social and Behavioral Science

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
CIS 268	Java Software Development II or		
CIS 281	Microsoft.NET Web Development .....	4	Program Requirement
CIS 299	Software Development Capstone .....	3	Program Requirement
	Computer Information Systems elective <sup>2</sup> .....	3	Program Requirement
	Humanities, Natural Science or Social/Behavioral Science* .....	3	Humanities, Natural Science or Social and Behavioral Science

1 Students must take at least three credit hours in a mathematics course at the level of MTH 101 or above.

2 Students must take at least six credit hours of electives selected from CAS 260, CIS 243, CIS 244, CIS 268, CIS 281, CIS 286, CSC 121, CSC 122, NET 121, WEB 200, WEB 240, or WEB 250.

+ Students must take nine credit hours in a minimum of two of these areas; three hours must be in a course that meets the World Cultures and Diversity graduation requirement.

### Administrative Assistant Certificate

*This 17 credit-hour certificate program prepares students for positions as business office administrative assistants. Students are introduced to advanced word processing and spreadsheets, to use of the Internet including Web browsing and e-mail, and to the integrated use of word processing, spreadsheet, and presentation software. Students are also introduced to computer skills and business management principles and to business writing. This certificate is the second in a two-certificate sequence: Office Assistant and Administrative Assistant.*

Number	Course Title	Credits
CAS 105	Word Processing Software <sup>1,2</sup> and	
CAS 115	Spreadsheet Software <sup>1,2</sup> and	
CAS 125	Database Software <sup>1,2</sup> or	
CAS 160	Introduction to Business Software Packages .....	3
CAS 135	Presentation Software <sup>1</sup> .....	1
CAS 205	Advanced Word Processing Software <sup>1</sup> .....	1
CAS 215	Advanced Spreadsheet Software <sup>1</sup> .....	1
CAS 290	Office Assistant Capstone <sup>1</sup> .....	2
CIS 100	Computer and Digital Literacy or	
CIS 101	Introduction to Computer Information Systems .....	3
ENG 130	Business Writing <sup>3</sup> .....	3
MGT 111	Introduction to Business Organization .....	3

1,2 This course is included in the Office Assistant certificate. Students may take CAS 105, 115 and 125 OR CAS 160 to satisfy this requirement.

1 This course is included in the Office Assistant certificate.

3 Placement test scores required.

### Computer Support Technician Certificate

*This 6 credit-hour certificate program provides students with experience installing, configuring, maintaining and troubleshooting computer hardware and operating systems. These courses will help students prepare for the CompTIA A+ certification exams and qualify for entry-level jobs as computer support technicians.*

#### Required:

Number	Course Title	Credits
NET 111	A+ Hardware .....	3
NET 112	A+ Operating Systems Technologies .....	3

## COMPUTER INFORMATION SYSTEMS

### Computers in Business Certificate

*This is a 15 credit-hour certificate program designed to familiarize a student with the business uses of computers. The student will gain exposure to computer concepts and computer software. This exposure will be useful to the person whose job or business requires the use of a computer.*

#### Required:

Number	Course Title	Credits
CAS 105	Word Processing Software and	
CAS 115	Spreadsheet Software and	
CAS 125	Database Software or	
CAS 160	Introduction to Business Software Packages .....	3
CIS 100	Computer and Digital Literacy or	
CIS 101	Introduction to Computer Information Systems .....	3

#### Electives: Select nine credit hours from the following:

Students must satisfy prerequisites for each course selected.

Number	Course Title	Credits
CAS 135	Presentation Software .....	1
CAS 175	Desktop Publishing Software .....	1
CAS 205	Advanced Word Processing Software .....	1
CAS 215	Advanced Spreadsheet Software .....	1
CIS 106	Computer Logic and Programming Technology .....	3
CIS 137	Computer Internship I .....	3
CIS 220	Topics in Computer Information Systems .....	3
CIS 230	Computer Programmer Internship .....	3
NET 105	IT Fundamentals .....	3
NET 111	A+ Hardware .....	3
NET 112	A+ Operating Systems Technologies .....	3
NET 121	Introduction to Networking .....	3
WEB 101	Internet Fundamentals .....	1
WEB 150	Web Foundations .....	3
WEB 170	Web Graphics and Prototyping .....	3
WEB 180	Web Multimedia .....	3
WEB 220	Flash Multimedia II .....	3

### Database Management Certificate

*This 12 credit-hour certificate program provides students with experience designing, implementing and administering relational databases using Structured Query Language (SQL). These courses will help students prepare for entry-level jobs as database analysts.*

#### Required:

Number	Course Title	Credits
CAS 160	Introduction to Business Software Packages .....	3
CIS 143	Introduction to Database Systems .....	3
CIS 243	Database Administration .....	3
CIS 244	Database Design and Implementation .....	3

### Office Assistant Certificate

*This 8 credit-hour certificate program prepares students for positions as assistants in a business office. Students are introduced to advanced word processing and spreadsheets, to use of the Internet including Web browsing and e-mail, and to integrated use of word processing, spreadsheet, and presentation software. Students are also introduced to office skills such as time and records management and collaboration. This certificate is the first in a two-certificate sequence and may be followed by the Administrative Assistant certificate.*

Number	Course Title	Credits
CAS 105	Word Processing Software <sup>1</sup> and	
CAS 115	Spreadsheet Software <sup>1</sup> and	
CAS 125	Database Software <sup>1</sup> or	
CAS 160	Introduction to Business Software Packages .....	3
CAS 135	Presentation Software .....	1
CAS 205	Advanced Word Processing Software .....	1
CAS 215	Advanced Spreadsheet Software .....	1
CAS 290	Office Assistant Capstone .....	2

## COMPUTER INFORMATION SYSTEMS

<sup>1</sup> Students may take CAS 105, 115 and 125 OR CAS 160 to satisfy this requirement.

### Software Development Certificate

*This 23 credit-hour certificate program is designed to prepare students for business software development using either Microsoft .NET or Sun Java. The student will be prepared for an entry-level software development position.*

#### Required:

Number	Course Title	Credits
CAS 160	Introduction to Business Software Packages .....	3
CIS 101	Introduction to Computer Information Systems .....	3
CIS 106	Computer Logic and Programming Technology <sup>1</sup> .....	3
CIS 143	Introduction to Database Systems <sup>1</sup> .....	3
WEB 150	Web Foundations .....	3

#### Electives: Choose eight credit hours from either:

Number	Course Title	Credits
CIS 168	Java Software Development I and	
CIS 268	Java Software Development II or	
CIS 182	Visual C# Software Development and	
CIS 281	Microsoft.NET Web Development .....	8

<sup>1</sup> The prerequisite for CIS 106 is math placement in MTH 101 or higher. The prerequisites for CIS 143 are CAS 160 with a grade of C or better and math placement in MTH 101 or higher. Students should have a strong mathematics background prior to enrollment in software development courses.

## COMPUTER NETWORKING

### Network Administration Certificate

*This 12 credit-hour certificate program provides students with experience in Cisco, Linux, Microsoft, and network security administration. These courses will help students prepare for Cisco CCNA, CompTIA, Linux+ and Security+, and Microsoft MTA certification exams, as well as qualify for entry-level jobs as network support specialists. Students must have CompTIA+ and Network+ certification or similar experience before specializing in network administration. See the Networking Fundamentals Certificate for entry-level courses.*

**Required:**

Number	Course Title	Credits
NET 240	Linux Fundamentals .....	3
NET 260	Windows Server Administration .....	3
NET 270	Cisco Networking (CCNET) .....	3
NET 280	Network Security Fundamentals .....	3

### Network Support Technician Certificate

*This 6 credit-hour certificate program provides students with experience installing, configuring, maintaining and troubleshooting basic network infrastructure. These courses will help students prepare for the CompTIA Network+ certification exam and qualify for entry-level jobs as network support technicians.*

**Required:**

Number	Course Title	Credits
NET 121	Introduction to Networking .....	3
NET 122	Internet Protocols .....	3

### Networking Fundamentals Certificate

*This 18 credit-hour certificate program provides students with experience installing, configuring, maintaining and troubleshooting computer hardware, operating systems, and basic network infrastructure. These courses will help students prepare for the CompTIA A+ and Network+ certification exams and qualify for entry-level jobs as computer and network support technicians.*

**Required:**

Number	Course Title	Credits
NET 105	IT Fundamentals .....	3
NET 111	A+ Hardware .....	3
NET 112	A+ Operating Systems Technologies .....	3
NET 121	Introduction to Networking .....	3
NET 122	Internet Protocols .....	3
NET 201	Service Desk and Service Management .....	3

## DENTAL HYGIENE

### Associate in Applied Science A.A.S.: Dental Hygiene Degree

*This program meets state guidelines and is accredited by the Commission on Dental Accreditation of the American Dental Association.*

*Because of the nature of clinical experiences and individualized instruction required in this program and specialized technology and the equipment necessary to offer this program, a higher tuition rate is assessed for career specific courses. These include courses with the prefix DHY. Tuition for these courses in this program is 200 percent of the standard tuition rate.*

*Prior to receiving a license in the practice of dental hygiene, graduates must successfully complete the program and pass the Dental Hygiene Written National Board exam and a Regional Clinical exam.*

**Admission Requirements:**

*Dental Hygiene is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit harpercollege.edu.*

*Students who apply for this limited enrollment program are obligated to meet the current admission requirements and follow program curriculum as defined at the time of acceptance to the program.*

*Upon admission to the Dental Hygiene program, the mathematics requirement is met.*

### PREREQUISITES:

A grade of C or better in all BIO, CHM, DHY and DIT courses is required for all students.

Number	Course Title	Credits	Course Category
BIO 160	Human Anatomy <sup>1</sup> .....	4	Natural Science
BIO 161	Human Physiology <sup>1</sup> .....	4	Natural Science
CHM 100	Chemistry for the Health Sciences <sup>1</sup> .....	4	Natural Science
ENG 101	Composition .....	3	Communications
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

### FIRST SEMESTER:

A grade of C or better in all BIO, CHM, DHY and DIT courses is required for all students.

Number	Course Title	Credits	Course Category
BIO 130	Microbiology <sup>1</sup> .....	4	Natural Science
DHY 100	Pre-Clinic .....	5	Program Requirement
DHY 159	Head and Neck Anatomy .....	3	Program Requirement
DHY 161	Dental Anatomy .....	2	Program Requirement
DIT 101	Fundamentals of Nutrition <sup>1</sup> .....	3	Natural Science

### SECOND SEMESTER:

A grade of C or better in all BIO, CHM, DHY and DIT courses is required for all students.

Number	Course Title	Credits	Course Category
DHY 101	Clinical Dental Hygiene I .....	5	Program Requirement
DHY 111	Dental Radiology .....	3	Program Requirement
DHY 190	General and Oral Pathology .....	2	Program Requirement
SOC 101	Introduction to Sociology <sup>+</sup> .....	3	Social and Behavioral Science
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### SUMMER SESSION:

A grade of C or better in all BIO, CHM, DHY and DIT courses is required for all students.

Number	Course Title	Credits	Course Category
DHY 119	Oral Health Management of Special Needs Populations .....	2	Program Requirement
DHY 151	Clinical Dental Hygiene II .....	2	Program Requirement
DHY 269	Science of Dental Materials .....	1	Program Requirement
DHY 270	Dental Materials Laboratory Techniques .....	1	Program Requirement

### THIRD SEMESTER:

A grade of C or better in all BIO, CHM, DHY and DIT courses is required for all students.

Number	Course Title	Credits	Course Category
DHY 200	Periodontology .....	2	Program Requirement
DHY 202	Radiology I .....	1	Program Requirement
DHY 220	Community Dental Health I .....	2	Program Requirement
DHY 230	Pain Management .....	2	Program Requirement
DHY 240	Dental Pharmacology .....	2	Program Requirement
DHY 250	Clinical Dental Hygiene III .....	5	Program Requirement

## DENTAL HYGIENE

**FOURTH SEMESTER:**

A grade of C or better in all BIO, CHM, DHY and DIT courses is required for all students.

Number	Course Title	Credits	Course Category
DHY 201	Ethics, Jurisprudence and Practice Management .....	2	Program Requirement
DHY 203	Radiology II .....	1	Program Requirement
DHY 221	Community Dental Health II .....	2	Program Requirement
DHY 251	Clinical Dental Hygiene IV .....	5	Program Requirement

- 1 Must be completed with a grade of C or better no earlier than five years prior to beginning the Dental Hygiene program.
- + This course meets the World Cultures and Diversity graduation requirement.

## DIAGNOSTIC CARDIAC SONOGRAPHY

### Associate in Applied Science A.A.S.: Diagnostic Cardiac Sonography Degree

This 69 credit-hour program prepares the graduate to be a diagnostic cardiac sonographer. A diagnostic cardiac sonographer is a highly skilled professional who uses specialized ultrasound equipment to record visual images of the heart. They work in hospitals and outpatient settings producing these echocardiograms to assist the physician in diagnosing heart disease. This degree prepares the graduate to secure their American Registry of Diagnostic Medical Sonography credential and entry-level work in the adult echo specialty area. The graduate also receives instruction in basic vascular sonography as well as EKG-related diagnostic testing. A clinical hospital experience in echocardiography is provided.

Because of the nature of clinical experiences and individualized instruction required in this program and specialized technology and the equipment necessary to offer this program, a higher tuition rate is assessed for career-specific courses including courses with the DCS prefix. Tuition for the courses in this program is 200 percent of the standard tuition rate.

#### Admission Requirements:

Diagnostic Cardiac Sonography is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit [harpercollege.edu](http://harpercollege.edu). Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

#### PREREQUISITES:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
BIO 160	Human Anatomy <sup>1</sup> .....	4	Natural Science
BIO 161	Human Physiology <sup>1</sup> .....	4	Natural Science
ENG 101	Composition .....	3	Communications
	Mathematics <sup>2</sup> .....	3	Mathematics
PHY 100	Basic Concepts in Physics <sup>3</sup> .....	3	Natural Science

#### FIRST SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DCS 101	Electrocardiography I .....	2	Program Requirement
DCS 105	Ultrasound Physics/Instrumentation 1 .....	2	Program Requirement
DCS 107	Sonography Theory I .....	2	Program Requirement
DCS 109	Sonography Lab I <sup>4</sup> .....	1	Program Requirement
HSC 107	Basic Health Care Skills .....	1	Program Requirement
HSC 112	Medical Terminology .....	2	Program Requirement
HSC 165	Basic Pharmacology .....	1	Program Requirement

#### SECOND SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DCS 102	Electrocardiography II .....	2	Program Requirement
DCS 106	Ultrasound Physics/Instrumentation 2 .....	2	Program Requirement
DCS 108	Sonography Theory II .....	2	Program Requirement
DCS 110	Sonography Lab II <sup>4</sup> .....	1	Program Requirement
HSC 104	Health Care Technology and Informatics .....	2	Program Requirement
HSC 213	Legal and Ethical Issues in Health Care .....	2	Program Requirement

#### SUMMER SESSION (Optional):

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DCS 112	Sonography Lab III <sup>5</sup> .....	1	Program Requirement

#### THIRD SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DCS 204	Cardiovascular Principles .....	3	Program Requirement
DCS 207	Cardiac Sonography Theory I .....	5	Program Requirement
DCS 209	Cardiac Sonography Lab I <sup>4</sup> .....	2	Program Requirement
	Humanities or Social and Behavioral Science <sup>+</sup> .....	3	Humanities or Social and Behavioral Science

## DIAGNOSTIC CARDIAC SONOGRAPHY

### FOURTH SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DCS 208	Cardiac Sonography Theory II .....	5	Program Requirement
DCS 210	Cardiac Sonography Lab II <sup>4</sup> .....	2	Program Requirement
DCS 220	Intro to Cardiac Sonog Clinical .....	2	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### SUMMER SESSION:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DCS 230	Cardiac Sonography Clinical <sup>6</sup> .....	5	Program Requirement
DCS 260	Advanced Sonography Seminar <sup>5</sup> .....	1	Program Requirement

- 1 Must be completed no earlier than five years prior to beginning the DCS program; time requirement may be waived for direct patient care providers with a minimum of a two-year allied health care degree.
- 2 MTH 165 is recommended. MTH 101, MTH 103, or higher with a grade of C or better may be substituted.
- 3 PHS 111 or PHY 121 or higher with a grade of C or better may be substituted.
- 4 Every credit hour of sonography lab requires a minimum of 2 hours per week sonography lab practice.
- 5 This course is optional and not required for graduation.
- + Students need to choose a course to meet this requirement that also fulfills the World Cultures and Diversity graduation requirement.
- 6 Assignments will be based on site availability.



## DIAGNOSTIC MEDICAL SONOGRAPHY

### Associate in Applied Science A.A.S.: Diagnostic Medical Sonography Degree

This 71 credit-hour program prepares the graduate to be a diagnostic medical sonographer. A diagnostic medical sonographer is a highly skilled professional who uses specialized ultrasound equipment to record visual images of internal structures of the abdomen, pelvis and neck. They work in hospitals and outpatient settings producing these ultrasounds to assist the physician in diagnosing disease. This degree program prepares the graduate to secure their American Registry of Diagnostic Medical Sonography credentials and entry-level work in the abdomen and obstetrics/gynecology specialty areas. The graduate also receives instruction in vascular sonography. A clinical hospital experience in abdominal, small parts, vascular, obstetrical and gynecological ultrasound is provided.

Because of the nature of clinical experiences and individualized instruction required in this program and specialized technology and the equipment necessary to offer this program, a higher tuition rate is assessed for career-specific courses, including courses with the DMS prefix. Tuition for these courses in this program is 200 percent of the standard tuition rate.

#### Admission Requirements:

Diagnostic Medical Sonography is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit [harpercollege.edu](http://harpercollege.edu)

Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

#### PREREQUISITES:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
BIO 160	Human Anatomy <sup>1</sup>	4	Natural Science
BIO 161	Human Physiology <sup>1</sup>	4	Natural Science
ENG 101	Composition	3	Communications
	Mathematics <sup>2</sup>	3	Mathematics
PHY 100	Basic Concepts in Physics <sup>3</sup>	3	Natural Science

#### FIRST SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DMS 105	Ultrasound Physics/Instrumentation 1	2	Program Requirement
DMS 107	Sonography Theory I	2	Program Requirement
DMS 109	Sonography Lab I <sup>4</sup>	1	Program Requirement
HSC 107	Basic Health Care Skills	1	Program Requirement
HSC 112	Medical Terminology	2	Program Requirement
HSC 165	Basic Pharmacology	1	Program Requirement
	Humanities or Social and Behavioral Science <sup>+</sup>	3	Humanities or Social and Behavioral Science

#### SECOND SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DMS 106	Ultrasound Physics/Instrumentation 2	2	Program Requirement
DMS 108	Sonography Theory II	2	Program Requirement
DMS 110	Sonography Lab II <sup>4</sup>	1	Program Requirement
HSC 104	Health Care Technology and Informatics	2	Program Requirement
HSC 213	Legal and Ethical Issues in Health Care	2	Program Requirement
SPE 101	Fundamentals of Speech Communication	3	Communications

#### SUMMER SESSION (Optional):

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DMS 112	Sonography Lab III <sup>5</sup>	1	Program Requirement

#### THIRD SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DMS 201	Introduction to the Medical Sonography Clinical	2	Program Requirement
DMS 204	Abdominal and Small Parts Sonography Theory I	4	Program Requirement
DMS 205	Obstetrical and Gynecological Sonography Theory I	3	Program Requirement
DMS 206	Medical Sonography Lab I <sup>4</sup>	2	Program Requirement

## DIAGNOSTIC MEDICAL SONOGRAPHY

### FOURTH SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DMS 207	Medical Sonography Clinical I <sup>6</sup> .....	5	Program Requirement
DMS 208	Abdominal and Small Parts Sonography Theory 2 .....	4	Program Requirement
DMS 209	Medical Sonography Lab II <sup>4</sup> .....	2	Program Requirement
DMS 210	Obstetrical and Gynecological Sonography Theory II .....	3	Program Requirement

### SUMMER SESSION:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
DMS 211	Medical Sonography Clinical II <sup>6</sup> .....	5	Program Requirement
DMS 260	Advanced Sonography Seminar <sup>5</sup> .....	1	Program Requirement

- 1 Must be completed no earlier than five years prior to beginning the DMS program; time requirement may be waived for direct patient care providers with a minimum of a two-year allied health care degree.
- 2 MTH 165 is recommended. MTH 101, 103 or higher with a grade of C or better may be substituted.
- 3 PHS 111 or PHY 121 or higher with a grade of C or better may be substituted.
- 4 Every credit hour of sonography lab requires a minimum of 2 hours per week sonography lab practice.
- + Students need to choose a course to meet this requirement that also fulfills the World Cultures and Diversity graduation requirement.
- 5 This course is optional and not required for graduation.
- 6 Assignments will be based on site availability.

## DIETETICS

### Associate in Applied Science A.A.S.: Dietetic Technician Degree

*This 62 credit-hour program prepares graduates to work in partnership with a Registered Dietitian in a variety of settings such as hospitals, nursing homes, schools, community health programs, food companies and wellness centers. The dietetic technician screens clients for nutritional risk, assists in the provision of nutrition care including nutrition education and supervises food production and service.*

*The Dietetic Technician program is currently granted accreditation by the Accreditation Council for Education in Nutrition and Dietetics of the Academy of Nutrition and Dietetics, 120 Riverside Plaza, Chicago, IL, 60606-6995, 312.899.5400. Graduates of the program receive a verification statement and are eligible to take the registration examination for Dietetic Technicians to become a Dietetic Technician, Registered (DTR).*

*The Dietetic Technician program may be taken on a part-time basis and not all courses in the program are offered every semester. To help avoid scheduling conflicts a planning session with the coordinator is recommended.*

#### FIRST SEMESTER:

A grade of C or better in all BIO, DIT, FSM, HSC and MGT courses is required.

Number	Course Title	Credits	Course Category
BIO 135	Introduction to Human Anatomy and Physiology <sup>1</sup>	4	Natural Science
DIT 101	Fundamentals of Nutrition	3	Program Requirement
DIT 103	The Nutrition Care Process	3	Program Requirement
DIT 220	Food Systems Administration	3	Program Requirement
FSM 114	Food Standards and Sanitation	2	Program Requirement
HSC 112	Medical Terminology	2	Program Requirement

#### SECOND SEMESTER:

A grade of C or better in all BIO, DIT, FSM, HSC and MGT courses is required.

Number	Course Title	Credits	Course Category
BIO 136	Introduction to Human Disease <sup>1</sup>	3	Natural Science
DIT 102	Medical Nutrition Therapy	3	Program Requirement
DIT 150	Dietetic Clinical Laboratory I	5	Program Requirement
ENG 101	Composition	3	Communications
	Mathematics <sup>2</sup>	3	Mathematics

#### THIRD SEMESTER:

A grade of C or better in all BIO, DIT, FSM, HSC and MGT courses is required.

Number	Course Title	Credits	Course Category
DIT 110	Principles of Food Preparation	3	Program Requirement
DIT 200	Dietetic Clinical Laboratory II	4	Program Requirement
DIT 201	Nutrition Education Techniques	3	Program Requirement
FSM 212	Hospitality Supervision or		
MGT 160	Principles of Supervision	3	Program Requirement
HSC 165	Basic Pharmacology	1	Program Requirement

#### FOURTH SEMESTER:

A grade of C or better in all BIO, DIT, FSM, HSC and MGT courses is required.

Number	Course Title	Credits	Course Category
DIT 202	Nutrition Care Seminar	3	Program Requirement
DIT 205	World Cultures and Food <sup>+</sup>	3	Program Requirement
DIT 250	Dietetic Clinical Laboratory III	2	Program Requirement
PSY 101	Introduction to Psychology	3	Social and Behavioral Science
SPE 101	Fundamentals of Speech Communication	3	Communications

<sup>1</sup> BIO 160 and BIO 161 may be substituted for BIO 135 and BIO 136.

<sup>2</sup> A competency test, available in the Testing Center, may be utilized to meet the mathematics requirement (MTH 065 or higher). Students who utilize the competency test to meet the mathematics requirement must complete a three credit-hour elective. (DIT 225 is highly recommended or select from Groups 1-5.)

<sup>+</sup> This course meets the World Cultures and Diversity graduation requirement.

### Dietary Manager Certificate

*This 19 credit-hour certificate program is designed for persons who desire a position in health care food service supervision. Food service personnel working in nutrition related fields who would like to enhance their management and clinical skills and promotion opportunities may also benefit from this program of study.*

*A dietary manager performs supervisory and clinical duties necessary to meet the basic nutritional needs of individuals. Supervision of employees, assuring menu acceptance by clients and managing food production are several of the responsibilities of a dietary manager.*

## DIETETICS

*The curriculum is approved by the Association for Nutrition and Food Service Professionals. Students who complete the 19 credit-hour certificate are eligible to take a national certification examination.*

### First Semester

A grade of C or better in all DIT and FSM courses is required for all students.

Number	Course Title	Credits
DIT 101	Fundamentals of Nutrition .....	3
DIT 103	The Nutrition Care Process .....	3
DIT 220	Food Systems Administration .....	3
FSM 114	Food Standards and Sanitation .....	2

### Second Semester

A grade of C or better in all DIT and FSM courses is required for all students.

Number	Course Title	Credits
DIT 102	Medical Nutrition Therapy .....	3
DIT 150	Dietetic Clinical Laboratory I .....	5

## EARLY CHILDHOOD EDUCATION

### Associate in Applied Science A.A.S.: Early Childhood Education Degree - Director

The 60 credit-hour curriculum is designed to provide students with the requisite skills and theoretical knowledge to work in a variety of facilities for young children as a director for half-day and full-day early childhood centers.

Upon completion of courses for the specialized area of director, demonstration of proof of First Aid/CPR certification and verification of 1200 hours of management experience, students need to complete an IL Gateways application to qualify for the Illinois Director Credential Level 1.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ECE 101	Introduction to Early Childhood Education .....	3	Program Requirement
ECE 102	Child Development .....	3	Program Requirement
ECE 115	Principles of Early Childhood Curriculum .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ECE 253	Administration of Early Childhood Programs .....	3	Program Requirement
ECE 226	Assessment and Guidance .....	3	Program Requirement
ECE 250	Health, Nutrition and Safety .....	3	Program Requirement
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
MGT 160	Principles of Supervision .....	3	Program Requirement

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ECE 252	Child-Family-Community .....	3	Program Requirement
EDU 219	Students With Disabilities in School .....	3	Program Requirement
EDU 250	Introduction to Technology in Education .....	3	Program Requirement
	Natural Science <sup>2</sup> .....	3	Natural Science
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ECE 254	Interpersonal Relationships in Early Child Education .....	1	Program Requirement
ECE 293	Early Childhood Director Practicum .....	3	Program Requirement
	ECE elective <sup>3</sup> .....	3	Program Requirement
FSM 114	Food Standards and Sanitation .....	2	Program Requirement
	Humanities <sup>+</sup> .....	3	Humanities
MKT 245	Principles of Marketing .....	3	Program Requirement

<sup>1</sup> Students must take at least 3 credit hours in a mathematics course, MTH 065 or higher.

<sup>2</sup> Natural Science elective: BIO 101, BIO 103 or BIO 105.

<sup>3</sup> ECE elective: Any ECE course.

<sup>+</sup> Humanities elective: HST 210, HUM 110 or MUS 104. All courses meet the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Early Childhood Education Degree - Family Child Care

The 60 credit-hour curriculum is designed to provide students with the requisite skills and theoretical knowledge to work in a variety of facilities for young children as a teacher or director for half-day and full-day early childhood centers, a teacher's assistant in academic at-risk, special needs and public school classrooms, resource and referral agencies, before/after school care, recreational programs and related settings.

Upon completion of courses for the specialized area of Family Child Care, students need to complete an IL Gateways application to qualify for the Family Child Care Credential Level 4.

#### FIRST SEMESTER

Number	Course Title	Credits	Course Category
ECE 101	Introduction to Early Childhood Education .....	3	Program Requirement
ECE 102	Child Development .....	3	Program Requirement
ECE 115	Principles of Early Childhood Curriculum .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics

## EARLY CHILDHOOD EDUCATION

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ECE 111	Infant/Toddler Programs .....	3	Program Requirement
ECE 140	Family Child Care Management .....	3	Program Requirement
ECE 226	Assessment and Guidance .....	3	Program Requirement
ECE 250	Health, Nutrition and Safety .....	3	Program Requirement
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science
ECE 252	Child-Family-Community .....	3	Program Requirement
ECE 291	Early Childhood Practicum I .....	3	Program Requirement
EDU 219	Students With Disabilities in School .....	3	Program Requirement
	Natural Science <sup>2</sup> .....	3	Natural Science

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ECE 209	Language Development and Activities for the Young Child .....	3	Program Requirement
ECE 235	Principles of School Age Care .....	3	Program Requirement
ECE 290	Family Child Care Practicum .....	3	Program Requirement
	ECE elective <sup>3</sup> .....	3	Program Requirement
	Humanities <sup>+</sup> .....	3	Humanities

1 Students must take at least 3 credit hours in a mathematics course, MTH 065 or higher.

2 Natural Science elective: BIO 101, BIO 103, or BIO 105.

3 ECE elective: ECE 210 or ECE 221.

+ Humanities elective: HST 210, HUM 110 or MUS 104. All courses meet the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Early Childhood Education Degree - Teacher

*The 60 credit-hour curriculum is designed to provide students with the requisite skills and theoretical knowledge to work in a variety of facilities for young children. Upon completion of courses for the specialized area of teacher, students need to complete an IL Gateways application to qualify for the Illinois ECE Credential Level 4 and Illinois Infant/Toddler Credential Level 4.*

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ECE 101	Introduction to Early Childhood Education .....	3	Program Requirement
ECE 102	Child Development .....	3	Program Requirement
ECE 115	Principles of Early Childhood Curriculum .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ECE 111	Infant/Toddler Programs .....	3	Program Requirement
ECE 209	Language Development and Activities for the Young Child .....	3	Program Requirement
ECE 226	Assessment and Guidance .....	3	Program Requirement
ECE 250	Health, Nutrition and Safety .....	3	Program Requirement
EDU 219	Students With Disabilities in School .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ECE 210	Creative Activities for Young Children .....	3	Program Requirement
ECE 291	Early Childhood Practicum I .....	3	Program Requirement
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
	Natural Science <sup>2</sup> .....	3	Natural Science
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

## EARLY CHILDHOOD EDUCATION

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ECE 252	Child-Family-Community .....	3	Program Requirement
ECE 221	Math and Science for the Young Child .....	3	Program Requirement
ECE 292	Early Childhood Practicum II .....	3	Program Requirement
	ECE elective <sup>3</sup> .....	3	Program Requirement
	Humanities <sup>+</sup> .....	3	Humanities

- 1 Students must take at least 3 credit hours in a mathematics course, MTH 065 or higher.  
 2 Natural Science elective: BIO 101, BIO 103, or BIO 105.  
 3 ECE elective: Any ECE course.  
 + Humanities elective: HST 210, HUM 110 or MUS 104. All courses meet the World Cultures and Diversity graduation requirement.

### Early Childhood Education: Assistant Teacher Certificate

*This 18 credit-hour curriculum will qualify students for the Illinois ECE Credential-Level 2. Students will need to complete an IL Gateways application. This certificate program will provide an assistant teacher in a licensed child care facility with basic knowledge in early childhood care and education.*

#### Required:

Number	Course Title	Credits
ECE 101	Introduction to Early Childhood Education .....	3
ECE 102	Child Development .....	3
ECE 115	Principles of Early Childhood Curriculum .....	3
ECE 226	Assessment and Guidance .....	3
ECE 250	Health, Nutrition and Safety .....	3
ECE 252	Child-Family-Community .....	3

### Early Childhood Education: Before/After School Care Certificate

*This six credit-hour certificate program provides basic knowledge about developmentally appropriate programming and guidance for school age care.*

#### Required:

Number	Course Title	Credits
ECE 226	Assessment and Guidance .....	3
ECE 235	Principles of School Age Care .....	3

### Early Childhood Education: Family Child Care I Certificate

*This 15 credit-hour curriculum will qualify students for the Illinois Family Child Care Credential - Level 2. Students will need to complete an IL Gateways application. This certificate program will provide a family child care teacher with basic knowledge in family child care and early childhood care and education.*

#### Required

Number	Course Title	Credits
ECE 101	Introduction to Early Childhood Education .....	3
ECE 102	Child Development .....	3
ECE 115	Principles of Early Childhood Curriculum .....	3
ECE 140	Family Child Care Management .....	3
ECE 250	Health, Nutrition and Safety .....	3

### Early Childhood Education: Family Child Care II Certificate

*This 36 credit-hour curriculum will qualify students for the Illinois Family Child Care Credential Level 3. Students will need to complete an IL Gateways application. This certificate meets the minimal educational requirements established by the Illinois Department of Children and Family Services for an early childhood teacher who has also obtained one year of experience in a licensed center.*

#### Required Early Childhood Education Courses:

Number	Course Title	Credits
ECE 101	Introduction to Early Childhood Education .....	3
ECE 102	Child Development .....	3
ECE 115	Principles of Early Childhood Curriculum .....	3
ECE 140	Family Child Care Management .....	3
ECE 226	Assessment and Guidance .....	3

## EARLY CHILDHOOD EDUCATION

ECE 250	Health, Nutrition and Safety .....	3
ECE 252	Child-Family-Community .....	3
ECE 290	Family Child Care Practicum .....	3
EDU 219	Students With Disabilities in School .....	3

### Required General Education Courses:

Number	Course Title	Credits
ENG 101	Composition .....	3
	Mathematics <sup>1</sup> .....	3
PSY 101	Introduction to Psychology .....	3

<sup>1</sup> A competency exam, available in the Testing Center, may be utilized to meet the mathematics requirement (MTH 065 or higher). Students who use the competency test to meet the mathematics requirement must take SOC 101.

### Early Childhood Education: Infant/Toddler Certificate

*This 15 credit-hour certificate program will qualify students for the Illinois Infant Toddler Credential - Level 2. Students will need to complete an IL Gateways application. This certificate will provide an assistant teacher in a licensed child care facility with basic knowledge in infant/toddler care and education.*

#### Required:

Number	Course Title	Credits
ECE 101	Introduction to Early Childhood Education .....	3
ECE 102	Child Development .....	3
ECE 111	Infant/Toddler Programs .....	3
ECE 115	Principles of Early Childhood Curriculum .....	3
ECE 250	Health, Nutrition and Safety .....	3

### Early Childhood Education: Teacher Certificate

*This 30 credit-hour curriculum will qualify students for the Illinois ECE Credential Level 3 and the Infant/Toddler Credential-Level 3. Students will need to complete an IL Gateways application. This certificate program meets the minimal educational requirements established by the Illinois Department of Children and Family Services for an early childhood teacher who has also obtained one year of experience in a licensed center.*

#### Required Early Childhood Education Courses:

Number	Course Title	Credits
ECE 101	Introduction to Early Childhood Education .....	3
ECE 102	Child Development .....	3
ECE 115	Principles of Early Childhood Curriculum .....	3
ECE 226	Assessment and Guidance .....	3
ECE 250	Health, Nutrition and Safety .....	3
ECE 252	Child-Family-Community .....	3
EDU 219	Students With Disabilities in School .....	3

#### Required General Education Courses:

Number	Course Title	Credits
ENG 101	Composition .....	3
	Mathematics <sup>1</sup> .....	3
PSY 101	Introduction to Psychology .....	3

<sup>1</sup> Students must take at least three credit hours of mathematics, MTH 065 or higher.



## ELECTRONICS ENGINEERING TECHNOLOGY

### Associate in Applied Science A.A.S.: Electronics Engineering Technology Degree

This 67 credit-hour program is designed to prepare students for careers in the field of electronics and other related technology industries. The curriculum satisfies general education requirements, and offers courses in mathematics, computer science and physics to cultivate student critical thinking skills. A broad range of electronics courses provides considerable emphasis on analysis and application, or applied technology. Specific electronics technology topics for this program include: electrical laws and principles, network analysis, semiconductor devices and circuits, digital and analog circuits, communications systems, and microprocessors and microcomputers. Additional courses in the industrial electronics area are also available.

Graduates of this program may find employment as technical sales specialists, applications engineers, engineering laboratory technicians, technical writers, manufacturing and quality control technicians, and customer service engineers.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>1</sup> .....	3	Communications
ELT 101	DC Network Analysis .....	4	Program Requirement
ELT 110	Introductory Electronics .....	4	Program Requirement
	Humanities or Social and Behavioral Science* .....	3	Humanities or Social and Behavioral Science
MTH 103	College Algebra .....	3	Mathematics

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>1</sup> .....	3	Communications
	CIS/CSC elective <sup>2</sup> .....	3	Program Requirement
ELT 102	AC Network Analysis .....	4	Program Requirement
ELT 111	Semiconductor Devices and Circuits .....	2	Program Requirement
MTH 140	Precalculus .....	5	Mathematics

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ELT 103	RF Network Analysis .....	4	Program Requirement
ELT 203	Digital Electronics .....	4	Program Requirement
	Humanities or Social and Behavioral Science* .....	3	Humanities or Social and Behavioral Science
PHY 121	Introductory Physics I .....	5	Natural Science

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
ELT 204	Analog Electronics .....	4	Program Requirement
ELT 207	Communications Systems .....	4	Program Requirement
ELT 218	Embedded Microcontroller/Processor Systems .....	4	Program Requirement
PHY 122	Introductory Physics II <sup>3</sup> .....	5	Natural Science

<sup>1</sup> Communications electives must satisfy Associate in Applied Science degree Group 1 requirement.

+ At least one of the Humanities or Social and Behavioral Science requirements must also meet the World Cultures and Diversity graduation requirement. Humanities and Social Science electives must satisfy Associate in Applied Science degree Group 4 or 5 requirements.

<sup>2</sup> CIS/CSC elective must be approved by the program coordinator.

<sup>3</sup> Students may substitute any 5-6 hour combination of ELT 125, ELT 135, ELT 140, ELT 215 courses for PHY 122.

### Alternative Electrical Energy Certificate

This 24 credit-hour certificate program is designed to prepare students for careers in the emerging field of alternative electrical energy installation and service, and other related sustainable electrical power generation and distribution maintenance areas. The curriculum is tailored to provide entry-level career training in the least amount of time. Emphasis is placed on equipment operation, application, installation and servicing. Courses specific to instruction include: basic electricity and electronics, residential/commercial electrical wiring and codes, industrial control systems, and solar and wind power generation. Topics within these courses involve: practical electrical concepts and measurements, digital and analog circuits, hydraulic and pneumatic controls, AC/DC motors, variable frequency drives, industrial motor controls, optics and sensors, and programmable logic controllers.

Students completing this program may find employment as electrical technicians, electrician apprentices, electricians, and facilities or plant maintenance technicians in alternative electrical energy or related fields.

Students may also continue their education by pursuing an Associate in Applied Science degree. Students considering this option are encouraged to meet with the program coordinator and their Student Development Faculty Counselor prior to beginning the program and also when planning their schedule each semester.

## ELECTRONICS ENGINEERING TECHNOLOGY

**Required:**

Number	Course Title	Credits
ELT 110	Introductory Electronics .....	4
ELT 135	Optics and Sensors .....	2
ELT 140	Programmable Logic Controllers .....	2
ELT 142	Electrical Wiring .....	2
ELT 143	Advanced Electrical Wiring .....	2
ELT 144	AC and DC Motors .....	2
ELT 145	Variable Frequency Drives .....	2
ELT 150	Solar Power Generation Systems .....	2
ELT 151	Wind Power Generation Systems .....	2
ELT 215	Industrial Control Systems .....	4

**Electrical Maintenance Certificate**

*This 10 credit-hour certificate program is designed to prepare students for careers in the field of electrical installation and service, and other related facilities or industrial electronics maintenance areas. The curriculum is tailored to provide entry-level career training in the least amount of time. Emphasis is placed on equipment operation, application, installation and servicing. Courses specific to instruction include: basic electricity and electronics, residential/commercial electrical wiring and codes, and industrial control systems. Topics within these courses involve: practical electrical concepts and measurements, digital and analog circuits, hydraulic and pneumatic controls, AC/DC motors, optics and sensors, and programmable logic controllers.*

*Students completing this program may find employment as electrical technicians, electrician apprentices, electricians, and facilities or plant maintenance technicians.*

*Students may also continue their education by pursuing an Associate in Applied Science degree. Students considering this option are encouraged to meet with the program coordinator and their Student Development Faculty Counselor prior to beginning the program, and also when planning their schedule each semester.*

**Required:**

Number	Course Title	Credits
ELT 110	Introductory Electronics .....	4
ELT 142	Electrical Wiring .....	2
ELT 215	Industrial Control Systems .....	4

**Electronics Certificate**

*This 16 credit-hour certificate program is designed to prepare students for careers in the field of electronics and other related technology industries. The curriculum is very flexible as it allows students to choose from a number of electronics courses in many diverse technology areas and is tailored to provide entry-level career training in a relatively short time. A broad range of electronics courses provides considerable emphasis on analysis, operation, application, installation and servicing. Many courses do not require a prerequisite. However, for those courses that do, please consult with the program coordinator.*

*Students completing this program may find employment in various entry-level positions in technical sales, manufacturing and quality control, and customer service.*

*Students may also continue their education by pursuing an Associate in Applied Science degree. Students considering this option are encouraged to meet with the program coordinator and a Student Development Faculty Counselor prior to beginning the program and also when planning their schedule each semester.*

**Electives: Select 16 credit hours from the following courses, provided the combination has program coordinator approval:**

Number	Course Title	Credits
ELT 101	DC Network Analysis .....	4
ELT 102	AC Network Analysis .....	4
ELT 103	RF Network Analysis .....	4
ELT 110	Introductory Electronics .....	4
ELT 111	Semiconductor Devices and Circuits .....	2
ELT 203	Digital Electronics .....	4
ELT 204	Analog Electronics .....	4
ELT 207	Communications Systems .....	4
ELT 208	Advanced Communications Systems .....	4
ELT 215	Industrial Control Systems .....	4
ELT 218	Embedded Microcontroller/Processor Systems .....	4
ELT 281	Topics in Electronics Engineering Technology .....	1-4

## ELECTRONICS ENGINEERING TECHNOLOGY

### Industrial Electronics Maintenance Certificate

This 16 credit-hour certificate program is designed to prepare students for careers in the field of industrial electronics and facilities maintenance, and other related technology maintenance areas. The curriculum is tailored to provide intermediate-level career training in the least amount of time. Emphasis is placed on equipment operation, application, installation and servicing. Courses specific to instruction include: basic electricity and electronics, residential/commercial electrical wiring and codes, and industrial control systems. Topics within these courses involve: practical electrical concepts and measurements, digital and analog circuits, hydraulic and pneumatic controls, AC/DC motors, electrical and electronic controls, variable frequency drives, optics and sensors, and programmable logic controllers.

Students completing this program may find employment as electrical technicians, electrician apprentices, electricians, and facilities or plant maintenance technicians.

Students may also continue their education by pursuing an Associate in Applied Science degree. Students considering this option are encouraged to meet with the program coordinator and their Student Development Faculty Counselor prior to beginning the program, and also when planning their schedule each semester.

#### Required:

Number	Course Title	Credits
ELT 110	Introductory Electronics .....	4
ELT 142	Electrical Wiring .....	2
ELT 215	Industrial Control Systems .....	4

#### Electives: Select six credit hours from the following:

Number	Course Title	Credits
ELT 120	Introductory Industrial Electronics Maintenance .....	2
ELT 135	Optics and Sensors .....	2
ELT 140	Programmable Logic Controllers .....	2
ELT 143	Advanced Electrical Wiring .....	2
ELT 144	AC and DC Motors .....	2
ELT 146	Industrial Motor Controls .....	2

### Mechatronics Certificate

This 24 credit-hour certificate program is designed to prepare students for careers in the field of industrial electronics and facilities maintenance, and other related technology maintenance areas. The curriculum is tailored to provide advanced-level career training in the least amount of time. Emphasis is placed on equipment operation, application, installation and servicing. Courses specific to instruction include: basic electricity and electronics, residential/commercial electrical wiring and codes, and industrial control systems. Topics within these courses involve practical electrical concepts and measurements, digital and analog circuits, hydraulic and pneumatic controls, AC/DC motors, electrical and electronic controls, variable frequency drives, optics and sensors, and programmable logic controllers.

Students completing this program may find employment as electrical technicians, electricians, and facilities or plant maintenance technicians and supervisors.

Students may also continue their education by pursuing an Associate in Applied Science degree. Students considering this option are encouraged to meet with the program coordinator and their Student Development Faculty Counselor prior to beginning the program, and also when planning their schedule each semester.

#### Required:

Number	Course Title	Credits
ELT 110	Introductory Electronics .....	4
ELT 120	Introductory Industrial Electronics Maintenance .....	2
ELT 140	Programmable Logic Controllers .....	2
ELT 142	Electrical Wiring .....	2
ELT 143	Advanced Electrical Wiring .....	2
ELT 215	Industrial Control Systems .....	4

#### Electives: Select eight credit hours from the following courses:

Number	Course Title	Credits
ELT 125	Fiber Optics .....	2
ELT 135	Optics and Sensors .....	2
ELT 144	AC and DC Motors .....	2
ELT 145	Variable Frequency Drives .....	2
ELT 146	Industrial Motor Controls .....	2
ELT 147	Radio Frequency ID Systems .....	2
ELT 161	Industrial Control Applications .....	4

## ELECTRONICS ENGINEERING TECHNOLOGY

### Radio Frequency ID (RFID) Electronics Certificate

*This 16 credit-hour certificate program is designed to prepare students for careers in the field of radio frequency identification (RFID) systems and other related technology industries. A broad range of courses provides the student with a solid foundation in electronics, industrial controls and maintenance techniques, wireless communications systems and radio frequency identification systems. Contemporary RFID applications relevant to current industry needs such as material handling and transportation, electronic warehousing, inventory tracking and control, and potential homeland security applications are also examined. The curriculum is tailored to provide entry-level career training in a relatively short time. Emphasis is placed on system analysis, and equipment operation, application, installation and servicing while focusing on radio frequency and microwave technologies.*

*Students completing this program may find employment in various entry-level positions in technical sales, applications engineering, and customer or field service.*

*Students may also continue their education by pursuing as Associate in Applied Science degree. Students considering this option are encouraged to meet with the program coordinator and a Student Development Faculty Counselor prior to beginning the program and also when planning their schedule each semester.*

#### Required:

Number	Course Title	Credits
ELT 110	Introductory Electronics .....	4
ELT 120	Introductory Industrial Electronics Maintenance .....	2
ELT 147	Radio Frequency ID Systems .....	2
ELT 207	Communications Systems .....	4
ELT 215	Industrial Control Systems .....	4

## EMERGENCY AND DISASTER MANAGEMENT

### Associate in Applied Science A.A.S.: Emergency and Disaster Management Degree

*This 61 credit-hour program is intended to meet the needs of men and women in emergency management roles at the local, state and federal levels in order to advance in the emergency management career field. Opportunities for graduates include Emergency Manager Specialist, Emergency Services Manager, Emergency Management Planner, Emergency Operations Director, Environmental Compliance Planner, and Emergency Disaster Coordinator.*

#### FIRST SEMESTER:

A grade of C or better in all EMG courses is required for all students.

Number	Course Title	Credits	Course Category
EMG 101	Introduction to Emergency Management .....	3	Program Requirement
EMG 253	Ideologies of Terrorism .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
FIS 132	Hazardous Materials .....	3	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics

#### SECOND SEMESTER:

A grade of C or better in all EMG courses is required for all students.

Number	Course Title	Credits	Course Category
EMG 103	Leadership, Influence, Decision Making and Problem Solving ....	3	Program Requirement
EMG 107	Incident Management Systems .....	3	Program Requirement
EMG 155	Social Dimensions of Disaster .....	3	Program Requirement
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### THIRD SEMESTER:

A grade of C or better in all EMG courses is required for all students.

Number	Course Title	Credits	Course Category
EMG 150	Public Information, Education and Community Relations .....	3	Program Requirement
EMG 153	Hazard Analysis and Mitigation .....	3	Program Requirement
EMG 201	International Disaster Management .....	3	Program Requirement
	Humanities <sup>+</sup> .....	3	Humanities
	Natural Science .....	3	Natural Science

#### FOURTH SEMESTER:

A grade of C or better in all EMG courses is required for all students.

Number	Course Title	Credits	Course Category
EMG 299	Emergency Management Systems Practicum .....	1	Program Requirement
	Electives <sup>2</sup> .....	12	Program Requirement
FIS 260	Emergency Services Safety .....	3	Program Requirement

<sup>1</sup> Students must take at least three credit hours in a mathematics course at the level of MTH 080 or above, or MGT 150 (Business Math).

<sup>+</sup> Students need to choose a course to meet this requirement that also fulfills the World Cultures and Diversity graduation requirement.

<sup>2</sup> Select at least 12 credit hours from the following courses: EMG 131, EMG 151, EMG 205, EMG 231, EMG 251, FIS 121, FIS 230, FIS 250, FIS 270

### Emergency and Disaster Management Certificate

*This 30 credit-hour certificate program is intended to meet the needs of men and women in emergency management roles at the local, state and federal levels to enter the emergency management career field. Opportunities for graduates include Emergency Manager Specialist, Emergency Services Manager, Emergency Management Planner, Emergency Operations Director, Environmental Compliance Planner, and Emergency Disaster Coordinator.*

#### Required:

A grade of C or better in all EMG courses is required for all students.

Number	Course Title	Credits
EMG 101	Introduction to Emergency Management .....	3
EMG 107	Incident Management Systems .....	3
EMG 150	Public Information, Education and Community Relations .....	3
EMG 155	Social Dimensions of Disaster .....	3
EMG 253	Ideologies of Terrorism .....	3
FIS 260	Emergency Services Safety .....	3

## EMERGENCY AND DISASTER MANAGEMENT

### Electives: Select at least 12 credit hours from the following courses:

A grade of C or better in all EMG courses is required for all students.

Number	Course Title	Credits
EMG 103	Leadership, Influence, Decision Making and Problem Solving .....	3
EMG 131	Public Safety Dispatcher I .....	3
EMG 151	Emergency Management Policy and Planning .....	3
EMG 153	Hazard Analysis and Mitigation .....	3
EMG 201	International Disaster Management .....	3
EMG 205	Crisis Exercise Design and Evaluation .....	3
EMG 231	Public Safety Dispatcher II .....	3
EMG 251	Select Problems in Emergency Management .....	3
EMG 299	Emergency Management Systems Practicum .....	1
FIS 121	Fire Behavior and Combustion .....	3
FIS 132	Hazardous Materials .....	3
FIS 230	Fire and Emergency Services Law .....	3
FIS 250	Industrial Fire Protection .....	3
FIS 270	Fire Service Technical Rescue .....	3

### Public Safety Dispatcher Certificate

*This 6 credit-hour certificate program is intended to meet the needs of men and women in public safety dispatching roles at the local, state and federal levels and to prepare others to enter the public safety dispatcher career field. This certificate program meets the requirements of the Illinois Law Enforcement Training and Standards Board (ILETSB) Public Safety Dispatcher minimum standards, Association of Police Communications Officers (APCO) Project 25 Public Safety Dispatcher minimum standards, and the National Fire Protection Association of NFPA 1061 Public Safety Dispatcher job requirements.*

### Required:

A grade of C or better in all EMG courses is required for all students.

Number	Course Title	Credits
EMG 131	Public Safety Dispatcher I .....	3
EMG 231	Public Safety Dispatcher II .....	3

## EMERGENCY MEDICAL SERVICES

### Associate in Applied Science A.A.S.: Emergency Medical Services Degree

This 70 credit-hour program is a joint educational venture with Northwest Community Healthcare and Harper College. The National EMS Agenda for the Future (Agenda), a consensus document published by the National Highway Traffic Safety Administration (NHTSA) and the Health Resources and Services Administration (HRSA) in 1996, declared that EMS education must be of high quality and represent the intersection of the EMS profession and the formal educational system and must be affiliated with an institution of higher learning and available for college credit. As an Illinois EMS Resource Hospital, Northwest Community Healthcare (NCH) is required by the Illinois EMS Act and Rules to conduct EMT and paramedic education programs within the context of Federal and State guidelines and standards.

The Agenda also asserted that EMS educational quality and entry level competence should be assured by curricula standards, national accreditation, and national standard testing. Thus, the program has been designed to comply with the requirements set forth by the National EMS Education Standards (NHTSA, 2009), the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoA), and the Illinois EMS Act and Administrative Rules with the goal of preparing competent entry-level Paramedics in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains, with or without exit points at the Emergency Medical Technician level.

Illinois EMS Rules define a paramedic as "a person who has successfully completed a course in advanced life support care as approved by the Department, is currently licensed by the Department in accordance with standards prescribed by the EMS Act and Rules and practices within an Advanced Life Support EMS System" (Section 3.50 of the Act). A paramedic is awarded practice privileges and functions under the direction of a Resource Hospital EMS Medical Director (EMS MD) in an IDPH-approved EMS System. They must operate within their approved scope of practice and are accountable to the EMS MD, their employer, the health care team, and the public.

Paramedics are expected to assess and recognize medical, trauma, emotional and psychological alterations from health, as well as render basic and advanced life support care in a wide variety of conditions and locations, and to people of all ages. They must be academically, physically and emotionally competent, needing strong knowledge and understanding of anatomy and physiology, pathophysiology, clinical assessment techniques, medications, complex procedures, providing emotional support, ethical behavior, and the ability to make informed judgments in an environment of complexity and uncertainty.

Our program supports and fosters critical thinking, research and service, and provides opportunities for cooperation and strategic linkages between all essential components for the delivery of quality EMS care. It facilitates adaptation of the work force as community health care needs and the role of EMS evolves. Interdisciplinary programs provide avenues for EMS providers to enhance their credentials or transition to other health career roles, and for other health care professionals to acquire EMS provider credentials.

Working conditions vary. Paramedics work indoors and outdoors. Most EMS agencies provide service 24/7, 365 days/year. Paramedics work all shifts including weekends and holidays. Potential employment opportunities must be analyzed on a local, rather than a regional, state, or national level. Market forces impacted by finite revenue streams, pension challenges, and shrinking reimbursements from Medicare and Medicaid and the state's insolvent economic situation have limited hiring. Competition for jobs is high, especially at the paramedic level within the Fire Services. Limited job openings occur due to replacement needs. The largest need for new EMTs and paramedics is in the private ambulance sector. They traditionally experience a high turnover rate as EMTs or paramedics leave to join municipal services. This private to public provider transition continues to be a common career path for individuals seeking to become firefighter/paramedics.

#### Admission Requirements:

Emergency Medical Services is a limited enrollment program. For admission requirements please contact the Admissions Outreach Office at 847.925.6700 or visit [harpercollege.edu](http://harpercollege.edu)

Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

Upon admission to the Emergency Medical Services program, the mathematics requirement is met.

### FIRST SEMESTER:

A grade of C or better in all BIO, EMS (EMS 214 and EMS 215 with grades of P), HSC and NUR courses is required for all students.

Number	Course Title	Credits	Course Category
BIO 160	Human Anatomy .....	4	Natural Science
EMS 110	Emergency Medical Technician Training .....	9	Program Requirement

### SECOND SEMESTER:

A grade of C or better in all BIO, EMS (EMS 214 and EMS 215 with grades of P), HSC and NUR courses is required for all students.

Number	Course Title	Credits	Course Category
BIO 161	Human Physiology .....	4	Natural Science
ENG 101	Composition .....	3	Communications
SOC 101	Introduction to Sociology+ .....	3	Social and Behavioral Science
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### THIRD SEMESTER:

A grade of C or better in all BIO, EMS (EMS 214 and EMS 215 with grades of P), HSC and NUR courses is required for all students.

Number	Course Title	Credits	Course Category
EMS 210	Paramedic Preparatory .....	10	Program Requirement
EMS 211	Paramedic Medical Emergencies I .....	5	Program Requirement
EMS 214	Paramedic: Hospital Internship .....	3	Program Requirement

## EMERGENCY MEDICAL SERVICES

### FOURTH SEMESTER:

A grade of C or better in all BIO, EMS (EMS 214 and EMS 215 with grades of P), HSC and NUR courses is required for all students.

Number	Course Title	Credits	Course Category
EMS 212	Paramedic Medical Emergencies II .....	7	Program Requirement
EMS 213	Paramedic Trauma/Special Populations/EMS Operations .....	6	Program Requirement
EMS 215	Paramedic: Field Internship .....	4	Program Requirement
EMS 216	Paramedic Seminar .....	3	Program Requirement

### SUMMER SESSION:

A grade of C or better in all BIO, EMS (EMS 214 and EMS 215 with grades of P), HSC and NUR courses is required for all students.

Number	Course Title	Credits	Course Category
	EMS electives <sup>1</sup> .....	4	Program Requirement
NUR 210	Physical Assessment .....	2	Program Requirement

+ This course meets the World Cultures and Diversity graduation requirement.

1 Select from the following courses: BIO 130, CHM 100, HSC 104, or HSC 213.

### Emergency Medical Technician Certificate

*The 9 credit-hour certificate program provides entry-level emergency medical care knowledge and skills with the delivery of Basic Life Support (BLS) as defined by the National EMS Education Standards. Specific enabling objectives are listed on the cover of each presentation's handout. Students must have a grade of 80% or better to qualify for the National Registry of Emergency Medical Technicians (NREMT) Exam. A high school diploma or GED, 2.0 Harper GPA, and an age requirement of 18 is necessary. This program is offered only at Northwest Community Hospital.*

#### Required:

A grade of C or better in this course is required for this certificate. A minimum cumulative score of 80% is required to sit for the NREMT exam.

Number	Course Title	Credits
EMS 110	Emergency Medical Technician Training .....	9

### Paramedic Certificate

*The 38 credit-hour certificate program is to be offered in two semesters starting in the fall semester and concluding the following spring semester. The program is designed to expand the entry-level knowledge and skills initially acquired through Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), or Emergency Medical Technician-Intermediate (EMT-I) education. Paramedic education includes classroom and lab instruction, plus hospital-based and field-based clinical experiences under the direct supervision of an approved preceptor. The Paramedic program exposes the students to a wide variety of patients, including observation and/or direct patient care in one of the EMS System hospitals and on ALS vehicles. Instructional content and design is based on the National EMS Education Standards (NHTSA, 2009) and is approved by the Illinois Department of Public Health, Division of EMS and Highway Safety. Paramedics must complete the certificate program to be eligible for licensure, but are encouraged to complete the full AAS degree.*

*The Paramedic program course work, including academic and clinical components, is administered through the EMS Department at Northwest Community Healthcare. Hospital internships are completed at area-wide hospitals while the field internship is completed with a System affiliated Advanced Life Support (ALS) provider agency with which the student is employed or has a participation agreement. After completion of the program, candidates are eligible to take a Paramedic licensure exam.*

#### Admission Requirements:

*Paramedic is a limited enrollment program. For admission requirements please contact the Admissions Outreach Office at 847.925.6700 or visit [harpercollege.edu](http://harpercollege.edu)*

*Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.*

#### Required:

A grade of C or better in all EMS courses (EMS 214 and EMS 215 with grades of P) is required for all students.

Number	Course Title	Credits
EMS 210	Paramedic Preparatory .....	10
EMS 211	Paramedic Medical Emergencies I .....	5
EMS 212	Paramedic Medical Emergencies II .....	7
EMS 213	Paramedic Trauma/Special Populations/EMS Operations .....	6
EMS 214	Paramedic: Hospital Internship .....	3
EMS 215	Paramedic: Field Internship .....	4
EMS 216	Paramedic Seminar .....	3



## FASHION DESIGN

### Associate in Applied Science A.A.S.: Fashion Design Degree - Fashion Design

*This 64 credit-hour program is designed to provide students with entry-level skills in apparel textile design, flat pattern design, draping, fashion illustrating and professional design room practices. Facilities will simulate the professional atmosphere of the fashion industry.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
FAS 100	Industrial Sewing Methods .....	3	Program Requirement
FAS 101	Flat Pattern Design and Draping I .....	3	Program Requirement
FAS 102	Flat Pattern Design and Draping II .....	3	Program Requirement
FAS 112	Fashion Basics .....	3	Program Requirement
FAS 113	Advanced Industrial Sewing Methods .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
FAS 104	Apparel Design and Construction .....	3	Program Requirement
FAS 105	Fashion Design Illustration I .....	3	Program Requirement
FAS 107	Textiles I .....	3	Program Requirement
FAS 201	Flat Pattern Design and Draping III .....	3	Program Requirement

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ENG 102	Composition .....	3	Communications
FAS 109	Fashion Arts and Design .....	3	Program Requirement
FAS 110	Costume History* .....	3	Program Requirement
GRA 101	Introduction to Graphic Arts Technology .....	3	Program Requirement
	Humanities <sup>1</sup> .....	3	Humanities
	Mathematics <sup>2</sup> .....	3	Mathematics

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
FAS 204	Senior Collection .....	4	Program Requirement
FAS 208	Computer-Aided Patternmaking .....	3	Program Requirement
FAS 210	Fashion Design Illustration II .....	3	Program Requirement
	Humanities <sup>1</sup> .....	3	Humanities
	Social and Behavioral Science .....	3	Social and Behavioral Science

+ This course meets the World Cultures and Diversity graduation requirement.

<sup>1</sup> ART 105 is recommended.

<sup>2</sup> A competency test, available in the Testing Center, may be utilized to meet the mathematics requirement (MTH 065 or higher). Students in this program who utilize the competency test must complete MKT 106 (Retail Merchandising.)

### Associate in Applied Science A.A.S.: Fashion Design Degree - Fashion Entrepreneurship

*This 63 credit-hour program is designed to provide students with entry-level skills in apparel textile design, flat pattern design, draping, fashion illustrating and professional design room practices. Facilities will simulate the professional atmosphere of the fashion industry.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
FAS 100	Industrial Sewing Methods .....	3	Program Requirement
FAS 101	Flat Pattern Design and Draping I .....	3	Program Requirement
FAS 102	Flat Pattern Design and Draping II .....	3	Program Requirement
FAS 112	Fashion Basics .....	3	Program Requirement
FAS 113	Advanced Industrial Sewing Methods .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
FAS 104	Apparel Design and Construction .....	3	Program Requirement
FAS 105	Fashion Design Illustration I .....	3	Program Requirement
FAS 107	Textiles I .....	3	Program Requirement
FAS 201	Flat Pattern Design and Draping III .....	3	Program Requirement
ENG 130	Business Writing .....	3	Communications

## FASHION DESIGN

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
FAS 110	Costume History+ .....	3	Program Requirement
GRA 101	Introduction to Graphic Arts Technology .....	3	Program Requirement
	Humanities .....	3	Humanities
MGT 150	Business Math .....	3	Mathematics
MGT 154	Entrepreneurship .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
FAS 208	Computer-Aided Patternmaking .....	3	Program Requirement
FAS 225	Global Sourcing Apparel/Textiles .....	3	Program Requirement
FAS 229	Promotion of Fashion .....	3	Program Requirement
	Humanities .....	3	Humanities
	Social and Behavioral Science .....	3	Social and Behavioral Science

+ This course meets the World Cultures and Diversity graduation requirement.

### Apparel Construction Certificate

*This 18 credit-hour certificate program is designed for those students interested in patternmaking and design. The following courses provide entry-level skills in sewing, flat pattern design and draping. Facilities simulate the professional atmosphere of the fashion industry.*

#### Required:

Number	Course Title	Credits
FAS 100	Industrial Sewing Methods .....	3
FAS 101	Flat Pattern Design and Draping I .....	3
FAS 102	Flat Pattern Design and Draping II .....	3
FAS 104	Apparel Design and Construction .....	3
FAS 113	Advanced Industrial Sewing Methods .....	3
FAS 116	Fashion Industries Career Practicum and Seminar .....	3

### Textiles Certificate

*This 10 credit-hour certificate is designed to provide students with an introduction to various textile techniques and proficiency in techniques of choice. The study of textiles includes the technical structure of fabrics and methods of fabrication as well as surface design, which covers a range of techniques for altering or embellishing, such as embroidery, printing, dyeing, applique, etc. This program offers the fiber artist opportunities to explore the technical processes with the artistic development of textiles.*

#### Required:

Number	Course Title	Credits
FAS 107	Textiles I .....	3
FAS 108	Textiles II .....	3
FAS 117	Textiles Studio I .....	2
FAS 118	Textiles Studio II .....	2

## FASHION MERCHANDISING

### Associate in Applied Science A.A.S.: Fashion Merchandising Degree

This 60 credit-hour curriculum provides all the phases of fashion merchandising, not only in business aspects, but also in aesthetic and creative sides of fashion, such as Visual Merchandising, Fashion Forecasting and Textiles. Students will study fashion history and trends as well as their influence on our lives. Students will also take courses in English composition, computer information systems, sociology and introductory psychology.

An educational background in fashion merchandising opens the door to various careers, such as fashion coordinating, fashion promoting, fashion show production, fashion displaying, stylist, sourcing, apparel quality assessment, retail buying and store managing.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
FAS 110	Costume History* .....	3	Program Requirement
FAS 112	Fashion Basics .....	3	Program Requirement
GRA 101	Introduction to Graphic Arts Technology .....	3	Program Requirement
MGT 111	Introduction to Business Organization .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ART 105	Introduction to Visual Art .....	3	Humanities
FAS 107	Textiles I .....	3	Program Requirement
MGT 150	Business Math .....	3	Mathematics
MKT 106	Retail Merchandising .....	3	Program Requirement
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
FAS 212	Visual Fashion Merchandising .....	3	Program Requirement
FAS 220	Apparel Analysis .....	3	Program Requirement
FAS 230	Fashion Forecasting .....	3	Program Requirement
MKT 140	Principles of Professional Selling .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
FAS 116	Fashion Industries Career Practicum and Seminar .....	3	Program Requirement
FAS 225	Global Sourcing Apparel/Textiles .....	3	Program Requirement
FAS 229	Promotion of Fashion .....	3	Program Requirement
MKT 245	Principles of Marketing .....	3	Program Requirement
	Social and Behavioral Science .....	3	Social and Behavioral Science

+ This course meets the World Cultures and Diversity graduation requirement.

## FINANCIAL MANAGEMENT

### Financial Management Certificate

*This 22 credit-hour certificate program is designed for those currently employed in or seeking employment in finance departments, banks, investment companies or other finance-related enterprises. The curriculum emphasizes developing the competencies necessary for supervisory and public contact positions in the finance field.*

*The Associate in Applied Science in Business Administration includes a specialized study area for Financial Management. Please refer to Business Administration in this section of the catalog if you are interested in pursuing a degree in this discipline.*

#### Required:

Number	Course Title	Credits
ACC 101	Introduction to Financial Accounting .....	4
FIN 101	Financial Institution Operations .....	3
FIN 200	Investment Management or	
MGT 170	Principles of Individual Financial Planning .....	3
FIN 215	Financial Statements Interpretation and Analysis .....	3
FIN 225	International Finance .....	3
MGT 111	Introduction to Business Organization .....	3
MGT 218	Introduction to Finance .....	3

## GEOGRAPHY

### Geographic Information Systems Certificate

*This 21 credit-hour certificate provides students with the skills and knowledge necessary to effectively apply Geographic Information Systems (GIS) and Global Positioning Systems (GPS) technologies and methodologies in various business and public sector domains as an analyst or technician. This certificate provides course work and hands-on experience in cartographic design, spatial analysis, database design and implementation, as well as the use of geographic computing devices and accessories.*

#### Required:

Number	Course Title	Credits
CAS 160	Introduction to Business Software Packages .....	3
CIS 143	Introduction to Database Systems <sup>1</sup> .....	3
GEG 150	GIS and Mapping Principles .....	3
GEG 151	Geographic Information Systems I .....	3
GEG 152	Geographic Information Systems II .....	3
GEG 153	Applications for GIS .....	3

#### Electives: Select 3 credit hours from the following courses:

Number	Course Title	Credits
CIS 243	Database Administration .....	3
CIS 244	Database Design and Implementation .....	3
GEG 101	World/Regional Geography .....	3
GEG 103	The Developing World .....	3
GEG 111	Physical Geography .....	3

<sup>1</sup> Requires completion of CAS 160 AND placement into MTH 101.

## GRAPHIC ARTS TECHNOLOGY

### Associate in Applied Science A.A.S.: Graphic Arts Technology Degree - Graphic Design

*This 64 credit-hour program is designed to prepare students for a wide range of employment opportunities in the graphic arts industry. This degree provides a well-rounded foundation of knowledge and skills to prepare students for new jobs as well as provide career advancement opportunities. The curriculum includes current application instruction with a focus on creative design techniques. Emphasis is on graphic and web design, including a complete understanding of print production. All students in the program complete a required sequence of classes and then select this graphic design specialty to be employable in this visual communication industry or transfer to a 4 year program.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ART 121	Design I .....	3	Humanities
ENG 101	Composition .....	3	Communications
GRA 101	Introduction to Graphic Arts Technology .....	3	Program Requirement
GRA 102	Graphic Arts Desktop Publishing .....	3	Program Requirement
GRA 103	Digital Imaging I .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 102	Composition .....	3	Communications
GRA 105	Color Management .....	3	Program Requirement
GRA 112	Digital Illustration I .....	3	Program Requirement
GRA 130	Introduction to Photography .....	2	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics
	Social and Behavioral Science* .....	3	Social and Behavioral Science

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
GRA 111	Press Operations .....	3	Program Requirement
GRA 120	Graphic Design I .....	3	Program Requirement
GRA 145	Wordpress and Mobile Technologies or		
WEB 150	Web Foundations .....	3	Program Requirement
GRA 229	Page Layout .....	3	Program Requirement
	Humanities or Social and Behavioral Science+ .....	3	Humanities or Social and Behavioral Science

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
GRA 113	Digital Imaging II .....	3	Program Requirement
GRA 131	Digital Photography I .....	3	Program Requirement
GRA 220	Graphic Design II .....	3	Program Requirement
GRA 221	Graphic Portfolio Design .....	2	Program Requirement
	GRA elective <sup>2</sup> .....	3	Program Requirement
MKT 245	Principles of Marketing .....	3	Program Requirement

1 A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement (MTH 065 or higher.) Students in this program who utilize the competency test to meet the mathematics requirement must complete an additional three credit-hour graphic arts course. See the coordinator for recommended courses.

+ One three credit-hour course from the Social and Behavioral Sciences electives for the AAS degree is required and one three credit-hour course from the Humanities or Social and Behavioral Science electives for the AAS degree is required. At least one of the Humanities or Social and Behavioral Sciences requirements must also meet the World Cultures and Diversity graduation requirement.

2 Graphic Arts electives: GRA 113, GRA 145, GRA 202, GRA 211, GRA 213, GRA 214, GRA 222, GRA 230, GRA 231, GRA 232, GRA 299, WEB 150

### Associate in Applied Science A.A.S.: Graphic Arts Technology Degree - Package Design

*This 64 credit-hour program is designed to prepare students for a wide range of employment opportunities in the graphic arts industry. This degree provides a well-rounded foundation of knowledge and skills to prepare students for new jobs as well as provide career advancement opportunities. The curriculum includes current and proprietary application instruction with a focus on creative package design techniques. Emphasis is on the packaging industry, including a complete understanding of print production for a variety of products. All students in the program complete a required sequence of classes and then select this package design specialty to be employable in this visual communication industry or transfer to a 4 year program.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ART 121	Design I .....	3	Humanities
ENG 101	Composition .....	3	Communications
GRA 101	Introduction to Graphic Arts Technology .....	3	Program Requirement

## GRAPHIC ARTS TECHNOLOGY

GRA 102	Graphic Arts Desktop Publishing .....	3	Program Requirement
GRA 103	Digital Imaging I .....	3	Program Requirement

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 102	Composition .....	3	Communications
GRA 105	Color Management .....	3	Program Requirement
GRA 112	Digital Illustration I .....	3	Program Requirement
GRA 130	Introduction to Photography .....	2	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics
	Social and Behavioral Science* .....	3	Social and Behavioral Science

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
GRA 111	Press Operations .....	3	Program Requirement
GRA 120	Graphic Design I .....	3	Program Requirement
GRA 229	Page Layout .....	3	Program Requirement
GRA 145	Wordpress and Mobile Technologies or		
WEB 150	Web Foundations .....	3	Program Requirement
	Humanities or Social and Behavioral Science* .....	3	Humanities or Social and Behavioral Science

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
GRA 213	Packaging, Finishing and Distribution .....	3	Program Requirement
GRA 214	Digital Illustration II .....	3	Program Requirement
GRA 220	Graphic Design II .....	3	Program Requirement
GRA 221	Graphic Portfolio Design .....	2	Program Requirement
GRA 222	Package Design .....	3	Program Requirement
GRA 230	Prepress Production .....	3	Program Requirement

- <sup>1</sup> A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement (MTH 065 or higher.) Students in this program who utilize the competency test to meet the mathematics requirement must complete an additional three credit-hour graphic arts course.
- + One three credit-hour course from the Social and Behavioral Sciences electives for the AAS degree is required and one three credit-hour course from the Humanities or Social and Behavioral Science electives for the AAS degree is required. At least one of the Humanities or Social and Behavioral Sciences requirements must also meet the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Graphic Arts Technology Degree - Print Graphics

*This 62 credit-hour program is designed to prepare students for a wide range of employment opportunities in the graphic arts industry. This degree provides a well-rounded foundation of knowledge and skills to prepare students for new jobs as well as provide career advancement opportunities. The curriculum includes current application instruction with a focus on print production and prepress techniques. Emphasis is on print projects, including a complete understanding of planning through print and finishing. All students in the program complete a required sequence of classes and then select this print production specialty to be employable in this visual communication industry or transfer to a 4 year program.*

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ART 121	Design I .....	3	Humanities
ENG 101	Composition .....	3	Communications
GRA 101	Introduction to Graphic Arts Technology .....	3	Program Requirement
GRA 102	Graphic Arts Desktop Publishing .....	3	Program Requirement
GRA 103	Digital Imaging I .....	3	Program Requirement

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 102	Composition .....	3	Communications
GRA 105	Color Management .....	3	Program Requirement
GRA 112	Digital Illustration I .....	3	Program Requirement
GRA 130	Introduction to Photography .....	2	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics
	Social and Behavioral Science* .....	3	Social and Behavioral Science

## GRAPHIC ARTS TECHNOLOGY

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
GRA 111	Press Operations .....	3	Program Requirement
GRA 120	Graphic Design I .....	3	Program Requirement
GRA 145	Wordpress and Mobile Technologies or		
WEB 150	Web Foundations .....	3	Program Requirement
GRA 229	Page Layout .....	3	Program Requirement
	Humanities or Social and Behavioral Science+ .....	3	Humanities or Social and Behavioral Science

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
GRA 202	Advanced Color Management .....	3	Program Requirement
GRA 211	Project Management, Scheduling and Estimating or		
MGT 111	Introduction to Business Organization .....	3	Program Requirement
GRA 213	Packaging, Finishing and Distribution .....	3	Program Requirement
GRA 230	Prepress Production .....	3	Program Requirement
GRA 231	Variable Data Technologies .....	3	Program Requirement

1 A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement (MTH 065 or higher.) Students in this program who utilize the competency test to meet the mathematics requirement must complete an additional three credit-hour graphic arts course. See program coordinator for recommended courses.

+ One three credit-hour course from the Social and Behavioral Sciences electives for the AAS degree is required and one three credit-hour course from the Humanities or Social and Behavioral Science electives for the AAS degree is required. At least one of the Humanities or Social and Behavioral Sciences requirements must also meet the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Graphic Arts Technology Degree - Web Design

*This 64 credit-hour program is designed to prepare students for a wide range of employment opportunities in the graphic arts industry. This degree provides a well-rounded foundation of knowledge and skills to prepare students for new jobs as well as provide career advancement opportunities. The curriculum includes current application instruction with a focus on web technologies. Emphasis is on web and graphic design, including a complete understanding of website design and best practices, hosting and internet protocols. All students in the program complete a required sequence of classes and then select this web design specialty to be employable in this visual communication industry or transfer to a 4 year program.*

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ART 121	Design I .....	3	Humanities
ENG 101	Composition .....	3	Communications
GRA 101	Introduction to Graphic Arts Technology .....	3	Program Requirement
GRA 102	Graphic Arts Desktop Publishing .....	3	Program Requirement
GRA 103	Digital Imaging I .....	3	Program Requirement

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 102	Composition .....	3	Communications
GRA 105	Color Management .....	3	Program Requirement
GRA 112	Digital Illustration I .....	3	Program Requirement
GRA 130	Introduction to Photography .....	2	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics
	Social and Behavioral Science+ .....	3	Social and Behavioral Science

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
GRA 111	Press Operations .....	3	Program Requirement
GRA 120	Graphic Design I .....	3	Program Requirement
GRA 145	Wordpress and Mobile Technologies .....	3	Program Requirement
GRA 229	Page Layout .....	3	Program Requirement
WEB 150	Web Foundations .....	3	Program Requirement

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
GRA 220	Graphic Design II .....	3	Program Requirement
GRA 221	Graphic Portfolio Design .....	2	Program Requirement



## GRAPHIC ARTS TECHNOLOGY

GRA 231	Variable Data Technologies .....	3	Program Requirement
	Humanities or Social and Behavioral Science* .....	3	Humanities or Social and Behavioral Science
WEB 170	Web Graphics and Prototyping .....	3	Program Requirement
WEB 180	Web Multimedia .....	3	Program Requirement

1 A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement (MTH 065 or higher.) Students in this program who utilize the competency test to meet the mathematics requirement must complete an additional three credit-hour graphic arts course. See program coordinator for recommended courses.

+ One three credit-hour course from the Social and Behavioral Sciences electives for the AAS degree is required and one three credit-hour course from the Humanities or Social and Behavioral Science electives for the AAS degree is required. At least one of the Humanities or Social and Behavioral Sciences requirements must also meet the World Cultures and Diversity graduation requirement.

### Fashion Graphic Arts Certificate

*This 21 credit-hour certificate program is designed to prepare students for direct employment in the graphic arts/fashion industry with a fashion illustration specialty. These graphic arts and fashion courses are designed to provide students with basic knowledge of the graphic arts industry for print as well as the illustration needs of the fashion industry. This program covers the latest computer software, illustration and production techniques.*

#### Required:

Number	Course Title	Credits
FAS 105	Fashion Design Illustration I .....	3
FAS 210	Fashion Design Illustration II .....	3
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 102	Graphic Arts Desktop Publishing .....	3
GRA 103	Digital Imaging I .....	3
GRA 112	Digital Illustration I .....	3
GRA 120	Graphic Design I .....	3

### Graphic Arts Certificate

*This 27 credit-hour certificate program is designed to prepare students for direct employment in the printing industry. These technical courses are designed to provide students with basic knowledge of the graphic arts industry. This program covers the latest computer software and production techniques.*

#### Required:

Number	Course Title	Credits
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 102	Graphic Arts Desktop Publishing .....	3
GRA 103	Digital Imaging I .....	3
GRA 111	Press Operations .....	3
GRA 112	Digital Illustration I .....	3
GRA 145	Wordpress and Mobile Technologies or	
WEB 150	Web Foundations .....	3
GRA 211	Project Management, Scheduling and Estimating or	
MGT 111	Introduction to Business Organization .....	3
GRA 213	Packaging, Finishing and Distribution .....	3
GRA 229	Page Layout .....	3

### Graphic Arts Design Certificate

*This 34 credit-hour certificate program is designed to provide students with the skills to gain creative understanding and design materials for print production. This program covers type and graphic design, page layout, computer graphics, and the production needs of good design.*

#### Required:

Number	Course Title	Credits
ART 121	Design I .....	3
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 102	Graphic Arts Desktop Publishing .....	3
GRA 103	Digital Imaging I .....	3
GRA 105	Color Management .....	3
GRA 112	Digital Illustration I .....	3
GRA 120	Graphic Design I .....	3
GRA 130	Introduction to Photography .....	2
GRA 131	Digital Photography I .....	3
GRA 145	Wordpress and Mobile Technologies or	

## GRAPHIC ARTS TECHNOLOGY

WEB 150	Web Foundations .....	3
GRA 220	Graphic Design II .....	3
GRA 221	Graphic Portfolio Design .....	2

### Graphic Arts Desktop Publishing Certificate

*This 30 credit-hour certificate program is designed for students interested in specializing in electronic prepress highlighting the latest software. This certificate will enhance a student's current employment position, as well as provide new employment opportunities.*

#### Required:

Number	Course Title	Credits
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 102	Graphic Arts Desktop Publishing .....	3
GRA 103	Digital Imaging I .....	3
GRA 105	Color Management .....	3
GRA 111	Press Operations .....	3
GRA 112	Digital Illustration I .....	3
GRA 145	Wordpress and Mobile Technologies or	
WEB 150	Web Foundations .....	3
GRA 202	Advanced Color Management .....	3
GRA 229	Page Layout .....	3
GRA 230	Prepress Production .....	3

### Graphic Arts Digital Photography Certificate

*This 23 credit-hour certificate program is designed for students interested in specializing in digital photography. This certificate will enhance a student's current employment position as well as provide new employment opportunities in the graphic arts industry.*

#### Required:

Number	Course Title	Credits
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 103	Digital Imaging I .....	3
GRA 105	Color Management .....	3
GRA 113	Digital Imaging II .....	3
GRA 130	Introduction to Photography .....	2
GRA 131	Digital Photography I .....	3
GRA 232	Digital Photography II .....	3
GRA 299	Digital Photography Capstone .....	3

### Graphic Arts Interactive Technology Certificate

*This 30 credit-hour certificate program is designed to provide students with a foundation in skills encompassing visual design and scripting to develop websites, rich internet applications (RIAs) and interactive multimedia. Individuals seeking entry-level positions in the field of graphic design, web design and interactive multimedia design will find these skills helpful.*

#### Required:

Number	Course Title	Credits
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 102	Graphic Arts Desktop Publishing .....	3
GRA 103	Digital Imaging I .....	3
GRA 120	Graphic Design I .....	3
GRA 145	Wordpress and Mobile Technologies .....	3
WEB 150	Web Foundations .....	3
WEB 170	Web Graphics and Prototyping .....	3
WEB 180	Web Multimedia .....	3
WEB 200	Web Scripting Foundations .....	3
WEB 235	Interactive Scripting .....	3

### Graphic Arts Package Design Certificate

*This 30 credit-hour certificate program is designed to provide students with the skills to gain marketing, creative and a manufacturing understanding of packaging skills and design materials for the packaging industry. This program covers graphic design, computer graphics, packaging-specific software, marketing and finishing needs and the production skills of good package design to get a product to market.*

## GRAPHIC ARTS TECHNOLOGY

### Required:

Number	Course Title	Credits
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 102	Graphic Arts Desktop Publishing .....	3
GRA 103	Digital Imaging I .....	3
GRA 112	Digital Illustration I .....	3
GRA 120	Graphic Design I .....	3
GRA 213	Packaging, Finishing and Distribution .....	3
GRA 214	Digital Illustration II .....	3
GRA 220	Graphic Design II .....	3
GRA 222	Package Design .....	3
GRA 230	Prepress Production .....	3

### Graphic Arts Variable Data Certificate

*This 30 credit-hour certificate program is designed to provide students with a foundation in skills to understand the graphic arts industries web-to-print solutions and the importance of personalization and customization in print promotions. This certificate will provide training in basic graphic technologies utilizing variable data applications and digital print production. It will instruct students on how to implement a successful web-to-print workflow as well as analysis of data, digital graphic files, and delivery of the variable printed piece.*

### Required:

Number	Course Title	Credits
CAS 160	Introduction to Business Software Packages .....	3
CIS 143	Introduction to Database Systems .....	3
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 102	Graphic Arts Desktop Publishing .....	3
GRA 103	Digital Imaging I .....	3
GRA 229	Page Layout .....	3
GRA 230	Prepress Production .....	3
GRA 231	Variable Data Technologies .....	3
WEB 150	Web Foundations .....	3
WEB 200	Web Scripting Foundations .....	3

### Graphic Arts Web Design Certificate

*This 30 credit-hour certificate program is designed to provide students with a foundation in skills to design materials for print and Web media. Individuals seeking graphic designer entry-level positions will find these skills helpful. The program introduces graphic design, page layout, print and web graphics, and the software for web and desktop publishing.*

### Required:

Number	Course Title	Credits
ART 121	Design I .....	3
GRA 101	Introduction to Graphic Arts Technology .....	3
GRA 102	Graphic Arts Desktop Publishing .....	3
GRA 103	Digital Imaging I .....	3
GRA 112	Digital Illustration I .....	3
GRA 120	Graphic Design I .....	3
GRA 145	Wordpress and Mobile Technologies .....	3
WEB 150	Web Foundations .....	3
WEB 170	Web Graphics and Prototyping .....	3
WEB 180	Web Multimedia .....	3

## HEALTH INFORMATION TECHNOLOGY

### Associate in Applied Science A.A.S.: Health Information Technology Degree

This 62 credit-hour program prepares the graduate to enter a career which blends two rapidly expanding fields, healthcare and information technology. Health information technicians ensure the quality of medical records by verifying their completeness, accuracy, and proper entry into computer systems. They also use computer systems to analyze patient data for the purpose of improving patient care or controlling costs.

Health information technicians (RHIT's) may specialize in coding diagnoses and procedures in patient records for reimbursement and research. Health information technicians work in hospitals, long-term care facilities, cancer registries, mental health facilities, managed care organizations, and physician offices or as consultants.

Graduates of the Health Information Technology program are qualified to take the national certification exam to become a registered health information technician (RHIT) given by the American Health Information Management Association (AHIMA). This program requires a 160-hour externship at an area hospital.

#### FIRST SEMESTER:

A grade of C or better is required in all courses.

Number	Course Title	Credits	Course Category
BIO 135	Introduction to Human Anatomy and Physiology .....	4	Natural Science
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
HSC 104	Health Care Technology and Informatics .....	2	Program Requirement
HSC 112	Medical Terminology .....	2	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics

#### SECOND SEMESTER:

A grade of C or better is required in all courses.

Number	Course Title	Credits	Course Category
BIO 136	Introduction to Human Disease .....	3	Natural Science
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
HIT 200	Introduction to Health Information Systems .....	3	Program Requirement
	Humanities or Social and Behavioral Science <sup>+</sup> .....	3	Humanities or Social and Behavioral Science

#### THIRD SEMESTER:

A grade of C or better is required in all courses.

Number	Course Title	Credits	Course Category
CIS 143	Introduction to Database Systems .....	3	Program Requirement
HIT 197	International Classification of Diseases (ICD) Coding <sup>2</sup> .....	3	Program Requirement
HIT 220	Health Care Information Management .....	3	Program Requirement
HIT 225	Electronic Health Records .....	3	Program Requirement
HIT 250	Law for Health Information .....	3	Program Requirement

#### FOURTH SEMESTER:

A grade of C or better is required in all courses.

Number	Course Title	Credits	Course Category
CIS 211	IT Project Management Design .....	3	Program Requirement
HIT 196	Current Procedural Terminology (CPT) Coding <sup>2</sup> .....	3	Program Requirement
HIT 215	Health Care Reimbursement .....	3	Program Requirement
HIT 230	Health Care Information Analysis .....	3	Program Requirement
HIT 240	Health Information Technology Externship .....	3	Program Requirement

<sup>1</sup> MTH 101, or MTH 103 or higher.

<sup>+</sup> Students must choose a Humanities or Social and Behavioral Science course that fulfills the World Cultures and Diversity graduation requirement.

<sup>2</sup> MOA 196 and MOA 198 will not be accepted for this degree.

### Medical Coding Certificate

This 19 credit-hour certificate program prepares the student to gain a comprehensive working knowledge of the International Classification of Disease (ICD), Current Procedural Terminology (CPT) and the Healthcare Common Procedure Coding System (HCPCS). Clinical coding systems assign a distinct numeric value to medical diagnosis, procedures and surgery. These coding systems serve an important function for physician reimbursement, hospital payments, quality review, benchmarking measurement and the collection of general medical statistical data. This program would prepare a student to work in a hospital and/or a physician-based setting as a coder. After completing this coding

## HEALTH INFORMATION TECHNOLOGY

*certificate program, students would be eligible to sit for the American Health Information Management Association (AHIMA), the Certified Coding Associate (CCA), the Certified Coding Specialist (CCS), and/or the Certified Coding Specialist-Physician-based (CCS-P) exam. Please visit [www.ahima.org](http://www.ahima.org) for more information regarding the various coding certifications.*

*Students electing to earn a certificate in coding are eligible to apply credits earned toward completion of the Associate in Applied Science Degree in Health Information Technology.*

### First Semester:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
BIO 135	Introduction to Human Anatomy and Physiology .....	4
BIO 136	Introduction to Human Disease .....	3
HSC 112	Medical Terminology .....	2
HSC 165	Basic Pharmacology .....	1

### Second Semester

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
HIT 196	Current Procedural Terminology (CPT) Coding .....	3
HIT 197	International Classification of Diseases (ICD) Coding .....	3
HIT 215	Health Care Reimbursement .....	3

## HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

### Associate in Applied Science A.A.S.: Refrigeration and Air Conditioning Technology Degree

The courses in this curriculum are theory design and service oriented. Theory courses deal with energy conversions. Service courses are strongly related to a hands-on philosophy. Emphasis is placed upon operating, servicing and installing equipment.

Graduates from this 62 credit-hour program may be employed as engineering laboratory assistants, equipment salesmen, heating and refrigeration service people, estimators and system designers.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3	Mathematics
RAC 101	Refrigeration Fundamentals .....	4	Program Requirement
RAC 103	Heating Principles .....	4	Program Requirement
RAC 105	Heating and Cooling Controls .....	4	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
PHS 111	Introduction to Physical Science .....	4	Natural Science
RAC 102	Refrigeration Systems .....	4	Program Requirement
RAC 104	Residential Comfort Systems .....	3	Program Requirement
RAC 108	Domestic Refrigeration Appliances .....	4	Program Requirement

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>2</sup> .....	3	Communications
ELT 145	Variable Frequency Drives .....	2	Program Requirement
RAC 106	Advanced Controls .....	4	Program Requirement
RAC 201	Refrigeration System Design I .....	4	Program Requirement
RAC 203	Air Conditioning Principles .....	3	Program Requirement

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>2</sup> .....	3	Communications
ELT 215	Industrial Control Systems or		
RAC 202	Refrigeration System Design II .....	4	Program Requirement
	Humanities <sup>+</sup> .....	3	Humanities
RAC 204	Air Distribution .....	3	Program Requirement
	Social and Behavioral Science <sup>+</sup> .....	3	Social and Behavioral Science

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103 or higher.

<sup>2</sup> One of the Communications electives must be ENG 101 or ENG 130. The second communications elective must be chosen from one of the following: ENG 100, ENG 102, ENG 103 or SPE 101. Students are encouraged to meet with a Student Development faculty counselor for advice in the selection of courses.

<sup>+</sup> At least one of the Humanities or Social and Behavioral Science requirements must also meet the World Cultures and Diversity graduation requirement.

### Domestic Refrigeration and Heating Certificate

This 16 credit-hour certificate program provides the necessary training for installation, maintenance and repair of domestic refrigeration and heating systems. Special attention is given to home heating devices and to domestic refrigeration appliances.

#### Required:

Number	Course Title	Credits
RAC 101	Refrigeration Fundamentals .....	4
RAC 103	Heating Principles .....	4
RAC 105	Heating and Cooling Controls .....	4
RAC 108	Domestic Refrigeration Appliances .....	4

### Heating Service Certificate

This 15 credit-hour certificate program allows individuals to concentrate solely on heating systems. In addition to fundamental principles, students will study basic and advanced heating and cooling controls.

#### Required:

Number	Course Title	Credits
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3
RAC 103	Heating Principles .....	4

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RAC 105	Heating and Cooling Controls .....	4
RAC 106	Advanced Controls .....	4

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

### Refrigeration Service Certificate

*This 16 credit-hour certificate program focuses solely on refrigeration. Students concentrate on mastering the fundamentals of installing, maintaining and repairing a variety of commercial refrigeration systems. Special consideration is given to the conservation, recovery and recycling of refrigerants including chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs).*

#### Required:

Number	Course Title	Credits
RAC 101	Refrigeration Fundamentals .....	4
RAC 102	Refrigeration Systems .....	4
RAC 105	Heating and Cooling Controls .....	4
RAC 106	Advanced Controls .....	4

### Refrigeration/Air Conditioning Service Certificate

*This 27 credit-hour certificate program provides a broad spectrum of the HVAC industry. Students train and learn to install, service and repair residential, industrial and commercial refrigeration systems.*

#### Required:

Number	Course Title	Credits
ELT 144	AC and DC Motors .....	2
ELT 145	Variable Frequency Drives .....	2
RAC 101	Refrigeration Fundamentals .....	4
RAC 102	Refrigeration Systems .....	4
RAC 103	Heating Principles .....	4
RAC 104	Residential Comfort Systems .....	3
RAC 105	Heating and Cooling Controls .....	4
RAC 106	Advanced Controls .....	4

### Residential Comfort Systems Certificate

*This 19 credit-hour certificate program focuses on residential comfort. In addition to mastering the ins and outs of residential comfort systems, candidates for this certificate also learn refrigeration and advanced heating and cooling controls.*

#### Required:

Number	Course Title	Credits
RAC 101	Refrigeration Fundamentals .....	4
RAC 103	Heating Principles .....	4
RAC 104	Residential Comfort Systems .....	3
RAC 105	Heating and Cooling Controls .....	4
RAC 106	Advanced Controls .....	4

## HOSPITALITY MANAGEMENT

### Associate in Applied Science A.A.S.: Hospitality Management Degree - Food Service Operations Management

*Emphasis is placed on the techniques and technology of the hospitality industry from a management point of view. Graduates of this 60 credit-hour curriculum will be qualified to assume positions as production supervisors, management trainees and small unit managers. Upon successful completion of approved hospitality management courses, students may be granted a Certificate of Completion and a Management Development Diploma from the Educational Foundation of the National Restaurant Association. Upon successful completion of approved hospitality management courses, students may be awarded a certificate from the Educational Institute of the American Hotel and Motel Association. Contact the Hospitality Management coordinator for details.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
DIT 101	Fundamentals of Nutrition .....	3	Natural Science
ENG 101	Composition .....	3	Communications
FSM 111	Introduction to the Hospitality Industry .....	3	Program Requirement
FSM 114	Food Standards and Sanitation .....	2	Program Requirement
FSM 115	Menu Planning .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
CIS 100	Computer and Digital Literacy* .....	3	Program Requirement
ENG 102	Composition .....	3	Communications
FSM 109	Introduction to Food Prep/Production .....	4	Program Requirement
FSM 113	Dining Room Operations .....	3	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
FSM 212	Hospitality Supervision .....	3	Program Requirement
FSM 215	Restaurant Layout and Equipment* .....	3	Program Requirement
FSM 216	Introduction to Wine, Spirits and Beverage Management* .....	3	Program Requirement
FSM 220	Hospitality Promotions* .....	3	Program Requirement
FSM 230	Hospitality Law and Risk Management* .....	3	Program Requirement

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
FSM 211	Purchasing and Storage .....	3	Program Requirement
FSM 213	Seminar and Internship .....	3	Program Requirement
FSM 214	Hospitality Operations Analysis .....	3	Program Requirement
	Humanities* .....	3	Humanities
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

\* At least 15 hours of electives are required. The coordinator recommends the courses with a asterisk (\*), however FSM 299 is an option per the catalog.

<sup>1</sup> A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics elective requirement. Students in this program who utilized the competency test to meet the mathematics requirement must complete a three credit-hour elective approved by the program coordinator.

+ Students must choose a Humanities course that meets the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Hospitality Management Degree - Hotel Operations Management

*Emphasis is placed on the techniques and technology of the hospitality industry from a management point of view. Graduates of this 60 credit-hour curriculum will be qualified to assume positions as production supervisors, management trainees and small unit managers. Upon successful completion of approved hospitality management courses, students may be granted a Certificate of Completion and a Management Development Diploma from the Educational Foundation of the National Restaurant Association. Upon successful completion of approved hospitality management courses, students may be awarded a certificate from the Educational Institute of the American Hotel and Motel Association. Contact the Hospitality Management coordinator for details.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
FSM 111	Introduction to the Hospitality Industry .....	3	Program Requirement
FSM 114	Food Standards and Sanitation .....	2	Program Requirement
FSM 115	Menu Planning .....	3	Program Requirement
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science



## HOSPITALITY MANAGEMENT

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
DIT 101	Fundamentals of Nutrition .....	3	Natural Science
ENG 102	Composition .....	3	Communications
FSM 109	Introduction to Food Prep/Production .....	4	Program Requirement
FSM 120	Front Office Operations* .....	3	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
CIS 100	Computer and Digital Literacy* .....	3	Program Requirement
FSM 113	Dining Room Operations .....	3	Program Requirement
FSM 210	Hospitality Facility Maintenance* .....	3	Program Requirement
FSM 212	Hospitality Supervision .....	3	Program Requirement
FSM 220	Hospitality Promotions* .....	3	Program Requirement

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
FSM 211	Purchasing and Storage .....	3	Program Requirement
FSM 213	Seminar and Internship .....	3	Program Requirement
FSM 214	Hospitality Operations Analysis .....	3	Program Requirement
FSM 230	Hospitality Law and Risk Management* .....	3	Program Requirement
	Humanities <sup>+</sup> .....	3	Humanities

\* At least 15 credits of electives are required. The coordinator recommends the courses with an asterisk (\*), however FSM 299 is an option per the catalog.

<sup>1</sup> A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement. Students in this program who utilize the competency test to meet the mathematics requirement must complete a three credit-hour elective approved by the program coordinator.

<sup>+</sup> Students must choose a Humanities course that meets the World Cultures and Diversity graduation requirement.

### Bread and Pastry Arts Certificate

*This is a 26 credit-hour certificate program planned to prepare students for entrance into the food service industry. Graduates may be able to secure positions as qualified bakers and bakers' helpers in institutional, retail and commercial bakeries.*

#### Required:

Number	Course Title	Credits
FSM 107	Basic Quantity Bread and Pastry Arts .....	4
FSM 108	Advanced Quantity Bread and Pastry Arts .....	4
FSM 114	Food Standards and Sanitation .....	2
FSM 115	Menu Planning .....	3
FSM 172	Classical Baking .....	2
FSM 173	Cake Decoration .....	2

#### Electives: Select at least nine credit hours from the following:

Number	Course Title	Credits
FSM 109	Introduction to Food Prep/Production .....	4
FSM 111	Introduction to the Hospitality Industry .....	3
FSM 113	Dining Room Operations .....	3
FSM 163	Garde Manger .....	2
FSM 211	Purchasing and Storage .....	3
FSM 212	Hospitality Supervision .....	3
FSM 214	Hospitality Operations Analysis .....	3
FSM 215	Restaurant Layout and Equipment .....	3
FSM 216	Introduction to Wine, Spirits and Beverage Management .....	3
FSM 220	Hospitality Promotions .....	3

### Culinary Arts Certificate

*This is a 32 credit-hour certificate program planned to prepare students for entrance into the food service industry. Graduates may be able to secure positions as head cooks, assistant cooks, specialty cooks, or chef's assistants.*

#### Required:

Number	Course Title	Credits
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## HOSPITALITY MANAGEMENT

FSM 107	Basic Quantity Bread and Pastry Arts .....	4
FSM 109	Introduction to Food Prep/Production .....	4
FSM 110	Advanced Quantity Culinary Arts .....	4
FSM 113	Dining Room Operations .....	3
FSM 114	Food Standards and Sanitation .....	2
FSM 115	Menu Planning .....	3
FSM 162	Classical Cuisine .....	4
FSM 163	Garde Manger .....	2

### Electives: Select at least six credit hours from the following:

Number	Course Title	Credits
FSM 111	Introduction to the Hospitality Industry .....	3
FSM 172	Classical Baking .....	2
FSM 173	Cake Decoration .....	2
FSM 211	Purchasing and Storage .....	3
FSM 212	Hospitality Supervision .....	3
FSM 214	Hospitality Operations Analysis .....	3
FSM 215	Restaurant Layout and Equipment .....	3
FSM 216	Introduction to Wine, Spirits and Beverage Management .....	3
FSM 220	Hospitality Promotions .....	3

### Food Service Management Certificate

*This is a 26 credit-hour certificate program designed for people wanting to upgrade their management skills enabling them to assume more responsible positions. Upon completion of this program, students may also be awarded a Management Development Diploma by the National Restaurant Association. Contact the Hospitality Management coordinator for details.*

#### Required:

Number	Course Title	Credits
FSM 111	Introduction to the Hospitality Industry .....	3
FSM 113	Dining Room Operations .....	3
FSM 114	Food Standards and Sanitation .....	2
FSM 115	Menu Planning .....	3
FSM 211	Purchasing and Storage .....	3
FSM 212	Hospitality Supervision .....	3
FSM 214	Hospitality Operations Analysis .....	3
FSM 215	Restaurant Layout and Equipment .....	3
FSM 230	Hospitality Law and Risk Management .....	3

### Hotel Management Certificate

*This 20 credit-hour certificate program is designed for people wanting to upgrade their management skills to assume more responsible positions. Upon completion of this program, students may be awarded a Rooms Division Management Certificate of Specialization from the Educational Institute of the American Hotel and Motel Association. Contact the Hospitality Management coordinator for details.*

#### Required:

Number	Course Title	Credits
FSM 120	Front Office Operations .....	3
FSM 210	Hospitality Facility Maintenance .....	3
FSM 212	Hospitality Supervision .....	3
FSM 220	Hospitality Promotions .....	3
FSM 230	Hospitality Law and Risk Management .....	3

### Electives: Select at least five credit hours from the following:

Number	Course Title	Credits
CIS 100	Computer and Digital Literacy .....	3
FSM 111	Introduction to the Hospitality Industry .....	3
FSM 113	Dining Room Operations .....	3
FSM 114	Food Standards and Sanitation .....	2
FSM 211	Purchasing and Storage .....	3
FSM 214	Hospitality Operations Analysis .....	3
FSM 216	Introduction to Wine, Spirits and Beverage Management .....	3

## HUMAN SERVICES

### Associate in Applied Science A.A.S.: Human Services Degree

*This 61 credit-hour program prepares students to work in a variety of therapeutic, recreational, and learning environments including residential and day programs, shelters for abused women or the homeless, programs for the developmentally disabled, mental health and crisis centers, geriatric centers, and hospice care. Courses in this program help students develop knowledge and skills in counseling and interviewing, leading and facilitating groups, and professional ethics.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
HMS 101	Introduction to Human Services .....	3	Program Requirement
HMS 102	Helping Skills in Human Services .....	3	Program Requirement
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science
SOC 101	Introduction to Sociology .....	3	Social and Behavioral Science

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
HMS 112	Group Work in Human Services .....	3	Program Requirement
HMS 121	Multiculturalism in the Helping Professions* .....	3	Program Requirement
HED 201	Drugs in Our Culture .....	3	Program Requirement
PSY 230	Abnormal Psychology .....	3	Social and Behavioral Science
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
HMS 211	Crisis Intervention .....	3	Program Requirement
HMS 221	Introduction to Gerontology .....	3	Program Requirement
	Humanities .....	3	Humanities
	Mathematics <sup>1</sup> .....	3	Mathematics
PSY 228	Psychology of Human Development .....	3	Social and Behavioral Science

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
HMS 232	Law and Ethics in Human Services .....	3	Program Requirement
HMS 241	Disabilities and Human Service .....	3	Program Requirement
HMS 251	Family Issues and Interventions .....	3	Program Requirement
HMS 290	Field Experience and Seminar .....	4	Program Requirement
SOC 215	Introduction to Social Psychology .....	3	Social and Behavioral Science

+ This course meets the World Cultures and Diversity graduation requirement.

<sup>1</sup> A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement. Students who utilize the competency test to meet the mathematics requirement must complete an additional three-hour approved elective course.

## INSURANCE

### Insurance Certificate

*This 21 credit hour certificate is designed for those individuals who are exploring an insurance career or are in the insurance field looking to expand their skills and knowledge with focus on property, liability, commercial and personal insurance. The certificate will build a foundation of insurance principles and allow students to get industry certification as they progress through the certificate and as a stackable credential for the AAS-Business Administration degree with Insurance concentration.*

#### Required:

Number	Course Title	Credits
ACC 100	Introductory Accounting or	
ACC 101	Introduction to Financial Accounting .....	4
INS 110	Insurance Fundamentals .....	3
INS 120	Property and Liability Insurance Principles .....	3
INS 220	Personal Insurance .....	3
INS 240	Commercial Insurance .....	3
MGT 111	Introduction to Business Organization .....	3

#### Electives: Select a minimum of three credit hours from the following courses:

Number	Course Title	Credits
MGT 154	Entrepreneurship .....	3
MGT 165	Global Business .....	3
MGT 205	Leadership .....	3

## INTERIOR DESIGN

### Associate in Applied Science A.A.S.: Interior Design Degree

This 72 credit-hour program is designed for students interested in careers in the furnishing and design industry. The program offers creative, artistic and challenging career opportunities. Graduates are trained to work as kitchen and bath designers, retail designers/salespersons, interior design assistants, assistant buyers of home furnishings, manufacturers' representatives or Merchandise Mart showroom managers.

Periodic field trips are required and will help students learn about current design trends. Students are encouraged to have computers at home although campus computer labs are available for student use. AutoCad and CAD Studio courses are required courses.

The Associate in Applied Science degree in Interior Design may be used to meet the interior design education requirement for registration of interior designers, the curriculum provides an overview of topics tested by the National Council for Interior Design Qualification (NCIDQ) exam, which must be completed before interior designers may be registered by the State of Illinois. In addition, the program is endorsed by the National Kitchen and Bath Association (NKBA).

By completing all required courses in this program, the World Cultures and Diversity graduation requirement has been met for this AAS degree.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ARC 116	Architectural CAD I .....	3	Program Requirement
ART 121	Design I .....	3	Humanities
IND 100	Theory and Fundamentals of Design .....	2	Program Requirement
IND 101	Interior Design Studio I .....	3	Program Requirement
IND 103	History of Furniture and Interior Architecture .....	3	Program Requirement
IND 106	Materials and Sources .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
IND 102	Interior Design Studio II .....	3	Program Requirement
IND 107	Interior Perspective and Rendering .....	3	Program Requirement
IND 110	Problem Solving/Design Communication .....	2	Program Requirement
IND 114	Codes for Interior Designers .....	2	Program Requirement
IND 116	Interior Detail/Construction Drawing .....	3	Program Requirement
IND 220	CAD Studio .....	3	Program Requirement

#### SUMMER SESSION:

Number	Course Title	Credits	Course Category
ENG 101	Composition <sup>1</sup> .....	3	Communications
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ART 130	Ancient and Medieval Art or		
ART 131	Gothic Through Romantic Art or		
ART 132	Modern and Contemporary Art .....	3	Humanities
IND 203	3-D Design Studio .....	3	Program Requirement
IND 206	Architectural Lighting .....	3	Program Requirement
IND 230	Kitchen Design Studio .....	3	Program Requirement
IND 281	Environmental Design Studio .....	3	Program Requirement

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
IND 207	Interior Design Internship .....	3	Program Requirement
IND 209	Contract Design Studio .....	3	Program Requirement
IND 211	Professional Practices for Interior Design .....	3	Program Requirement
IND 233	Bathroom Design Studio .....	2	Program Requirement
IND 250	Portfolio Development .....	1	Program Requirement

#### SUMMER SESSION:

Number	Course Title	Credits	Course Category
	Mathematics <sup>2</sup> .....	3	Mathematics
	Social and Behavioral Science .....	3	Social and Behavioral Science

<sup>1</sup> An assessment test, available in the Assessment and Testing Center, must be taken before registering for ENG 101.

## INTERIOR DESIGN

- 2 A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement (MTH 065 or higher). Students who utilize the competency test to meet the mathematics requirement must complete a three credit-hour elective.

### Architectural 2D CAD Certificate

*This 6 credit-hour certificate program is designed for those just entering the field of architecture, as well as the practicing professional who desires to learn the necessary skills to be proficient in beginning CAD drafting. Courses include introductory two-dimensional drafting and proceed through advanced two-dimensional drafting to make work faster and more efficient. Students will learn, through hands-on experience using state of the art computer hardware, the CAD software packages in demand in today's workplace.*

#### Required:

Number	Course Title	Credits
ARC 116	Architectural CAD I .....	3
ARC 117	Architectural CAD II .....	3

### Kitchen and Bath Specialty Certificate

*This 44 credit-hour certificate program is designed to give students the opportunity to benchmark their progress through the Interior Design program. Upon completion, students will be qualified to become employed in the kitchen and bath design field.*

#### Required:

Number	Course Title	Credits
ARC 116	Architectural CAD I .....	3
ART 121	Design I .....	3
IND 100	Theory and Fundamentals of Design .....	2
IND 101	Interior Design Studio I .....	3
IND 102	Interior Design Studio II .....	3
IND 106	Materials and Sources .....	3
IND 107	Interior Perspective and Rendering .....	3
IND 110	Problem Solving/Design Communication .....	2
IND 114	Codes for Interior Designers .....	2
IND 116	Interior Detail/Construction Drawing .....	3
IND 203	3-D Design Studio .....	3
IND 206	Architectural Lighting .....	3
IND 207	Interior Design Internship .....	3
IND 230	Kitchen Design Studio .....	3
IND 232	Kitchen and Bath CAD Studio .....	3
IND 233	Bathroom Design Studio .....	2

### Perspective and Rendering Certificate

*This 15 credit-hour certificate program is designed to give students a benchmark while going through the Interior Design program. This certificate's intent is for those students who want to specialize in the perspective and rendering areas of design.*

#### Required:

Number	Course Title	Credits
ART 121	Design I .....	3
IND 100	Theory and Fundamentals of Design .....	2
IND 101	Interior Design Studio I .....	3
IND 107	Interior Perspective and Rendering .....	3
IND 110	Problem Solving/Design Communication .....	2
IND 217	Advanced Sketching and Perspective Drawing .....	2

## LAW ENFORCEMENT AND JUSTICE ADMINISTRATION

### Associate in Applied Science A.A.S.: Forensic Science Degree

This 60 credit hour program will provide instruction to students in the proper techniques of identifying, collecting and packaging physical evidence associated with crime scenes and understanding the importance of proper evidence handling. The forensic science technician is responsible for processing evidence at crime scenes, identifying, collecting, and preserving physical evidence to support law enforcement activities. Graduates may be employed as forensic technicians, property and identification custodians, arson investigators and investigators for local law enforcement and fire services, federal agencies, local, regional and national crime labs, as well as in private industry such as insurance companies, etc.

#### FIRST SEMESTER:

A grade of C or better in all CHM, FIS, LEJ, and MTH courses is required for all students.

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
FIS 121	Fire Behavior and Combustion .....	3	Program Requirement
LEJ 101	Introduction to Criminal Justice .....	3	Program Requirement
LEJ 116	Forensics I .....	3	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics

#### SECOND SEMESTER:

A grade of C or better in all CHM, FIS, LEJ, and MTH courses is required for all students.

Number	Course Title	Credits	Course Category
CHM 100	Chemistry for the Health Sciences or		
CHM 110	Fundamentals of Chemistry .....	4	Natural Science
ENG 103	Technical and Report Writing .....	3	Communications
LEJ 202	Criminal Procedures .....	3	Program Requirement
LEJ 217	Forensics II .....	4	Program Requirement

#### THIRD SEMESTER:

A grade of C or better in all CHM, FIS, LEJ, and MTH courses is required for all students.

Number	Course Title	Credits	Course Category
ANT 215	Introduction to Forensic Anthropology .....	3	Social and Behavioral Science
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
FIS 132	Hazardous Materials .....	3	Program Requirement
FIS 210	Fire-Arson Investigation <sup>2</sup> .....	3	Program Requirement
LEJ 218	Forensics III .....	4	Program Requirement

#### FOURTH SEMESTER:

A grade of C or better in all CHM, FIS, LEJ, and MTH courses is required for all students.

Number	Course Title	Credits	Course Category
FIS 211	Advanced Fire-Arson Investigation .....	3	Program Requirement
LEJ 216	Investigative Process .....	3	Program Requirement
LEJ 295	Forensics IV .....	3	Program Requirement
PHI 101	Critical Thinking .....	3	Humanities
SOC 101	Introduction to Sociology <sup>+</sup> .....	3	Social and Behavioral Science

<sup>1</sup> Students must take at least three credit hours in a mathematics course at the level of MTH 080 or above.

<sup>2</sup> Prerequisite of FIS 100 will be waived for Forensic Science students.

<sup>+</sup> This course meets the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Law Enforcement and Justice Administration Degree

This 61 credit hour program is designed to serve the needs of individuals who are seeking a career in law enforcement and to meet the specific entry-level requirements to be a law enforcement officer in the State of Illinois.

This multi-disciplinary curriculum provides a general education as well as specialized training. Students who successfully complete the initial 30-31 credit hours of this program may continue on with the law enforcement career track (Year 2). Enrollment in second-year courses will require a grade of C or better for LEJ courses.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
LEJ 101	Introduction to Criminal Justice .....	3	Program Requirement
LEJ 116	Forensics I .....	3	Program Requirement
	Mathematics <sup>1</sup> .....	3	Mathematics
SOC 101	Introduction to Sociology <sup>+</sup> .....	3	Social and Behavioral Science

## LAW ENFORCEMENT AND JUSTICE ADMINISTRATION

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
LEJ 201	Criminal Law .....	3	Program Requirement
LEJ 205	Juvenile Justice .....	3	Program Requirement
PHI 101	Critical Thinking .....	3	Humanities
SOC 205	Social Problems .....	3	Social and Behavioral Science
SPE 101	Fundamentals of Speech Communication .....	3	Communications

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
LEJ 107	Vice and Drug Control .....	3	Program Requirement
LEJ 135	Patrol Procedures .....	4	Program Requirement
LEJ 210	Criminology .....	3	Program Requirement
LEJ 214	Community Policing .....	3	Program Requirement
LEJ 216	Investigative Process .....	3	Program Requirement

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
LEJ 200	Leadership and Ethics for Law Enforcement .....	3	Program Requirement
LEJ 202	Criminal Procedures .....	3	Program Requirement
LEJ 230	Organized Crime .....	3	Program Requirement
	EMG, LEJ, or SPA electives <sup>2</sup> .....	6	Program Requirement

1 A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement (MTH 065). Students who utilize the competency test to meet the mathematics requirement must complete an additional three credit hour elective.

+ This course meets the World Cultures and Diversity graduation requirement.

2 Electives: EMG 107, LEJ 104, LEJ 111, LEJ 138, LEJ 140, LEJ 217, LEJ 218, LEJ 240, LEJ 281, LEJ 295, LEJ 299, SPA 121.

### Forensic Science Technician Certificate

*This 17 credit-hour certificate program will provide advanced instruction to the person with select degrees or experience in public safety who wants specialized training. The program focuses on the proper techniques of identifying, collecting, and packaging physical evidence associated with crime scenes and understanding the importance of proper evidence handling. A forensic science technician is responsible for processing evidence at crime scenes, and identifying, collecting, and preserving physical evidence to support law enforcement activities.*

#### Required

A grade of C or better in all LEJ courses is required for all students.

Number	Course Title	Credits
LEJ 101	Introduction to Criminal Justice .....	3
LEJ 116	Forensics I .....	3
LEJ 217	Forensics II .....	4
LEJ 218	Forensics III .....	4
LEJ 295	Forensics IV .....	3

### Private Security Certificate

*This 19 credit-hour certificate program is designed to serve the needs of individuals who want the core education the Law Enforcement program offers. It also provides students with basic concepts recognized in the Security Industry. It furthers the partnerships between Law Enforcement and Private Security and offers the student an opportunity to incorporate a Certificate in Private Security within the AAS Degree in Law Enforcement thereby producing a stackable degree, something that did not exist in the Law Enforcement programs in the past.*

#### Required

A grade of C or better in all LEJ courses is required for all students.

Number	Course Title	Credits
LEJ 101	Introduction to Criminal Justice .....	3
LEJ 116	Forensics I .....	3
LEJ 135	Patrol Procedures .....	4
LEJ 140	Introduction to Private Security .....	3
LEJ 201	Criminal Law .....	3
LEJ 216	Investigative Process .....	3



## MAINTENANCE TECHNOLOGY

### Associate in Applied Science A.A.S.: Maintenance Technology Degree

This 61 credit-hour program prepares students for employment in the fast growing building maintenance service sector of urban society. Graduates may be employed directly in building maintenance as directors, managers or operators for industrial and commercial properties. Other graduates may find employment as assistants in residential properties managed through associations including assisted living housing for the elderly.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>1</sup> .....	3	Communications
ELT 142	Electrical Wiring .....	2	Program Requirement
MNT 111	Prints and Schematics .....	2	Program Requirement
MNT 115	Basic Carpentry .....	2	Program Requirement
MNT 125	Basic Plumbing .....	2	Program Requirement
MTH 097	Basic Technical Mathematics <sup>2</sup> .....	3	Mathematics

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>1</sup> .....	3	Communications
MNT 215	Commercial Carpentry .....	2	Program Requirement
MNT 225	Commercial Plumbing .....	2	Program Requirement
	Natural Science or Social and Behavioral Science <sup>+</sup> .....	3	Natural Science or Social and Behavioral Science
RAC 103	Heating Principles .....	4	Program Requirement
WLD 110	Welding I .....	3	Program Requirement

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ELT 143	Advanced Electrical Wiring .....	2	Program Requirement
	Natural Science or Social and Behavioral Science <sup>+</sup> .....	3	Natural Science or Social and Behavioral Science
RAC 101	Refrigeration Fundamentals .....	4	Program Requirement
	Technical electives <sup>3</sup> .....	6	Program Requirement

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
BCE 104	Basic Mechanical and Energy Conservation Codes .....	3	Program Requirement
	Humanities <sup>+</sup> .....	3	Humanities
MGT 160	Principles of Supervision .....	3	Program Requirement
MNT 235	Maintenance Troubleshooting Skills .....	3	Program Requirement
	Technical electives <sup>3</sup> .....	3	Program Requirement

- 1 One of the Communications electives must be ENG 101 or ENG 130. The second communications elective must be chosen from one of the following: ENG 100, ENG 102, ENG 103 or SPE 101. Students are encouraged to meet with a Student Development faculty counselor for advice in the selection of courses.
- 2 Students may take MTH 097, MTH 101, MTH 103, or higher.
- + At least one of the Humanities or Social and Behavioral Science requirements must also meet the World Cultures and Diversity graduation requirement.
- 3 Technical electives: ACC 100, ARC 210, ARC 232, ELT 120, ELT 140, ELT 144, ELT 145, FIS 122, MFT 105, MFT 120, MNT 228, MNT 255, MNT 281, RAC 104, WLD 210, WLD 211, WLD 212.

### Basic Maintenance Certificate

This 16 credit-hour certificate program provides the basic knowledge and skill for entry-level jobs in building and residential maintenance.

#### Required:

Number	Course Title	Credits
ELT 142	Electrical Wiring .....	2
MNT 111	Prints and Schematics .....	2
MNT 115	Basic Carpentry .....	2
MNT 125	Basic Plumbing .....	2

#### Electives: Select eight credit hours from the following courses:

Number	Course Title	Credits
MFT 105	Machining Processes I .....	4
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3

## MAINTENANCE TECHNOLOGY

RAC 103	Heating Principles .....	4
WLD 110	Welding I .....	3

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

### Commercial Maintenance Certificate

*This 32 credit-hour certificate program builds on the Basic Maintenance certificate to prepare students for more advanced maintenance jobs in commercial or industrial maintenance.*

#### Required:

Number	Course Title	Credits
ELT 142	Electrical Wiring .....	2
ELT 143	Advanced Electrical Wiring .....	2
MNT 111	Prints and Schematics .....	2
MNT 115	Basic Carpentry .....	2
MNT 125	Basic Plumbing .....	2
MNT 215	Commercial Carpentry .....	2
MNT 225	Commercial Plumbing .....	2
MNT 228	Small Equipment Maintenance .....	2
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3
RAC 103	Heating Principles .....	4
WLD 110	Welding I .....	3

#### Select six credits from the following:

Number	Course Title	Credits
ELT 120	Introductory Industrial Electronics Maintenance .....	2
FIS 122	Fire Prevention Principles .....	3
MFT 105	Machining Processes I .....	4
MFT 120	Machining Processes II .....	3
MNT 235	Maintenance Troubleshooting Skills .....	3
MNT 255	Belts/Bearings and Mechanical Drives .....	2
RAC 101	Refrigeration Fundamentals .....	4
WLD 210	Welding II .....	3
WLD 211	Welding III .....	4
WLD 212	Welding IV .....	4

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

### Manufacturing Basic Certificate

*This 15 credit-hour certificate program is designed to give students skills in welding and machining to prepare them for entry-level employment in manufacturing. The program of study will emphasize welding theory and extensive practice in major arc welding process including OAW, SMAW, GMAW, and GTAW. Students will learn the fundamentals of machine shop theory and the practical application to the maintenance and fabrication industry. Students will work from blueprints and will be able to fabricate and repair small parts used in a variety of industrial applications.*

#### Required:

Number	Course Title	Credits
MFT 105	Machining Processes I .....	4
MFT 120	Machining Processes II .....	3
MNT 111	Prints and Schematics .....	2
WLD 110	Welding I .....	3
WLD 210	Welding II .....	3

### Supervisory Maintenance Certificate

*This 46 credit-hour certificate program builds on the Basic Maintenance and Commercial Maintenance certificates to prepare students for supervisory positions in commercial, industrial or residential maintenance.*

#### Required:

Number	Course Title	Credits
BCE 104	Basic Mechanical and Energy Conservation Codes .....	3
ELT 142	Electrical Wiring .....	2
ELT 143	Advanced Electrical Wiring .....	2
MGT 160	Principles of Supervision .....	3

## MAINTENANCE TECHNOLOGY

MNT 111	Prints and Schematics .....	2
MNT 115	Basic Carpentry .....	2
MNT 125	Basic Plumbing .....	2
MNT 215	Commercial Carpentry .....	2
MNT 225	Commercial Plumbing .....	2
MNT 228	Small Equipment Maintenance .....	2
MNT 235	Maintenance Troubleshooting Skills .....	3
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3
RAC 101	Refrigeration Fundamentals .....	4
RAC 103	Heating Principles .....	4
WLD 110	Welding I .....	3

**Electives: Select seven credit hours from the following courses:**

Number	Course Title	Credits
ACC 100	Introductory Accounting .....	3
ARC 213	Building Materials II .....	4
ELT 120	Introductory Industrial Electronics Maintenance .....	2
ELT 140	Programmable Logic Controllers .....	2
ELT 144	AC and DC Motors .....	2
ELT 145	Variable Frequency Drives .....	2
FIS 122	Fire Prevention Principles .....	3
MFT 105	Machining Processes I .....	4
MFT 120	Machining Processes II .....	3
MNT 255	Belts/Bearings and Mechanical Drives .....	2
MNT 281	Topics in Maintenance Technology .....	1-6
RAC 104	Residential Comfort Systems .....	3
WLD 210	Welding II .....	3
WLD 211	Welding III .....	4
WLD 212	Welding IV .....	4

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103 or higher.

## MANAGEMENT

### Business Management Certificate

This 18 credit-hour certificate program is designed for those students who wish to further explore the specific qualifications and requirements necessary for entry-level to mid-management positions.

The Associate in Applied Science in Business Administration includes a specialized study area for Management. Please refer to Business Administration in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
MGT 111	Introduction to Business Organization .....	3
MGT 150	Business Math or Mathematics <sup>1</sup> .....	
MGT 160	Principles of Supervision .....	3
MGT 270	Principles of Management .....	3

#### Electives: Select at least six credit hours from the following courses:

Number	Course Title	Credits
MGT 205	Leadership .....	3
MGT 218	Introduction to Finance .....	3
MGT 280	Organizational Behavior .....	3
MGT 291	Problems in Management and Supervision .....	3

<sup>1</sup> The mathematics elective must be MTH 103 or above. Students should meet with a Student Development Faculty Counselor or the program coordinator for an appropriate MTH course.

### Entrepreneurship Certificate

This 21 credit-hour certificate is designed for those individuals who are exploring entrepreneurial ventures, want to apply the entrepreneurial mindset to their careers and/or want to start small businesses. Focus will be on leadership, creativity, innovation and funding sources. The Associate in Applied Science in Business Administration includes a specialized study area for Entrepreneurship. Please refer to Business Administration in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
ACC 100	Introductory Accounting or	
ACC 101	Introduction to Financial Accounting .....	4
MGT 111	Introduction to Business Organization .....	3
MGT 154	Entrepreneurship .....	3
MGT 205	Leadership .....	3
MGT 254	Applied Entrepreneurship .....	3
MGT 255	Entrepreneurial Financing .....	3

#### Electives: Select a minimum of three credit hours from the following courses:

Number	Course Title	Credits
FIN 215	Financial Statements Interpretation and Analysis .....	3
MGT 165	Global Business .....	3
MGT 211	Internship in Small Business .....	3
MKT 180	Strategic Writing for a Digital World .....	3
MKT 245	Principles of Marketing .....	3
MKT 252	Internet Marketing .....	3

### Human Resource Management Certificate

This 18 credit-hour certificate program is designed for those individuals interested in employment in the Human Resources field.

The Associate in Applied Science in Business Administration includes a specialized study area for Human Resource Management. Please refer to Business Administration in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
ACC 216	Employment Law .....	3
MGT 111	Introduction to Business Organization .....	3
MGT 204	Training and Development .....	3
MGT 265	Human Resources Management .....	3
MGT 280	Organizational Behavior .....	3

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## MANAGEMENT

**Electives: Select three credit hours from the following courses:**

Number	Course Title	Credits
MGT 266	Wage Analysis and Administration .....	3
MGT 275	Labor-Management Relations .....	3
MGT 276	Collective Bargaining .....	3

## MANUFACTURING TECHNOLOGY

### Associate in Applied Science A.A.S.: Advanced Manufacturing Technology Degree - Mechatronics/Automation

*This 60 credit-hour Advanced Manufacturing Technology degree is designed to prepare students for the modern manufacturing environment. This program will prepare students for employment with companies that have implemented team-oriented design, production, quality and maintenance systems within the manufacturing environment. American manufacturers are increasingly using high-tech equipment that involves multiple integrated systems. It is critical that these companies be able to recruit and employ individuals who know how to operate, troubleshoot and maintain this high-tech equipment.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
MFT 102	Introduction to Manufacturing and Safety .....	4	Program Requirement
MFT 104	Quality and Measurement .....	2	Program Requirement
MFT 108	Manufacturing Processes .....	3	Program Requirement
MFT 109	Introduction to Manufacturing Maintenance .....	2	Program Requirement
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3	Mathematics

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ELT 110	Introductory Electronics .....	4	Program Requirement
ELT 120	Introductory Industrial Electronics Maintenance .....	2	Program Requirement
ENG 101	Composition .....	3	Communications
MFT 119	Manufacturing Internship .....	2	Program Requirement
	Technical electives <sup>2</sup> .....	5	Program Requirement

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ELT 140	Programmable Logic Controllers .....	2	Program Requirement
ELT 142	Electrical Wiring .....	2	Program Requirement
ELT 143	Advanced Electrical Wiring .....	2	Program Requirement
	ELT electives <sup>3</sup> .....	4	Program Requirement
	Social and Behavioral Science <sup>4</sup> .....	6	Social and Behavioral Science

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>4</sup> .....	3	Communications
ELT 215	Industrial Control Systems .....	4	Program Requirement
	ELT electives <sup>3</sup> .....	4	Program Requirement
	Humanities <sup>4</sup> .....	3	Humanities

1 Students may take MTH 097, MTH 101, MTH 103, or higher.

2 Select courses not listed as required that have one of the following prefixes: ELT, MFT, MNT, SCM, or WLD.

3 Select from the following courses: ELT 125, ELT 135, ELT 144, ELT 145, ELT 146, ELT 147, ELT 161.

+ At least one course from the Humanities or Social and Behavioral Science must also meet the World Cultures and Diversity graduation requirement.

4 Choose from ENG 103 or SPE 101.

### Associate in Applied Science A.A.S.: Advanced Manufacturing Technology Degree - Metal Fabrication

*This 60 credit-hour Advanced Manufacturing Technology degree is designed to prepare students for the modern manufacturing environment. This program will prepare students for employment with companies that have implemented team-oriented design, production, quality and maintenance systems within the manufacturing environment. American manufacturers are increasingly using high-tech equipment that involves multiple integrated systems. It is critical that these companies be able to recruit and employ individuals who know how to operate, troubleshoot and maintain this high-tech equipment.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
MFT 102	Introduction to Manufacturing and Safety .....	4	Program Requirement
MFT 104	Quality and Measurement .....	2	Program Requirement
MFT 108	Manufacturing Processes .....	3	Program Requirement
MFT 109	Introduction to Manufacturing Maintenance .....	2	Program Requirement
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3	Mathematics

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
MFT 119	Manufacturing Internship .....	2	Program Requirement

## MANUFACTURING TECHNOLOGY

MNT 111	Prints and Schematics .....	2	Program Requirement
	Social and Behavioral Science* .....	6	Social and Behavioral Science
WLD 110	Welding I .....	3	Program Requirement
WLD 210	Welding II .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
WLD 211	Welding III .....	4	Program Requirement
WLD 212	Welding IV .....	4	Program Requirement
WLD 240	Cutting Processes .....	3	Program Requirement

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
WLD 225	Advanced Blueprint Reading .....	2	Program Requirement
WLD 245	Welding Fabrication I .....	4	Program Requirement
WLD 250	Welding Fabrication II .....	4	Program Requirement
	Humanities* .....	3	Humanities
	Communications <sup>2</sup> .....	3	Communications

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

+ At least one of the Humanities or Social and Behavioral Science courses must also meet the World Cultures and Diversity graduation requirement.

<sup>2</sup> Choose from ENG 103 or SPE 101.

### Associate in Applied Science A.A.S.: Advanced Manufacturing Technology Degree - Precision Machining

*This 60 credit-hour Advanced Manufacturing Technology degree is designed to prepare students for the modern manufacturing environment. This program will prepare students for employment with companies that have implemented team-oriented design, production, quality and maintenance systems within the manufacturing environment. American manufacturers are increasingly using high-tech equipment that involves multiple integrated systems. It is critical that these companies be able to recruit and employ individuals who know how to operate, troubleshoot and maintain this high-tech equipment.*

### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
MFT 102	Introduction to Manufacturing and Safety .....	4	Program Requirement
MFT 104	Quality and Measurement .....	2	Program Requirement
MFT 108	Manufacturing Processes .....	3	Program Requirement
MFT 109	Introduction to Manufacturing Maintenance .....	2	Program Requirement
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3	Mathematics

### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
MFT 105	Machining Processes I .....	4	Program Requirement
MFT 119	Manufacturing Internship .....	2	Program Requirement
MFT 120	Machining Processes II .....	3	Program Requirement
MFT 123	Introduction to CNC Machining .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>2</sup> .....	3	Communications
MFT 125	CNC Lathe Operation and Programming .....	3	Program Requirement
MFT 128	CNC Mill Operation and Programming .....	3	Program Requirement
MNT 111	Prints and Schematics .....	2	Program Requirement
	Social and Behavioral Science* .....	6	Social and Behavioral Science

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
	Humanities* .....	3	Humanities
MFT 130	Machining Blueprints .....	1	Program Requirement
MFT 201	Advanced CNC .....	5	Program Requirement
MFT 265	Properties of Materials .....	2	Program Requirement

## MANUFACTURING TECHNOLOGY

Technical electives<sup>3</sup> ..... 3 Program Requirement

- 1 Students may take MTH 097, MTH 101, MTH 103, or higher.
- 2 Choose from ENG 103 or SPE 101.
- + At least one of the Humanities or Social and Behavior Science courses must also meet the World Cultures and Diversity graduation requirement.
- 3 Select courses not listed as required that have one of the following prefixes: ELT, MFT, MNT, SCM, or WLD.

### Associate in Applied Science A.A.S.: Advanced Manufacturing Technology Degree - Supply Chain Management

*This 60 credit-hour Advanced Manufacturing Technology degree is designed to prepare students for the modern manufacturing environment. This program will prepare students for employment with companies that have implemented team-oriented design, production, quality and maintenance systems within the manufacturing environment. American manufacturers are increasingly using high-tech equipment that involves multiple integrated systems. It is critical that these companies be able to recruit and employ individuals who know how to operate, troubleshoot and maintain this high-tech equipment.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
MFT 102	Introduction to Manufacturing and Safety .....	4	Program Requirement
MFT 104	Quality and Measurement .....	2	Program Requirement
MFT 108	Manufacturing Processes .....	3	Program Requirement
MFT 109	Introduction to Manufacturing Maintenance .....	2	Program Requirement
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3	Mathematics

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
SCM 101	Supply Chain Management .....	3	Program Requirement
SCM 122	Inventory Management .....	3	Program Requirement
SCM 126	Demand Planning .....	3	Program Requirement
	Social and Behavioral Science <sup>+</sup> .....	3	Social and Behavioral Science

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>2</sup> .....	3	Communications
	Humanities <sup>+</sup> .....	3	Humanities
SCM 120	Production Control .....	3	Program Requirement
SCM 226	Advanced Planning and Integration .....	3	Program Requirement
	Social and Behavioral Science <sup>+</sup> .....	3	Social and Behavioral Science

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
MFT 119	Manufacturing Internship .....	2	Program Requirement
SCM 123	Transportation .....	3	Program Requirement
SCM 124	Warehouse Operations .....	3	Program Requirement
SCM 125	Procurement .....	3	Program Requirement
	Technical electives <sup>3</sup> .....	5	Program Requirement

- 1 Students may take MTH 097, MTH 101, MTH 103, or higher.
- + At least one of the Humanities or Social and Behavioral Science courses must also meet the World Cultures and Diversity graduation requirement.
- 2 Choose from ENG 103 or SPE 101.
- 3 Select courses not listed as required that have one of the following prefixes: ELT, MFT, MNT, SCM or WLD.

### Computer Numerical Control (CNC) Operator I Certificate

*This 18 credit-hour certificate program is designed to provide students with the skills necessary to gain entry-level employment in the manufacturing/precision machining industry. The certificate focuses on skills used in a modern machine shop-blueprint reading, conventional machine tool theory and lab, and an introduction to CNC operations.*

#### Required:

Number	Course Title	Credits
MFT 105	Machining Processes I .....	4
MFT 120	Machining Processes II .....	3
MFT 123	Introduction to CNC Machining .....	3
MFT 125	CNC Lathe Operation and Programming .....	3



## MANUFACTURING TECHNOLOGY

MNT 111	Prints and Schematics .....	2
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

### Computer Numerical Control (CNC) Operator II Certificate

*This 29 credit-hour certificate program is a continuation of the CNC Operator Control I certificate. It is designed to further develop CNC operation skills to prepare students to advance in their career in precision machining.*

#### Required:

Number	Course Title	Credits
MFT 105	Machining Processes I .....	4
MFT 120	Machining Processes II .....	3
MFT 123	Introduction to CNC Machining .....	3
MFT 125	CNC Lathe Operation and Programming .....	3
MFT 128	CNC Mill Operation and Programming .....	3
MFT 130	Machining Blueprints .....	1
MFT 201	Advanced CNC .....	5
MFT 265	Properties of Materials .....	2
MNT 111	Prints and Schematics .....	2
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

### Manufacturing Production Certificate

*This 16 credit-hour certificate program is designed to build the core competencies of manufacturing production to prepare students for internships and entry-level positions in manufacturing. The MFT coursework below prepares the student for an industry recognized certification assessment. Students who successfully pass all four assessments will be recognized as Certified Production Technicians by the Manufacturing Skill Standards Council (MSSC).*

#### Required:

Number	Course Title	Credits
MFT 102	Introduction to Manufacturing and Safety .....	4
MFT 104	Quality and Measurement .....	2
MFT 108	Manufacturing Processes .....	3
MFT 109	Introduction to Manufacturing Maintenance .....	2
MFT 119	Manufacturing Internship .....	2
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

## MARKETING

### E-Commerce Business Certificate

This 18 credit-hour certificate program is designed to give individuals with little technical or business training the skills necessary to start and manage viable Web-based businesses or consult with others on e-commerce business start-ups. The principles learned in this program could also be applied to existing businesses wishing to expand by offering a Web-based alternative.

The Associate in Applied Science in Business Administration includes a specialized study area for Marketing. Please refer to Business Administration in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
MGT 111	Introduction to Business Organization .....	3
MGT 154	Entrepreneurship .....	3
MKT 245	Principles of Marketing .....	3
MKT 252	Internet Marketing .....	3
WEB 240	E-Commerce Strategies/Technologies .....	3

#### Electives: Select three credit hours from the following:

Number	Course Title	Credits
MKT 247	Consumer Buying Behavior .....	3
MKT 255	Marketing Research .....	3
MKT 180	Strategic Writing for a Digital World .....	3

### Marketing Certificate

This 18 credit-hour certificate program is designed for those interested in obtaining basic marketing skills that can be used in entry-level marketing positions.

The Associate in Applied Science in Business Administration includes a specialized study area for Marketing. Please refer to Business Administration in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
MGT 111	Introduction to Business Organization .....	3
MKT 217	Advertising .....	3
MKT 245	Principles of Marketing .....	3
MKT 252	Internet Marketing .....	3
MKT 255	Marketing Research .....	3

#### Electives: Select three credit hours from the following:

Number	Course Title	Credits
MKT 105	Sports Marketing .....	3
MKT 106	Retail Merchandising .....	3
MKT 140	Principles of Professional Selling .....	3
MKT 247	Consumer Buying Behavior .....	3
MKT 281	Internship in Marketing .....	3

### Retail Merchandising Certificate

This 18 credit-hour certificate program is designed for individuals with career interests in the retail management field. It is especially appropriate for those individuals employed in retailing who are seeking skills and knowledge which may prepare them for career advancement.

The Associate in Applied Science in Business Administration includes a specialized study area for Marketing. Please refer to Business Administration in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
FAS 212	Visual Fashion Merchandising or	
MKT 217	Advertising .....	3
MGT 111	Introduction to Business Organization .....	3
MKT 106	Retail Merchandising .....	3
MKT 251	Retail Merchandise Management .....	3

## MARKETING

### Electives: Select six credit hours from the following courses:

Number	Course Title	Credits
MGT 154	Entrepreneurship .....	3
MGT 160	Principles of Supervision .....	3
MKT 140	Principles of Professional Selling .....	3
MKT 245	Principles of Marketing .....	3
MKT 252	Internet Marketing .....	3

### Sales Management and Development Certificate

*This 18 credit-hour certificate program is designed to provide in-service and pre-service training and development for industrial sales and sales management personnel representing manufacturers, service marketers, wholesalers or other marketing middlemen. Through the selection of courses, this program can satisfy both the career needs of individuals seeking to develop and expand their selling and account servicing skills and individuals preparing for sales management responsibilities. This certificate program would be especially appropriate for individuals who are entering the professional field without a formal sales or marketing education.*

*To achieve an individual program designed to complement the student's industrial and educational background, the selection of electives should be made in consultation with the coordinator.*

*The Associate in Applied Science in Business Administration includes a specialized study area for Marketing. Please refer to Business Administration in this section of the catalog if you are interested in pursuing a degree in this discipline.*

### Required:

Number	Course Title	Credits
MGT 111	Introduction to Business Organization .....	3
MKT 140	Principles of Professional Selling .....	3
MKT 141	Sales Management .....	3
MKT 240	Advanced Sales Strategies .....	3

### Electives: Select six credit hours from the following:

Number	Course Title	Credits
ACC 211	Business Law I .....	3
MGT 160	Principles of Supervision .....	3
MGT 280	Organizational Behavior .....	3
MKT 245	Principles of Marketing .....	3
MKT 247	Consumer Buying Behavior .....	3

## MASSAGE THERAPY

### Massage Therapy Certificate

This 34 credit-hour program prepares the graduate to be a massage therapist and sit for the required National Board Exam. A massage therapist manipulates soft tissue to promote wellness, flexibility, and healing of the body, mind and spirit. Massage therapists are employed in diverse environments from chiropractic and rehabilitation settings to beauty and health spas. Many therapists own their own businesses as well as travel to on-site locations. Part-time supplemental employment as well as full-time careers are possible in this diverse profession.

The Massage Therapy profession requires that the therapist uphold high ethical standards and practices. Therapeutic massage requires close contact with clients and students in this program are expected to demonstrate professionalism and comply with the ethical standards of the profession during their treatment of clients.

Students interested in entering the field must meet the requirements set by the Illinois Department of Financial and Professional Regulation (IDFPR): 18 years of age, high school graduate or equivalent (GED) and successfully pass a criminal background check. Successful completion of MTP 100 (Introduction to Massage Therapy) is also required for admission to the program.

Graduates must pass the Massage Board Licensing Exam (MBLEx) and apply for licensure with the Illinois Department of Financial and Professional Regulation.

### PREREQUISITE:

A grade of C or better in all MTP courses is required for all students.

Number	Course Title	Credits
MTP 100	Introduction to Massage Therapy .....	1

### FIRST SEMESTER:

A grade of C or better in all MTP courses is required for all students.

Number	Course Title	Credits
MTP 110	Massage Practice Fundamentals .....	2
MTP 112	Massage Structure/Function I .....	3
MTP 115	Foundations of Massage Therapy I .....	4
MTP 118	Hydrotherapy and Intro to Clinic .....	2
MTP 123	Integrative Palpation I .....	3

### SECOND SEMESTER:

A grade of C or better in all MTP courses is required for all students.

Number	Course Title	Credits
MTP 122	Massage Structure/Function 2 .....	3
MTP 125	Foundations of Massage Therapy II .....	4
MTP 128	Massage Therapy Clinical I .....	1
MTP 133	Integrative Palpation II .....	2
MTP 134	Pathology for Massage Therapists .....	2

### THIRD SEMESTER:

A grade of C or better in all MTP courses is required for all students.

Number	Course Title	Credits
MTP 135	Foundations of Massage Therapy III .....	2
MTP 136	Movement Analysis/Applied Therapies .....	3
MTP 137	Massage Practice Development .....	1
MTP 138	Massage Therapy Clinical II .....	1

## MEDICAL OFFICE ADMINISTRATION

### Associate in Applied Science A.A.S.: Health Care Office Manager Degree

This 60 credit-hour program is designed for individuals seeking a rewarding career in healthcare as a Health Care Office Manager. Develop the skills necessary to manage the day-to-day office operations of a medical facility. This degree prepares the student for employment in medical offices, clinics, extended care facilities, home health care agencies, or various departments within acute-care settings. For more information attend a Health Career Information Session or schedule an appointment with your Student Development Faculty Counselor.

#### FIRST SEMESTER:

A grade of C or better is required in all BIO, HSC and MOA courses.

Number	Course Title	Credits	Course Category
BIO 135	Introduction to Human Anatomy and Physiology .....	4	Natural Science
ENG 101	Composition .....	3	Communications
HSC 104	Health Care Technology and Informatics .....	2	Program Requirement
HSC 105	Introduction to Health Care Today .....	2	Program Requirement
HSC 112	Medical Terminology .....	2	Program Requirement
MOA 145	Health Care Records Management .....	2	Program Requirement

#### SECOND SEMESTER:

A grade of C or better is required in all BIO, HSC and MOA courses.

Number	Course Title	Credits	Course Category
BIO 136	Introduction to Human Disease .....	3	Natural Science
HSC 213	Legal and Ethical Issues in Health Care .....	2	Program Requirement
MGT 111	Introduction to Business Organization .....	3	Program Requirement
MOA 150	Math Applications in Health Care .....	1	Program Requirement
MOA 235	Health Care Office Procedures .....	3	Program Requirement
	Elective <sup>1</sup> .....	3	Program Requirement

#### THIRD SEMESTER:

A grade of C or better is required in all MOA courses.

Number	Course Title	Credits	Course Category
MGT 150	Business Math .....	3	Mathematics
MGT 270	Principles of Management .....	3	Program Requirement
MOA 195	Principles of Health Insurance Billing .....	3	Program Requirement
MOA 245	Health Care Office Management .....	3	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### FOURTH SEMESTER:

A grade of C or better is required in all MOA courses.

Number	Course Title	Credits	Course Category
MOA 299	Medical Office Capstone .....	3	Program Requirement
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science
	Humanities or Social and Behavioral Science <sup>+</sup> .....	3	Humanities or Social and Behavioral Science
	Electives <sup>1</sup> .....	6	Program Requirement

<sup>1</sup> Select nine credit hours from the following courses: CIS 101, HSC 106, HSC 225 or LNG 225, MGT 205, MGT 265, MGT 280, MOA 196, MOA 198.

<sup>+</sup> Students need to choose a course to meet this requirement that also meets the World Cultures and Diversity graduation requirement.

### Health Insurance Specialist Certificate

This concentrated 35 credit-hour certificate program is designed for the individual who is interested in becoming an insurance billing specialist or biller or coder in an outpatient/ambulatory care facility or a claims approver in an insurance company. The program provides a generalized orientation to the health care field, plus specific training in International Classification of Disease (ICD) and Current Procedural Terminology (CPT) coding, billing reimbursement and collections procedures. Some keyboarding skills and knowledge of computers is recommended. A 160-hour externship in a medical facility is offered during spring and fall semesters only, during the last semester of the program. For more information attend a Health Career Information Session or schedule an appointment with your Student Development Faculty Counselor.

#### Required:

A grade of C or better is required for all courses.

Number	Course Title	Credits
BIO 135	Introduction to Human Anatomy and Physiology .....	4
BIO 136	Introduction to Human Disease .....	3
ENG 101	Composition .....	3
HSC 104	Health Care Technology and Informatics .....	2

## MEDICAL OFFICE ADMINISTRATION

HSC 105	Introduction to Health Care Today .....	2
HSC 112	Medical Terminology .....	2
HSC 213	Legal and Ethical Issues in Health Care .....	2
MOA 145	Health Care Records Management .....	2
MOA 195	Principles of Health Insurance Billing .....	3
MOA 196	Current Procedural Terminology (CPT) Coding .....	3
MOA 198	Principles of ICD-10-cm Coding .....	3
MOA 235	Health Care Office Procedures <sup>1</sup> .....	3
MOA 275	Health Insurance Specialist Externship <sup>1</sup> .....	3

<sup>1</sup> Students must submit an American Heart Association Cardiopulmonary Resuscitation for the Health Care Provider (CPR) certificate before entering externship.

### Medical Assistant Certificate

*This concentrated 36 credit-hour certificate program is designed for the individual who is interested in becoming a medical assistant in a physician's office or other outpatient health care setting. The curriculum provides training in a variety of administrative and clinical tasks to facilitate the work of the physician. Administrative duties include patient communication, computer skills and record keeping. Clinical duties include assisting with examinations, treatments, diagnostic testing, patient education, and preparation and administration of medications.*

*A minimum keyboarding speed of 30 words per minute is recommended to enter the program. 40 words per minute is expected in order to progress through externship. The program may be taken part-time and many courses are available on an evening schedule. An orientation and planning session is recommended by the coordinator. Detailed information is available on the website harpercollege.edu*

#### Professional Accreditation and Certification:

*The Medical Assistant certificate program at Harper College has been accredited by the Commission on the Accreditation of Allied Health Educational Programs (CAAHEP) upon recommendation of the Medical Assistant Education Review Board (MAERB). Graduates of the programs are eligible to sit for the national certification examination sponsored by the American Association of Medical Assistants (AAMA). The MOA graduate who successfully completes this national examination is credentialed as a Certified Medical Assistant (CMA-AAMA).*

*Please contact the program coordinator for current name(s) and pertinent information regarding the national professional organization(s) affiliated with the programs in the Medical Office Administration department.*

#### Required

A grade of C or better in all BIO, HSC and MOA courses is required for all students.

Number	Course Title	Credits
BIO 135	Introduction to Human Anatomy and Physiology .....	4
ENG 101	Composition .....	3
HSC 112	Medical Terminology .....	2
HSC 165	Basic Pharmacology .....	1
HSC 213	Legal and Ethical Issues in Health Care .....	2
MOA 145	Health Care Records Management .....	2
MOA 150	Math Applications in Health Care .....	1
MOA 195	Principles of Health Insurance Billing .....	3
MOA 215	Clinical Procedures <sup>1</sup> .....	8
MOA 235	Health Care Office Procedures .....	3
MOA 280	Medical Assistant Externship <sup>1</sup> .....	3
MOA 291	Certified Medical Assistant Review .....	1
PSY 101	Introduction to Psychology .....	3

<sup>1</sup> Students must submit an American Heart Association Cardiopulmonary Resuscitation for the Health Care Provider (CPR) certificate before entering externship.

### Medical Receptionist Certificate

*This 24 credit-hour certificate program is designed for the individual who is interested in working in a medical facility at the front desk. The certificate offers the skills necessary to work as an office assistant in a medical office or health care related facility. Administrative duties include patient and visitor reception, appointment scheduling, appointment confirmation calls, maintaining files, insurance verification, insurance claims processing, billing and collections, health care records management, and other clerical front desk duties. A 160-hour externship in a medical facility is offered during spring and fall semesters only, during the last semester of the program. For more information attend a Health Career Information Session or schedule an appointment with your Student Development Faculty Counselor.*

#### Required:

A grade of C or better is required in all courses.

Number	Course Title	Credits
BIO 135	Introduction to Human Anatomy and Physiology .....	4
ENG 101	Composition .....	3
HSC 104	Health Care Technology and Informatics .....	2
HSC 105	Introduction to Health Care Today .....	2
HSC 112	Medical Terminology .....	2

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## MEDICAL OFFICE ADMINISTRATION

MOA 145	Health Care Records Management .....	2
MOA 195	Principles of Health Insurance Billing .....	3
MOA 235	Health Care Office Procedures <sup>1</sup> .....	3
MOA 265	Medical Receptionist Externship <sup>1</sup> .....	3

<sup>1</sup> Students must submit an American Heart Association Cardiopulmonary Resuscitation for the Health Care Provider (CPR) certificate before entering externship.

## NURSING

### Associate in Applied Science A.A.S.: Nursing Degree

This 72 credit-hour program is designed to enable students to receive an Associate in Applied Science degree in Nursing at the completion of the two-year sequence. The program is approved by the Illinois Department of Professional Regulation and accredited by the Accreditation Commission for Education in Nursing, Inc (ACEN).

The Associate in Applied Science degree in Nursing qualifies the graduate for NCLEX-RN and application for Illinois licensure as a registered nurse. Legal limitations could prohibit an individual from taking this licensing examination. Questions regarding these restrictions should be directed to the Illinois Department of Financial and Professional Regulations at 217.782.8556. Positions are available in a variety of health care settings.

Because of the nature of clinical experiences and individual instruction required in this program, specialized technology and the equipment necessary to offer this program, a higher tuition rate is assessed for career-specific courses. These include courses with the NUR prefix. Tuition for these courses in this program is 200 percent of the standard tuition rate.

#### Admission Requirements:

Nursing is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit [harpercollege.edu](http://harpercollege.edu)

Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

Upon admission to the Nursing program, the mathematics requirement is met.

### PREREQUISITES:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
BIO 160	Human Anatomy <sup>1</sup> .....	4	Natural Science
BIO 161	Human Physiology <sup>1</sup> .....	4	Natural Science
ENG 101	Composition .....	3	Communications
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

### FIRST SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
BIO 130	Microbiology <sup>1</sup> .....	4	Natural Science
NUR 110	Nursing Concepts and Practice .....	2	Program Requirement
NUR 111	Introduction to Nursing Roles .....	2	Program Requirement
NUR 112	Nursing Roles Clinical .....	2	Program Requirement
NUR 180	Pathophysiology .....	3	Program Requirement
PSY 228	Psychology of Human Development .....	3	Social and Behavioral Science

### SECOND SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
HSC 201	Advanced Pharmacology <sup>1</sup> .....	2	Program Requirement
NUR 140	Adult Health Concepts I .....	2	Program Requirement
NUR 141	Adult Health Clinical I .....	3	Program Requirement
NUR 150	Psychosocial Concepts .....	2	Program Requirement
NUR 151	Psychosocial Concepts Clinical .....	2	Program Requirement
NUR 210	Physical Assessment .....	2	Program Requirement

### ELECTIVE (Optional):

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
NUR 199	Bridge to Advanced Nursing <sup>2</sup> .....	3	Program Requirement

### THIRD SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
NUR 201	Child Bearing Concepts .....	2	Program Requirement
NUR 202	Adult Health Concepts II .....	2	Program Requirement
NUR 205	Pediatric Health Concepts .....	2	Program Requirement
NUR 220	Child Bearing Clinical .....	2	Program Requirement
NUR 240	Adult Health Clinical II .....	2	Program Requirement
NUR 250	Pediatric Health Clinical .....	2	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications



## NURSING

### FOURTH SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
NUR 216	Adult Health Concepts III .....	2	Program Requirement
NUR 218	Role Transition Seminar .....	1	Program Requirement
NUR 260	Adult Health Clinical III .....	3	Program Requirement
NUR 280	Role Transition Practicum .....	5	Program Requirement
	Social and Behavioral Science or Humanities+ .....	3	Social and Behavioral Science or Humanities

1 Must be completed no earlier than five years prior to beginning the Nursing program.

2 This course is required for Advanced Placement Nursing (bridge) students only.

+ Students need to choose a course to meet this requirement that also meets the World Cultures and Diversity graduation requirement.

### Certified Nursing Assistant Certificate

*This six credit-hour certificate program provides theory and training in the basic skills essential to the practice of health care workers who will assist the nurse in the care of patients in a variety of health care settings. Includes simulated practice and opportunity for clinical application. The course is approved by the Illinois Department of Public Health, Office of Health Regulations. Successful completion is required for application for the Nurse Aide Competency Exam. NOTE: All students are required to have a valid Social Security number, pass a criminal background check and meet health requirements. Special fees apply.*

*Opportunities for employment are found in settings such as long-term care facilities, home health agencies, hospitals, and private duty.*

*This program is part of Harper's Dual Credit Career Partnership. Applicants from this high school Dual Credit Career Partnership must have completed the 11th grade prior to entering and must also meet the program's special admission requirements. Special admission requirement options include ENG 001, ENG 100 or ENG 101 with a grade of C or better, or ESL 073 with a grade of B or better, or RDG 090 or RDG 099 with a grade of C or better, or an ACT Reading score of 20 or higher, or required placement test scores.*

### Required:

A grade of C or better in this course is required for this certificate.

Number	Course Title	Credits
CNA 101	Nursing Assistant Training .....	6

### Medical Corpsman to Practical Nurse Certificate

*This 6 credit-hour certificate program designed to educate the Medical Corpsman to become a practical nurse. This Medical Corpsman to Practical Nurse certificate program addresses the difference in competencies between the Medical Education and Training Campus (METC) Basic Medical Technician Corpsman Program and those of a practical nursing program as delineated in the Illinois Nurse Practice Act. The successful completion of the Medical Corpsman to Practical Nurse certificate program qualifies the graduate to sit for the National Council Licensure Exam for Practical Nurses (NCLEX-PN) and application for Illinois licensure as a practical nurse. Legal limitations could prohibit an individual from taking this licensing examination. Questions regarding these restrictions should be directed to the Illinois Department of Financial and Professional Regulations at 217.782.8556. Opportunities for employment are found in settings such as long-term care facilities, medical office groups, school nursing, home care, hospice and homes for people with disabilities. Because of the nature of clinical experiences and individual instruction required in this program, specialized technology and equipment necessary to offer this program, a higher tuition rate is assessed for career specific courses. These include courses with NUR prefix. Tuition for these courses in this program is 200 percent of the standard tuition rate NOTE: All students wishing to sit for the NCLEX-PN must have earned a High School Diploma or equivalency. Admission Requirements: Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program. Successful completion of the METC Basic Medical Technician Corpsman Program\* within the last five years. If more than 5 years, at least one year of experience using corpsman skills within the last five years. \*Navy B-300-0010 Hospital Corpsman (HM-0000), Air Force Phase 1 L8AQJ4N031 01AA, Aerospace Medical Service Apprentice Course (4N031)*

### Required:

A grade of C or better in this course is required for this certificate.

Number	Course Title	Credits
NUR 198	Medical Corpsman to Practical Nurse .....	6

### Practical Nursing Certificate

*This 37 credit-hour certificate program is designed to educate the student to become a practical nurse.*

*The Practical Nursing certificate qualifies the graduate to sit for the NCLEX-PN and application for Illinois licensure as a practical nurse. Legal limitations could prohibit an individual from taking this licensing examination. Questions regarding these restrictions should be directed to the Illinois Department of Financial and Professional Regulations at 217.782.8556. Positions in practical nursing are available in a variety of health care settings.*

## NURSING

*Because of the nature of clinical experiences and individual instruction required in this program and specialized technology and equipment necessary to offer this program, a higher tuition rate is assessed for career specific courses. These include courses with the NUR prefix. Tuition for these courses in this program is 200 percent of the standard tuition rate.*

**Admission Requirements:**

*Practical Nursing is a limited enrollment program. Applicants must have completed a CNA program and be active on the Illinois Department of Public Health, Health Care Worker Registry. For admission requirements, please contact the Admission Outreach Office at 847.925.6700 or visit harpercollege.edu*

*Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.*

**PREREQUISITES**

A grade of C or better in all BIO and NUR courses is required for all students.

Number	Course Title	Credits
ENG 101	Composition .....	3

**SUMMER SESSION:**

A grade of C or better in all BIO and NUR courses is required for all students.

Number	Course Title	Credits
BIO 160	Human Anatomy .....	4
PSY 101	Introduction to Psychology .....	3

**FIRST SEMESTER:**

A grade of C or better in all BIO and NUR courses is required for all students.

Number	Course Title	Credits
BIO 161	Human Physiology .....	4
NUR 101	PN Fundamentals .....	7
NUR 105	PN Pharmacology <sup>1</sup> .....	1

**SECOND SEMESTER:**

A grade of C or better in all BIO and NUR courses is required for all students.

Number	Course Title	Credits
NUR 102	Medical Surgical Nursing for the PN .....	4
NUR 108	PN Mental Health Nursing .....	1
NUR 109	PN Maternity and Pediatrics .....	4
PSY 228	Psychology of Human Development .....	3

**SUMMER SESSION:**

A grade of C or better in all BIO and NUR courses is required for all students.

Number	Course Title	Credits
NUR 104	PN Field Experience .....	3

<sup>1</sup> Must be taken during fall semester.

## PARALEGAL STUDIES

### Associate in Applied Science A.A.S.: Paralegal Studies Degree

The 63 credit-hour program is designed to prepare men and women as technically qualified assistants to a lawyer. Under the supervision of a lawyer, the paralegal may perform such functions as legal research, investigation, detail work with regard to probate matters, preparation of tax forms and returns, searching public and court records, office management, library service, bookkeeping, serving and filing legal documents and preparing legal forms.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
ENG 101	Composition .....	3	Communications
	Humanities <sup>1</sup> .....	3	Humanities
PLS 101	Introduction to Paralegal Studies .....	3	Program Requirement
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science
SOC 101	Introduction to Sociology <sup>+</sup> .....	3	Social and Behavioral Science

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ENG 103	Technical and Report Writing .....	3	Communications
PLS 102	Fundamentals of Legal Research .....	3	Program Requirement
PLS 103	Litigation .....	3	Program Requirement
PLS 105	Family Law .....	3	Program Requirement
PLS 123	Real Property Law .....	3	Program Requirement

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
	Mathematics <sup>2</sup> .....	3	Mathematics
PLS 201	Tort and Insurance Law .....	3	Program Requirement
PLS 205	Contract Law .....	3	Program Requirement
PLS 210	Corporate and Securities Law .....	3	Program Requirement
PSC 101	American Politics and Government .....	3	Social and Behavioral Science

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
	LEJ or PLS electives <sup>3</sup> .....	9	Program Requirement
PLS 208	Internship in Paralegal Studies <sup>4</sup> or		
PLS 215	Today's Law Office <sup>4</sup> .....	3	Program Requirement
PLS 223	Computer-Assisted Legal Research .....	3	Program Requirement

1 Humanities electives must be chosen from the following ABA-approved humanities, listed with the requirements for AAS degrees: ART 105, ART 114, ART 130, ART 131, ART 132, any FRN, any GER, any HST, any HUM, any JPN, any LIT, LNG 105, MUS 103, MUS 104, MUS 120, any PHI but not PHI 160, any SPA, or either SPE 107 or THE 111.

+ This course meets the World Cultures and Diversity graduation requirement.

2 Only 100 level or higher mathematics courses are acceptable for the mathematics elective.

3 LEJ 201 or LEJ 202 (prerequisite of LEJ 101 will be waived for Paralegal Studies degree students), PLS 200, PLS 202, PLS 206, PLS 208, PLS 212, PLS 215, PLS 220, PLS 221, PLS 222, PLS 224, PLS 230.

4 Required for individuals without any legal experience. Individuals with legal experience may substitute another PLS course with coordinator approval.

### Paralegal Studies Certificate

This 24 credit-hour certificate program is designed for those individuals who are currently employed or employable in the legal field or those who, because of legal experience, could benefit from these specialty options. The various choices available allow the student to develop special interests and skills.

To receive a certificate in Paralegal Studies, students must have earned an Associate in Applied Science degree, an Associate in Arts or Science degree, or a bachelor's degree which includes general education courses equivalent to those required in Harper College's Associate in Applied Science degree in Paralegal Studies. Verification of the degree must be submitted before the certificate will be awarded.

Students who complete the 24 credit-hour certificate are eligible to use our computerized placement service and otherwise work as paralegals for a practicing attorney. Students should be aware that there are legal restrictions on the practice of law by laymen.

Students electing to earn a certificate in Paralegal Studies are eligible to apply credits earned toward completion of the Associate in Applied Science degree.

#### Required:

Number	Course Title	Credits
PLS 101	Introduction to Paralegal Studies .....	3

## PARALEGAL STUDIES

PLS 102	Fundamentals of Legal Research .....	3
PLS 103	Litigation .....	3
PLS 208	Internship in Paralegal Studies or	
PLS 215	Today's Law Office .....	3
PLS 223	Computer-Assisted Legal Research .....	3

**Electives: Select at least 9 credit hours from the following courses, providing the combination has the approval of the coordinator or a Student Development faculty member.**

Number	Course Title	Credits
LEJ 201	Criminal Law <sup>1</sup> or	
LEJ 202	Criminal Procedures .....	3
PLS 105	Family Law .....	3
PLS 123	Real Property Law .....	3
PLS 200	Probate .....	3
PLS 201	Tort and Insurance Law .....	3
PLS 202	Estate Planning .....	3
PLS 205	Contract Law .....	3
PLS 206	Environmental Law .....	3
PLS 210	Corporate and Securities Law .....	3
PLS 212	Law Office Management .....	3
PLS 220	Community Law .....	3
PLS 221	Bankruptcy Law .....	3
PLS 222	Intellectual Property .....	3
PLS 224	Commercial Real Estate Law .....	3
PLS 230	Topics in Paralegal Studies .....	3

<sup>1</sup> Students may take LEJ 201 or LEJ 202, but not both. Prerequisite of LEJ 101 will be waived for Paralegal Studies certificate students.

## PARAPROFESSIONAL EDUCATOR

### Associate in Applied Science A.A.S.: Paraprofessional Educator Degree

This 62 credit-hour program is designed to promote the development of skills necessary when working with children in Title 1 programs in the K-12 public or private school classrooms. Students must complete both the required courses for the program and 18 hours of approved electives.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
EDU 201	Introduction to Education .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Humanities .....	3	Humanities
MTH 130	Mathematics for Elementary Teaching I .....	4	Mathematics
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
ECE 102	Child Development .....	3	Program Requirement
EDU 211	Educational Psychology .....	3	Program Requirement
	Electives <sup>1</sup> .....	6	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
EDU 219	Students With Disabilities in School .....	3	Program Requirement
EDU 250	Introduction to Technology in Education .....	3	Program Requirement
LIT 219	Children's Literature .....	3	Humanities
	Electives <sup>1</sup> .....	6	Program Requirement

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
EDU 202	Pre-Student Teaching Clinical Experience .....	1	Program Requirement
EDU 230	Introduction to Language Arts in Elementary/Middle School Teaching .....	3	Program Requirement
EDU 220	Diversity in Schools and Society* .....	3	Program Requirement
PSC 101	American Politics and Government .....	3	Social and Behavioral Science
	Electives <sup>1</sup> .....	6	Program Requirement

<sup>1</sup> Select from: ANT 101, 202, ART 105, 130, ECE 120, ECE 121, ENG 102, GEG 101, HST 111, 112, LNG 105, MTH 131, PHS 111, 112, PSY 217, 228, SGN 101.

+ This course meets the World Cultures and Diversity graduation requirement.

### Paraprofessional Educator Certificate

This 32 credit-hour program is designed to promote the skills necessary when working with children in non-title I positions in K-12 public or private schools. Individuals can also use the certificate program toward completion of the Paraprofessional Educator Associate in Applied Science degree.

#### Required:

Number	Course Title	Credits
ECE 102	Child Development .....	3
EDU 201	Introduction to Education .....	3
EDU 202	Pre-Student Teaching Clinical Experience .....	1
EDU 211	Educational Psychology .....	3
EDU 219	Students With Disabilities in School .....	3
EDU 220	Diversity in Schools and Society .....	3
EDU 230	Introduction to Language Arts in Elementary/Middle School Teaching .....	3
EDU 250	Introduction to Technology in Education .....	3
LIT 219	Children's Literature .....	3
MTH 130	Mathematics for Elementary Teaching I .....	4
PSY 101	Introduction to Psychology .....	3

## PHLEBOTOMY

### Phlebotomy Certificate

*This 8 credit-hour certificate program consists of lectures, student laboratories and a clinical internship arranged in a local health care facility. This certificate is useful for a number of health care professionals interested in developing the skills and techniques involved in the collection of blood from patients or donors for diagnostic testing. In addition, ethical and legal responsibilities, effective communication skills and safe practices are studied. Phlebotomists are employed in hospitals, hospital laboratories, physician offices, clinics, blood banks, commercial laboratories, or similar facilities. Phlebotomy has become a fast-growing health occupation and is considered a profession with a standardized educational curriculum and accepted routes for national certification. NOTE: All students wishing to sit for the national certification exam must have earned a High School Diploma or equivalency. Proof of high school graduation or GED is required before registering for PHB102.*

#### Required:

A grade of C or better in all HSC and PHB courses is required for all students.

Number	Course Title	Credits
HSC 112	Medical Terminology .....	2
PHB 101	Phlebotomy Principles and Practice .....	4
PHB 102	Phlebotomy Internship .....	2

## PHYSICAL THERAPIST ASSISTANT

### Associate in Applied Science A.A.S.: Physical Therapist Assistant Degree

(Please note: This degree will be offered beginning with the Fall 2017 semester.)

The 69 credit-hour Physical Therapist Assistant degree program prepares the student to provide physical therapy services under the direction and supervision of a licensed physical therapist, treating patients of all ages who present with various medical conditions that limit their ability to move and perform functional activities in their daily lives. Upon successful completion of the program, students will be eligible to take the National Physical Therapy Examination (NPTE) for licensure as a physical therapist assistant (PTA).

Because of the nature of clinical experiences and individualized instruction required in this program and specialized technology and the equipment necessary to offer this program, a higher tuition rate is assessed for career-specific courses including courses with the PTA prefix. Tuition for the courses in this program is 200 percent of the standard tuition rate.

#### Admission Requirements:

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit: [harpercollege.edu](http://harpercollege.edu). Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

#### PREREQUISITES:

A grade of C or better in all BIO and ENG coursework is required for all students.

Number	Course Title	Credits	Course Category
BIO 160	Human Anatomy <sup>1</sup> .....	4	Natural Science
BIO 161	Human Physiology <sup>1</sup> .....	4	Natural Science
ENG 101	Composition .....	3	Communications
	Mathematics <sup>2</sup> .....	3	Mathematics

#### FIRST SEMESTER:

A grade of C or better in all HSC, KIN and PTA coursework is required for all students.

Number	Course Title	Credits	Course Category
HSC 112	Medical Terminology .....	2	Program Requirement
KIN 230	Personal Training I/Exercise Science .....	3	Program Requirement
NUR 180	Pathophysiology .....	3	Program Requirement
PTA 101	Introduction to Physical Therapist Assistant .....	2	Program Requirement
PTA 105	Orthopedics for Physical Therapy Assistant .....	5	Program Requirement

#### SECOND SEMESTER:

A grade of C or better in all PTA coursework is required for all students.

Number	Course Title	Credits	Course Category
PTA 108	Neurology for Physical Therapist Assistant .....	5	Program Requirement
PTA 111	Kinesiology for the Physical Therapist Assistant .....	2	Program Requirement
PTA 115	Manual Techniques for the Physical Therapy Assistant .....	2	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

#### SUMMER SESSION:

A grade of C or better in all PTA coursework is required for all students.

Number	Course Title	Credits	Course Category
PTA 130	Pta Clinical Experience I .....	3	Program Requirement

#### THIRD SEMESTER:

A grade of C or better in all PTA coursework is required for all students.

Number	Course Title	Credits	Course Category
PSY 101	Introduction to Psychology .....	3	Social and Behavioral Science
PTA 201	Cardiopulmonary/Integumentary for the Physical Therapist Assistant .....	5	Program Requirement
PTA 205	Therapeutic Modalities .....	2	Program Requirement
PTA 230	Physical Therapist Assistant Clinical Experience II .....	3	Program Requirement

#### FOURTH SEMESTER:

A grade of C or better in all HSC and PTA coursework is required for all students.

Number	Course Title	Credits	Course Category
HSC 213	Legal and Ethical Issues in Health Care .....	2	Program Requirement
PTA 208	Special Populations for the Physical Therapist Assistant .....	1	Program Requirement
PTA 225	Physical Therapist Assistant Professional Seminar .....	1	Program Requirement
PTA 235	Physical Therapist Assistant Clinical Experience III .....	5	Program Requirement

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## PHYSICAL THERAPIST ASSISTANT

Humanities or Social and Behavioral Science<sup>1</sup> ..... 3 Humanities or Social and Behavioral Science

- 1 Must be completed no earlier than five years prior to beginning the PTA program. Time requirement may be waived for direct patient care providers with a minimum of a two-year allied health degree.
- 2 MTH 103 is recommended. MTH 101, MTH 124 or higher with a grade of C may be substituted.
- + This course must fulfill the World Cultures and Diversity graduation requirement.



## RADIOLOGIC TECHNOLOGY

### Associate in Applied Science A.A.S.: Radiologic Technology Degree

This 74 credit-hour full-time curriculum prepares radiographers to produce radiographic images of parts of the human body for use in diagnosing medical problems. Additional duties may include processing and evaluating images, evaluating radiology equipment, and providing relevant patient care and education. The program provides both classroom and clinical instruction in anatomy and physiology, radiobiology, pathology, medical imaging and processing, radiation physics, positioning of patients, patient care procedures, radiation protection, and medical ethics.

Radiographers are employed in health care facilities including hospitals and clinics, specialized imaging centers, urgent care clinics, physician offices and government offices. Some radiographers are employed in educational institutions and in industry.

Because of the nature of clinical experiences and individualized instruction in this program, and specialized technology and the equipment necessary to offer this program, a higher tuition rate is assessed for career specific courses. These include courses with the RAD prefix. Tuition for these courses in this program is 200 percent of the standard tuition rate.

#### Admission Requirements:

Radiologic Technology is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit [harpercollege.edu](http://harpercollege.edu)

Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

### PREREQUISITES:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
BIO 160	Human Anatomy <sup>1</sup> .....	4	Natural Science
BIO 161	Human Physiology <sup>1</sup> .....	4	Natural Science
ENG 101	Composition .....	3	Communications

### FIRST SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
HSC 104	Health Care Technology and Informatics .....	2	Program Requirement
HSC 112	Medical Terminology .....	2	Program Requirement
	Mathematics <sup>2</sup> .....	3	Mathematics
RAD 101	Intro to Radiologic Technology .....	3	Program Requirement
RAD 102	Radiologic Procedures I .....	3	Program Requirement
RAD 103	Radiologic Principles I .....	3	Program Requirement

### SECOND SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
HSC 165	Basic Pharmacology .....	1	Program Requirement
HSC 213	Legal and Ethical Issues in Health Care .....	2	Program Requirement
	Humanities or Social and Behavioral Science <sup>+</sup> .....	3	Humanities or Social and Behavioral Science
RAD 105	Radiologic Procedures II .....	3	Program Requirement
RAD 106	Radiologic Principles II .....	3	Program Requirement
RAD 107	Radiologic Clinical Education I .....	2	Program Requirement

### SUMMER SESSION:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
RAD 201	Radiologic Clinical Education II .....	2	Program Requirement
RAD 202	Radiologic Procedures III .....	1	Program Requirement

### THIRD SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
RAD 222	Radiologic Procedures IV .....	3	Program Requirement
RAD 223	Advanced Radiologic Principles .....	2	Program Requirement
RAD 224	Radiobiology .....	2	Program Requirement
RAD 225	Radiologic Clinical Education III .....	3	Program Requirement
RAD 228	Digital Imaging .....	1	Program Requirement
SPE 101	Fundamentals of Speech Communication .....	3	Communications

## RADIOLOGIC TECHNOLOGY

### FOURTH SEMESTER:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
RAD 236	Radiologic Pathology .....	3	Program Requirement
RAD 237	Radiologic Quality Assurance .....	1	Program Requirement
RAD 238	Sectional Anatomy for Imaging .....	2	Program Requirement
RAD 239	Radiologic Special Procedures .....	3	Program Requirement
RAD 240	Radiologic Clinical Education IV .....	3	Program Requirement

### SUMMER SESSION:

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits	Course Category
RAD 251	Radiologic Clinical Education V .....	3	Program Requirement
RAD 258	Radiologic Seminar .....	1	Program Requirement

- 1 Must be completed no earlier than five years prior to beginning the Radiologic Technology program.
  - 2 MTH 101 or higher with a grade of C or better.
- + Students need to choose a course to meet this requirement that also fulfills the World Cultures and Diversity graduation requirement.

### Computed Tomography (CT) Certificate

*This 16 credit-hour, year-long certificate program prepares ARRT registered radiologic technologists to produce cross-sectional images of the body, utilizing computed tomography equipment, in order to diagnose abnormalities that are difficult to evaluate with conventional radiography. The program offers a combination of clinical and didactic educational experiences that will provide the student with the necessary knowledge and skills to become an entry-level CT technologist. Students will learn the physics and instrumentation of computed tomography, clinical procedures and protocols, patient care and radiation safety. Upon completion of the CT program, the radiologic technologist will be eligible for certification by the American Registry of Radiologic Technologists (ARRT) in Computed Tomography.*

*Because of the nature of clinical experiences and individualized instruction in this program, and specialized technology, and the equipment necessary to offer this program, a higher tuition rate is assessed for career specific courses. These include courses with the RAD prefix. Tuition for these courses in this program is 200 percent of the standard tuition rate.*

#### Admission Requirements

*Computed Tomography is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit harpercollege.edu*

*Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.*

### FIRST YEAR

#### First Semester

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
RAD 238	Sectional Anatomy for Imaging .....	2
RAD 260	CT Procedures/Patient Care .....	3
RAD 261	CT Principles I .....	3

#### Second Semester

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
RAD 262	CT Principles II .....	2
RAD 263	CT Clinical Education I .....	3

### SECOND YEAR

#### First Semester

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
RAD 264	CT Clinical Education II .....	3

### Magnetic Resonance Imaging (MRI) Certificate

*This 16 credit-hour, year-long certificate program prepares ARRT registered radiologic technologists to produce cross-sectional images of the body, utilizing magnetic resonance equipment, in order to diagnose abnormalities that are difficult to evaluate with conventional radiography. The program offers a combination of clinical and didactic educational experiences that will provide the student with the*

## RADIOLOGIC TECHNOLOGY

necessary knowledge and skills to become an entry-level MRI technologist. Students will learn the physics and instrumentation of magnetic imaging, clinical procedures and protocols, patient care and radiation safety. Upon completion of the MRI program, the radiologic technologist will be eligible to sit for the registry examination given by the American Registry of Radiologic Technologists (ARRT) in MRI.

Because of the nature of clinical experiences and individualized instruction in this program, and specialized technology, and the equipment necessary to offer this program, a higher tuition rate is assessed for career specific courses. These include courses with the RAD prefix. Tuition for these courses in this program is 200 percent of the standard tuition rate.

### Admission Requirements

Magnetic Resonance Imaging is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit harpercollege.edu

Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

### FIRST YEAR First Semester

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
RAD 238	Sectional Anatomy for Imaging .....	2
RAD 270	MRI Patient Care and Procedures .....	3
RAD 271	MRI Principles I .....	3

### Second Semester

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
RAD 272	MRI Principles II .....	2
RAD 273	MRI Clinical Education I .....	3

### SECOND YEAR First Semester

A grade of C or better in all coursework is required for all students.

Number	Course Title	Credits
RAD 274	MRI Clinical Education II .....	3

### Mammography Certificate

This four credit-hour certificate program will provide the American Registry of Radiologic Technology (ARRT) registered radiologic technologist the opportunity to expand their skills into the study of the theory and practice of mammography. The mammogram is a non-invasive procedure that assists in the detection of breast cancer.

Individuals who successfully complete this program are eligible to take the ARRT Mammography registry exam.

Because of the nature of clinical experiences and individualized instruction in this certificate, and specialized technology and the equipment necessary to offer this certificate, a higher tuition rate is assessed for career-specific courses. These include courses with the RAD prefix. Tuition for these courses in this certificate is 200 percent of the standard tuition rate.

### Admission Requirements:

Mammography is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit harpercollege.edu

Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

### Required:

A grade of C or better in all RAD courses is required for all students.

Number	Course Title	Credits
RAD 215	Principles and Procedures in Mammography .....	3
RAD 216	Mammography Externship .....	1

## SIGN LANGUAGE INTERPRETING

### Sign Language Interpreting Certificate

This 40 credit-hour certificate program is designed to provide students with entry-level interpreting and transliterating skills, a general knowledge of Deaf culture and an understanding of the interpreting profession. Students enrolled in the program need to possess fluency in American Sign Language and English and need to have met the prerequisites for entry into the program. For individuals who do not yet possess sign language fluency, Harper College offers the following courses to assist in acquiring the necessary skills: SGN 101, SGN 102, SGN 103, SGN 201, and SGN 202. (See Sign Language course information.)

Successful completion of this program provides a foundation for students to take written and/or performance examinations leading to select credentials. Students should be aware that there are legal restrictions that apply to interpreters in the State of Illinois. Individuals in Illinois working toward becoming (or already working as) interpreters should familiarize themselves with the Interpreter for the Deaf Licensure Act of 2007.

#### Required:

Number	Course Title	Credits
ITP 101	Introduction to Interpreting .....	3
ITP 110	Consecutive Interpreting: English to ASL <sup>1</sup> .....	3
ITP 111	Consecutive Interpreting: ASL to English <sup>1</sup> .....	3
ITP 120	Simultaneous Interpreting: English to ASL I .....	3
ITP 121	Simultaneous Interpreting: ASL to English I .....	3
ITP 200	Transliterating and the Educational Setting .....	3
ITP 211	Simultaneous Interpreting: ASL to English II .....	3
ITP 215	Interpreting: Dialogic Discourse .....	4
ITP 216	Simultaneous Interpreting: English to ASL II .....	3
ITP 220	Interpreting Practicum <sup>2</sup> .....	5
SGN 205	American Sign Language V <sup>3</sup> .....	3
SGN 210	American Sign Language: Cultural Perspective <sup>4</sup> .....	4

#### Electives:

Number	Course Title	Credits
ITP 105	Vocabulary Development for Interpreters: English .....	1
ITP 106	Vocabulary Development for Interpreters: American Sign Language .....	1
ITP 201	Topics in Interpreting .....	1-4

- 1 Prerequisites include a grade of B or better in ITP 101 and SGN 205 before ITP 110 and ITP 111 may be taken.
- 2 A grade of C or better is required in this course.
- 3 SGN 205 has a prerequisite of SGN 202 with a grade of C or better, or consent of program coordinator.
- 4 SGN 210 has a prerequisite of SGN 201 with a grade of C or better, or consent of program coordinator.

## SUPPLY CHAIN MANAGEMENT

### Inventory/Production Control Certificate

This 12 credit-hour certificate program is designed for those currently employed in or seeking employment in the fields of inventory management or production control. The coursework is specific to those jobs and careers that focus on production planning, MRP and ERP processes, inventory management, and materials management. The Associate in Applied Science in Manufacturing Technology includes a specialized study area for Supply Chain Management. Please refer to Manufacturing Technology in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
SCM 101	Supply Chain Management .....	3
SCM 120	Production Control .....	3
SCM 122	Inventory Management .....	3
SCM 226	Advanced Planning and Integration .....	3

### Logistics Certificate

This 12 credit-hour certificate program is designed for those currently employed in or seeking employment in logistics and related positions. Topics covered will provide the graduate with knowledge of transportation, warehouse operations, material handling, packaging and overall logistics design and strategy. The Associate in Applied Science in Manufacturing Technology includes a specialized study area for Supply Chain Management. Please refer to Manufacturing Technology in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
SCM 101	Supply Chain Management .....	3
SCM 123	Transportation .....	3
SCM 124	Warehouse Operations .....	3
SCM 228	Logistics Design and Strategy .....	3

### Procurement Certificate

This 12 credit-hour certificate program is designed for those currently employed in or seeking employment in procurement positions in various industries. The curriculum emphasizes developing the competencies necessary for success in the procurement and supply management field. The Associate in Applied Science in Advanced Manufacturing includes a specialized study area for Supply Chain Management. Please refer to Manufacturing in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
SCM 101	Supply Chain Management .....	3
SCM 122	Inventory Management .....	3
SCM 125	Procurement .....	3
SCM 259	Sourcing and Supply Management .....	3

### Supply Chain Management Certificate

This 18 credit-hour certificate program is designed to provide End-to-End (E2E) education for those persons working directly in, or in fields related to, supply chain management. This particular curriculum format is especially suitable for those who may be in the field and are seeking to fill in knowledge or skill "gaps" in their total preparation. Educational content covers all functions within the supply chain including demand planning, inventory and production control, procurement and supply management, and logistics and transportation. Additionally, the program may provide training for those who may seek or be transferred into jobs within these fields and functions. The Associate in Applied Science in Manufacturing Technology includes a specialized study area for Supply Chain Management. Please refer to Manufacturing Technology in this section of the catalog if you are interested in pursuing a degree in this discipline.

#### Required:

Number	Course Title	Credits
SCM 101	Supply Chain Management .....	3
SCM 120	Production Control .....	3
SCM 122	Inventory Management .....	3
SCM 123	Transportation .....	3
SCM 125	Procurement .....	3
SCM 126	Demand Planning .....	3

## SURGICAL TECHNOLOGY

### Associate in Applied Science A.A.S.: Surgical Technology Degree

(Please note: This degree will be offered beginning with the Fall 2017 semester.)

This 66 credit-hour curriculum prepares the student for a career as a Surgical Technologist. Surgical technologists are integral members of the healthcare team, providing surgical care to patients in a variety of settings such as operating rooms and outpatient surgical centers. The surgical technologist works directly under the supervision of the surgeon during invasive surgical procedures to ensure that the operating room environment is fully prepared with surgical instruments, properly functioning equipment and environmental conditions that maximize patient safety.

Students will engage in clinical experiences built upon didactic instruction in healthcare sciences, technological sciences, patient care concepts, and surgical procedures. Because of the nature of clinical experiences, individualized instruction, and specialized technology/equipment, this program assesses a higher tuition rate for courses with the SUR prefix. Tuition for these courses is 200 percent of the standard tuition rate.

Surgical Technology is a limited enrollment program. For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or visit harpercollege.edu. Students who apply for this limited enrollment program are obligated to meet current admission requirements and follow program curriculum as defined at the time of acceptance to the program.

#### PREREQUISITES:

A grade of C or better in all BIO and HSC courses is required.

Number	Course Title	Credits	Course Category
BIO 160	Human Anatomy <sup>1</sup> .....	4	Natural Science
BIO 161	Human Physiology <sup>1</sup> .....	4	Natural Science
ENG 101	Composition .....	3	Communications
HSC 112	Medical Terminology .....	2	Program Requirement
	Mathematics <sup>2</sup> .....	3	Mathematics

#### FIRST SEMESTER:

A grade of C or better is required in all SUR courses.

Number	Course Title	Credits	Course Category
SPE 101	Fundamentals of Speech Communication .....	3	Communications
SUR 100	Orientation to the Profession .....	1	Program Requirement
SUR 101	Surgical Pharmacology .....	4	Program Requirement
SUR 110	Fundamentals of Sterile Processing .....	4	Program Requirement
SUR 111	Fundamentals/Sterile Processing Lab .....	2	Program Requirement

#### SECOND SEMESTER:

A grade of C or better is required in all SUR courses.

Number	Course Title	Credits	Course Category
SUR 102	Fundamentals of Surgical Technology .....	4	Program Requirement
SUR 103	Fundamentals/Surgical Technology Lab .....	2	Program Requirement
SUR 104	Surgical Procedures I .....	4	Program Requirement
SUR 105	Clinical Applications I .....	2	Program Requirement

#### THIRD SEMESTER:

A grade of C or better is required in all SUR courses.

Number	Course Title	Credits	Course Category
SUR 201	Surgical Procedures II .....	6	Program Requirement
SUR 202	Clinical Applications II .....	5	Program Requirement

#### FOURTH SEMESTER:

A grade of C or better is required in all SUR courses.

Number	Course Title	Credits	Course Category
SUR 203	Surgical Procedures III .....	4	Program Requirement
SUR 204	Clinical Applications III .....	6	Program Requirement
	Humanities or Social Science <sup>+</sup> .....	3	Humanities or Social and Behavioral Science

<sup>1</sup> Must be completed no earlier than five years prior to beginning the Surgical Technology program.

<sup>2</sup> MTH 101, MTH 103 or higher.

<sup>+</sup> Students need to choose a course to meet this requirement that also fulfills the World Cultures and Diversity graduation requirement.

## WEB DEVELOPMENT

### Associate in Applied Science A.A.S.: Web Development Degree - Web Application Development

The 60 credit-hour technical curriculum trains students for various positions in the field of web development. Graduates of the program may find employment as web developers, web designers, website managers, and consultants.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics
NET 105	IT Fundamentals .....	3	Program Requirement
WEB 150	Web Foundations .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications
	Natural Science, Humanities or Social/Behavioral Science* .....	3	Natural Science, Humanities, Social and Behavioral Science
WEB 200	Web Scripting Foundations .....	3	Program Requirement
WEB 210	Web Accessibility .....	3	Program Requirement

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ART 105	Introduction to Visual Art .....	3	Humanities
CIS 143	Introduction to Database Systems .....	3	Program Requirement
MKT 252	Internet Marketing .....	3	Program Requirement
WEB 235	Interactive Scripting .....	3	Program Requirement
WEB 240	E-Commerce Strategies/Technologies .....	3	Program Requirement

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
MKT 180	Strategic Writing for a Digital World .....	3	Program Requirement
	Natural Science, Humanities or Social/Behavioral Science* .....	3	Natural Science, Humanities, Social and Behavioral Science
NET 121	Introduction to Networking .....	3	Program Requirement
WEB 190	Web Authoring Tools .....	3	Program Requirement
WEB 250	Server-Side Scripting .....	3	Program Requirement

<sup>1</sup> Students must take at least 3 credit hours in a mathematics course at the level of MTH 101 or above.

<sup>+</sup> Students must take six credit hours in a minimum of two of these areas; three hours must be in a course that meets the World Cultures and Diversity graduation requirement.

### Associate in Applied Science A.A.S.: Web Development Degree - Web Visual Design

The 60 credit-hour technical curriculum trains students for various positions in the fields of web visual design. Graduates of the program may find employment as web developers, web designers, website managers, and consultants.

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
CIS 101	Introduction to Computer Information Systems .....	3	Program Requirement
ENG 101	Composition .....	3	Communications
	Mathematics <sup>1</sup> .....	3	Mathematics
NET 105	IT Fundamentals .....	3	Program Requirement
WEB 150	Web Foundations .....	3	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
CAS 160	Introduction to Business Software Packages .....	3	Program Requirement
ENG 102	Composition or		
ENG 103	Technical and Report Writing or		
SPE 101	Fundamentals of Speech Communication .....	3	Communications

## WEB DEVELOPMENT

	Natural Science, Humanities or Social/Behavioral Science* .....	3	Natural Science, Humanities, Social and Behavioral Science
WEB 200	Web Scripting Foundations .....	3	Program Requirement
WEB 210	Web Accessibility .....	3	Program Requirement

### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
ART 105	Introduction to Visual Art .....	3	Humanities
GRA 112	Digital Illustration I .....	3	Program Requirement
MKT 252	Internet Marketing .....	3	Program Requirement
WEB 180	Web Multimedia .....	3	Program Requirement
WEB 235	Interactive Scripting .....	3	Program Requirement

### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
GRA 103	Digital Imaging I .....	3	Program Requirement
MKT 180	Strategic Writing for a Digital World .....	3	Program Requirement
	Natural Science, Humanities or Social/Behavioral Science* .....	3	Natural Science, Humanities, Social and Behavioral Science
WEB 170	Web Graphics and Prototyping .....	3	Program Requirement
WEB 190	Web Authoring Tools .....	3	Program Requirement

<sup>1</sup> Students must take at least three credit hours in a mathematics course at the level of MTH 101 or above.

<sup>+</sup> Students must take six credit hours minimum of two of these areas; three hours must be in a course that meets the World Cultures and Diversity graduation requirement.

### Web Development Certificate

*This 27 credit-hour certificate program provides a background in web development with emphasis on scripting and programming techniques. Individuals seeking entry-level positions in the field of web development and maintenance will find these skills helpful. This program will also be useful to individuals whose job scope has expanded to include web site responsibilities.*

#### Required:

Number	Course Title	Credits
CAS 160	Introduction to Business Software Packages .....	3
CIS 143	Introduction to Database Systems .....	3
WEB 150	Web Foundations .....	3
WEB 190	Web Authoring Tools .....	3
WEB 200	Web Scripting Foundations .....	3
WEB 210	Web Accessibility .....	3
WEB 235	Interactive Scripting .....	3
WEB 240	E-Commerce Strategies/Technologies .....	3
WEB 250	Server-Side Scripting .....	3

### Web Visual Design Certificate

*This 21 credit-hour certificate program provides a background in web development with emphasis on graphic and visual elements. Individuals seeking entry-level positions in the field of web page design and maintenance will find these skills helpful. This program will also be useful to individuals whose job scope has expanded to include web site responsibilities.*

#### Required:

Number	Course Title	Credits
WEB 150	Web Foundations .....	3
WEB 170	Web Graphics and Prototyping .....	3
WEB 180	Web Multimedia .....	3
WEB 190	Web Authoring Tools .....	3
WEB 200	Web Scripting Foundations .....	3
WEB 210	Web Accessibility .....	3
WEB 235	Interactive Scripting .....	3



## WELDING TECHNOLOGY

### Associate in Applied Science A.A.S.: Welding Technology Degree

*This 60 credit-hour program prepares students for employment in the high demand welding and fabrication sector of the economy. Graduates may find employment as welders, fabricators and welder supervisors in the manufacturing and construction industries.*

#### FIRST SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>1</sup> .....	3	Communications
MTH 097	Basic Technical Mathematics <sup>2</sup> .....	3	Mathematics
MNT 111	Prints and Schematics .....	2	Program Requirement
WLD 110	Welding I .....	3	Program Requirement
WLD 210	Welding II .....	3	Program Requirement
WLD 225	Advanced Blueprint Reading .....	2	Program Requirement

#### SECOND SEMESTER:

Number	Course Title	Credits	Course Category
	Communications <sup>1</sup> .....	3	Communications
	Natural Science or Social and Behavioral Science <sup>+</sup> .....	3	Natural Science or Social and Behavioral Science
WLD 211	Welding III .....	4	Program Requirement
WLD 212	Welding IV .....	4	Program Requirement

#### THIRD SEMESTER:

Number	Course Title	Credits	Course Category
	Technical elective <sup>3</sup> .....	4	Program Requirement
WLD 240	Cutting Processes .....	3	Program Requirement
WLD 245	Welding Fabrication I .....	4	Program Requirement
WLD 249	Applied Welding Theory .....	3	Program Requirement

#### FOURTH SEMESTER:

Number	Course Title	Credits	Course Category
	Humanities <sup>+</sup> .....	3	Humanities
	Natural Science or Social and Behavioral Science <sup>+</sup> .....	3	Natural Science or Social and Behavioral Science
	Technical elective <sup>3</sup> .....	3	Program Requirement
WLD 250	Welding Fabrication II .....	4	Program Requirement
WLD 253	Welding Power Sources .....	3	Program Requirement

- 1 One of the Communications electives must be ENG 101 or ENG 130. The second Communications elective must be chosen from one of the following: ENG 100, ENG 102, ENG 103 or SPE 101. Students are encouraged to meet with a Student Development faculty counselor for advice in the selection of courses.
- 2 Students may take MTH 097, MTH 101, MTH 103, or higher.
- + At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.
- 3 Technical electives: MFT 105, MFT 120, MFT 265, WLD 246, WLD 248, WLD 260, WLD 261, WLD 285.

### Advanced Welding Certificate

*This 33 credit-hour certificate program is designed to give students advanced knowledge and skills in welding. The program of study will emphasize advanced welding theory, and practical application of the major forms of welding. Students will learn to interpret welding blueprints and develop the skills necessary to pass welder qualification tests. Students will meet AWS SENSE (School Excelling through National Skill Standards Education) training standards for certification as an AWS Level II Advanced Welder.*

#### Required:

Number	Course Title	Credits
MFT 265	Properties of Materials .....	2
MNT 111	Prints and Schematics .....	2
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3
WLD 110	Welding I .....	3
WLD 210	Welding II .....	3
WLD 211	Welding III .....	4
WLD 212	Welding IV .....	4
WLD 225	Advanced Blueprint Reading .....	2
WLD 249	Applied Welding Theory .....	3
WLD 253	Welding Power Sources .....	3
WLD 260	Arc Welder Qualification or	
WLD 261	Mig Welder Qualification .....	4

## WELDING TECHNOLOGY

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

### Basic Pipe Welding Certificate

*This 16 credit-hour certificate program is designed to give students entry-level skills in basic pipe welding. The program of study will emphasize extensive practice in the major arc welding process, and out-of-position and multi-pass arc welding including GMAW, SMAW and GTAW. Students will work from blueprints and develop the welding skills necessary to perform SMAW pipe welding with E6010 and E7018 electrodes in all positions.*

#### Required:

Number	Course Title	Credits
MNT 111	Prints and Schematics .....	2
WLD 110	Welding I .....	3
WLD 210	Welding II .....	3
WLD 246	Pre-Pipe Welding .....	4
WLD 248	Basic Pipe Welding .....	4

### Basic Welding Certificate

*This 16 credit-hour certificate program is designed to give students entry-level skills in welding. The program of study will emphasize welding safety, extensive practice in the major arc welding process, and out-of-position and multi-pass arc welding including GMAW, SMAW, and GTAW. Students will work with mild steel, stainless steel and aluminum. Students will work on the welding skills necessary to pass welder qualification tests. Students will meet the AWS (American Welding Society) SENSE (Schools Excelling through National Skill Standards Education) training standards for certification in AWS Level 1 - Entry Welder.*

#### Required:

Number	Course Title	Credits
MNT 111	Prints and Schematics .....	2
WLD 110	Welding I .....	3
WLD 210	Welding II .....	3
WLD 211	Welding III .....	4
WLD 212	Welding IV .....	4

### Welding Fabrication Certificate

*This 32 credit-hour certificate program is designed to give students entry-level skills in welding fabrication. The program of study will emphasize advanced welding theory, extensive practice in the major arc welding process, and out-of-position and multi-pass arc welding including GMAW, SMAW and GTAW. Students will work from blueprints and develop the welding skills necessary to construct quality fabricated metal weldments.*

#### Required:

Number	Course Title	Credits
MNT 111	Prints and Schematics .....	2
MTH 097	Basic Technical Mathematics <sup>1</sup> .....	3
WLD 110	Welding I .....	3
WLD 210	Welding II .....	3
WLD 211	Welding III .....	4
WLD 212	Welding IV .....	4
WLD 225	Advanced Blueprint Reading .....	2
WLD 240	Cutting Processes .....	3
WLD 245	Welding Fabrication I .....	4
WLD 250	Welding Fabrication II .....	4

<sup>1</sup> Students may take MTH 097, MTH 101, MTH 103, or higher.

## ACC Accounting

### ACC 100 Introductory Accounting (3-0) 3 crs.

Provides students with a foundation in fundamental accounting procedures using the accounting cycle for both service and merchandising businesses, including adjustments, preparation of financial statements and closing procedures. Also included are reconciliation of bank statements, petty cash and examination of fraud and internal controls. This non-transfer course is intended for those students planning to take only one semester of accounting or for those who need preparation before enrolling in ACC 101.

### ACC 101 Introduction to Financial Accounting (4-0) 4 crs.

Presents accounting as an information system that produces summary financial statements primarily for users external to a business. Emphasizes the reporting of the effect of transactions and other economic events on the financial condition and operating results of a business. Topics include: basic accounting concepts, financial statements, accrual and cash basis, the accounting cycle, monetary assets, inventories, fixed assets, current and long-term liabilities, and owner's equity. The course assumes a corporate form of organization. NOTE: High school algebra is recommended. IAI BUS 903

### ACC 102 Introduction to Managerial Accounting (3-0) 3 crs.

Presents accounting as a system of producing information for internal management use in a business. Emphasis is on the identification, accumulation and interpretation of information for planning, controlling and evaluating the performance of the separate components of a business. Topics include: theory and application of product costing, operational control, cost allocation, performance evaluation for manufacturing and service organizations, standard costing, job order and process costing, budgeting, JIT inventory control, decentralized operations, differential analysis, capital investment analysis and financial statement analysis. IAI BUS 904

**Prerequisite:** ACC 101 with a grade of C or better.

### ACC 112 Quickbooks (1-2) 2 crs.

Provides students with applications of QuickBooks. Students apply accounting principles and manage accounting records like those used in small businesses.

**Prerequisite:** Prior or concurrent enrollment in ACC 100 or ACC 101.

### ACC 155 Payroll Accounting (2-0) 2 crs.

Explains the preparation of payroll records including the tax returns for old-age benefits and employment insurance.

**Prerequisite:** ACC 100 or ACC 101.

### ACC 201 Intermediate Accounting I (3-0) 3 crs.

Presents accounting and reporting process, accounting theory, inventories, tangibles and intangible fixed assets. This is a problem solving course that continues accounting principles begun in ACC 101 and ACC 102.

**Prerequisite:** ACC 102 with a grade of C or better.

### ACC 202 Intermediate Accounting II (3-0) 3 crs.

Presents course materials in the following sequences: Accounting for corporations, including capital stock, retained earnings, bonds payable, income statement and balance sheet analysis, pensions and leases, fund flow analysis, consignments, and installment sales.

**Prerequisite:** ACC 201 with a grade of C or better.

### ACC 203 Introductory Cost Accounting (3-0) 3 crs.

Includes an examination of the nature of costs and the use of relevant accounting data for purposes of improved decision making. Topics covered are product costs (process, job order, and standard), overhead variance, by-product costs, joint-product cost, and direct and variable costing.

**Prerequisite:** ACC 102 with a grade of C or better.

### ACC 211 Business Law I (3-0) 3 crs.

Presents the history of the source of law, civil and criminal wrongs, law of contracts, agency, employment, property, and related topics. Problems and case materials are used. (NOTE: Transfer students should check with the school they will be transferring to regarding the transferability of this course.)

### ACC 213 Legal Environment of Business (3-0) 3 crs.

Introduces the student to the nature, function, and application of law in the commercial context. Emphasizes the regulation of business by statutes, administrative regulations, and court decisions.

### ACC 216 Employment Law (3-0) 3 crs.

Examines past and present employment laws in the United States and their impact on employers and employees. Creates an understanding of the rights, duties, and obligation of both employment groups under the law.

### ACC 250 Individual Tax Accounting (3-0) 3 crs.

Offers a practical study of current Federal and Illinois income taxes as they relate to individual income tax procedures. Topics studied include income inclusions and exclusions, capital gains and losses, business and personal deductions, and accounting methods.

**Prerequisite:** ACC 102 with a grade of C or better.

### ACC 251 Business Tax Accounting (3-0) 3 crs.

Presents the basic concepts of corporation income taxation, partnerships, estates and trusts. The course includes a study of the taxation on the transfer of wealth, both during lifetime and testamentary.

**Prerequisite:** ACC 102 with a grade of C or better.

### ACC 253 Advanced Accounting I (3-0) 3 crs.

Studies municipal accounts, business combinations and the preparation of consolidated financial statements. Topics will include branches, consolidated statements, elimination of inter-company transactions, general funds and non-profit service organizations.

**Prerequisite:** ACC 202 with a grade of C or better.

### ACC 254 Auditing (3-0) 3 crs.

Examines the auditory theory and procedures involving the topical areas of audit reporting, auditing standards and evidence, statistical sampling and electronic data processing. The legal and ethical dimensions of auditing will also be studied with emphasis on how government affects financial reporting through court decisions, federal securities laws, the S.E.C. and the Foreign Corrupt Practice Act.

**Prerequisite:** ACC 102 with a grade of C or better.

### ACC 260 Financial Research (1-0) 1 cr.

Presents basic techniques of conducting financial accounting research using professional accounting databases. Students will develop skills necessary to research and interpret financial accounting standard guidelines using accounting related cases. Students will communicate their research results in a professional business format. Recommended prerequisite: ACC 201 or equivalent experience.

### ACC 261 Tax Research (1-0) 1 cr.

Presents basic techniques of conducting federal tax research using authoritative databases. Students will develop skills necessary to research and interpret tax case guidelines using tax cases. Students will communicate their research results in a professional business format. Recommended prerequisite: ACC 250 or equivalent experience.

**ACC 265 Fraud Examination (3-0) 3 crs.**

Presents the fundamentals of fraud examination and forensic accounting for the workplace. Students will discover how and why fraud occurs in organizations, develop skills to detect fraud, and be able to identify and classify various types of fraud. This course will emphasize the importance of corporate social responsibility in an organization and the need for reporting systems that focus on integrity and accountability.

**Prerequisite:** ACC 102 with a grade of C or better.

**ACC 295 Topics in Accounting (1-0 to 4-0) 1-4 crs.**

Provides seminars and courses on varying topics that are current and relevant to accounting students and business professionals. This course may be taken up to four (4) times for a total of 4 credit hours. Prerequisites will vary according to the topic.

**Prerequisite:** Will vary according to topic.

**AED Adult Education****AED 016 Basic Vocabulary Skills (NNL) (1-0 to 4-0) 1-4 crs.**

Develops basic English vocabulary skills. Focuses on building vocabulary using the software and website links on computers. Explores a variety of life-skills and work-related topics on ESL websites. This course is the first in a sequence of three courses. It is for students of English who have limited native language literacy skills. Students must take a language skills test which identifies the Nonnative Literacy student before enrolling. Carries no transfer credit.

**AED 017 Intermediate Vocabulary Skills (NNL) (1-0 to 4-0) 1-4 crs.**

Continues to develop basic English vocabulary skills. Focuses on building vocabulary using software and website links on computers. Further explores a variety of life-skills and work-related topics. This course is the second in a sequence of three courses. It is for students of English who have limited native language literacy skills. Students must take a language skills test which identifies the Nonnative Literacy student before enrolling. Carries no transfer credit.

**AED 018 Advanced Vocabulary Skills (NNL) (1-0 to 4-0) 1-4 crs.**

Expands basic English vocabulary skills. Focuses on building vocabulary and grammar skills using software and website links on computers. Expands exploration of a variety of life-skills and work-related topics and focuses on applications to education, family, and community. This course is the third in a sequence of three courses. It is for students of English who have limited native language literacy skills. Students must take a language skills test which identifies the Nonnative Literacy student before enrolling. Carries no transfer credit.

**AED 053 Bridge to Technical Trades in Manufacturing/Intermediate (4-0) 4 crs.**

Integrates basic listening, speaking, reading, writing and math skills with occupational-specific knowledge in the manufacturing sector. Contextualizes skills to prepare students to transition into post-secondary and/or employment. Designed for students assessed at the ABE (pre-GED) reading level. Includes career awareness and intensive supportive services. Carries no transfer credit.

**AED 055 Bridge to Technical Trades in Manufacturing/Advanced (4-0) 4 crs.**

Expands listening, speaking, reading, writing and math skills with occupational-specific knowledge in the manufacturing sector. Contextualizes skills to prepare students to transition into post-secondary and/or employment. Designed for students assessed at the ASE (GED) reading level. Includes career awareness and intensive supportive services. Carries no transfer credit.

**AED 057 Bridge to Healthcare/Intermediate (4-0) 4 crs.**

Integrates basic listening, speaking, reading, writing and math skills with occupational-specific knowledge in the healthcare sector. Contextualizes skills to prepare students to transition into postsecondary education and/or employment. Designed for students assessed at the ABE (pre-GED) reading level. Includes career awareness and transition supportive services. Carries no transfer credit.

**AED 059 Bridge to Healthcare/Advanced (4-0) 4 crs.**

Expands listening, speaking, reading, writing and math skills with occupational-specific knowledge in the healthcare sector. Contextualizes skills to prepare students to transition into postsecondary education and/or employment. Designed for students assessed at the ASE (GED) reading level. Includes career awareness and transition supportive services. Carries no transfer credit.

**AED 061 Adult Employment Skills/Beginning (1-0 to 4-0) 1-4 crs.**

Introduces basic employment skills, including on-the-job communication and job search strategies. Introduces vocabulary, listening, speaking, and literacy skills necessary for entry-level jobs in restaurant, hotel, factory/warehouse, office, and other settings. Introduces job search skills such as understanding applications, want ads, components of a resume, and basic job interviews. Promotes awareness of workers' rights, responsibilities, and health and safety issues in the workplace. This course is for English Language Learners (ELLs) with limited formal schooling in their native countries. This is the first in a sequence of three courses. Carries no transfer credit.

**AED 062 Adult Employment Skills/Intermediate (1-0 to 4-0) 1-4 crs.**

Develops basic employment skills, including on-the-job communication and job search strategies. Reviews vocabulary, listening, speaking, and literacy skills necessary for entry-level jobs in restaurant, hotel, factory/warehouse, office, and other settings. Develops job search skills such as networking, describing qualifications, and preparing for basic job interviews. Promotes awareness of workers' rights, responsibilities, and health and safety issues in the workplace. This course is for English Language Learners (ELLs) with limited formal schooling in their native countries. This is the second in a sequence of three courses. Carries no transfer credit.

**AED 063 Adult Employment Skills/Advanced (1-0 to 4-0) 1-4 crs.**

Expands basic employment skills, including on-the-job communication and job search strategies. Develops advanced vocabulary, listening, speaking, and literacy skills necessary for entry-level jobs in restaurant, hotel, factory/warehouse, office, and other settings. Develops advanced job search skills including interest inventories, goal-setting, and more in-depth job interviews. Promotes awareness of workers' rights, responsibilities, and health and safety issues in the workplace. This course is for English Language Learners (ELLs) with limited formal schooling in their native countries. This is the third in a sequence of three courses. Carries no transfer credit.

**AED 065 Adult Employment Skills (0.5-0 to 3-0) 0.5-3 crs.**

Examines the world of work and current issues and trends that affect employability. Explores topics such as job/career assessment, individual education/employment plans, employment/life skills, job search skills, employment documents, interviewing skills, employment practices and personnel programs, job retention skills, and job departure. Carries no transfer credit.

**AED 067 Bridge to College and Career Success (2-0) 2 crs.**

Provides students with an overview of the skills needed to be successful in college career program classes. Emphasizes introductory college success skills such as time management, goal-setting, note-taking and reading strategies while exploring career options. Introduces student services offered at Harper College. Students wanting to enroll in this class must be in the Harper College's AED department GED classes, have a readiness to take the GED exam, and have the recommendation of the program staff. Carries no transfer credit.

**AED 071 Citizenship Preparation/Beginning (1-0 to 4-0) 1-4 crs.**

Introduces the very basic structure, functions and purposes of U.S. federal government and aspects of American history and geography pertinent to the naturalization test. Explains the procedures and application for applying for U.S. naturalization. Introduces basic rights and responsibilities of U.S. citizenship. Develops the very basic listening, speaking, and literacy skills necessary for passing the test and interview for U.S. naturalization. Includes a brief introduction of state government. This course is for English Language Learners (ELLs) with limited formal schooling in their native countries. This is the first in a sequence of three courses. Carries no transfer credit.

**AED 072 Citizenship Preparation/Intermediate (1-0 to 4-0) 1-4 crs.**

Introduces the basic structure, functions, and purposes of U.S. federal government and aspects of American history and geography pertinent to the naturalization test. Explains the procedures and application for applying for U.S. naturalization. Reviews rights and responsibilities of U.S. citizenship. Develops listening, speaking, and literacy skills necessary for passing the test and interview for U.S. naturalization. Includes a brief introduction of state government, civic duties and community participation. This course is for English Language Learners (ELLs) with limited formal schooling in their native countries. This is the second in a sequence of three courses. Carries no transfer credit.

**AED 073 Citizenship Preparation/Advanced (1-0 to 4-0) 1-4 crs.**

Introduces and expands upon the basic structure, functions and purposes of U.S. federal government and major aspects of American history and geography. Expands upon the procedures and application for applying for U.S. naturalization. Expands on the rights and responsibilities of U.S. citizenship and promotes awareness of civil rights and the contributions of diverse and multicultural groups in the U.S. Develops advanced vocabulary and reviews listening, speaking, and literacy skills necessary for passing the test and interview for U.S. naturalization. Includes a brief introduction of state government, civic duties, and community participation. This course is for English Language Learners (ELLs) with limited formal schooling in their native countries. This is the third in a sequence of three courses. Carries no transfer credit.

**AED 082 Adult Conversation Skills (1-0 to 4-0) 1-4 crs.**

Develops basic conversation skills, including the ability to start and maintain a conversation, describe personal experiences, and discuss general interest topics. Develops basic communication skills such as greeting, making small talk, and asking for clarification. Introduces more complex conversation skills such as agreeing, disagreeing, and providing examples. Conversation focuses on personal, local, and world issues. Promotes awareness of and builds vocabulary necessary to discuss topics ranging from family and parenting to global, political and environmental issues. This course is for English Language Learners (ELLs) with limited formal schooling in their native countries. Recommended for Nonnative Literacy students enrolled in Levels 2 - 5. Carries no transfer credit.

**ANT Anthropology****ANT 101 Introduction to Anthropology (3-0) 3 crs.**

Addresses such central questions as "What does it mean to be human?" and "How did we get to be the way we are?" Among the topics to be examined will be human, physical, and cultural evolution; the origin of culture; language; religion; kinship; economics; and the impact of contemporary life on the world's populations. IAI S1 900N

**ANT 202 Cultural Anthropology (3-0) 3 crs.**

Describes and analyzes how people throughout the world define and resolve the problems of life that are found everywhere. Some of the specific topics studied will be religion, social structure, law, "the unknown," economics and the formation of behavior within particular groups. IAI S1 901N

**ANT 203 Native Americans (3-0) 3 crs.**

Acquaints the student with our American heritage. There are detailed studies of various Native American groups, both before and after the arrival of the Europeans. The religion, social organization, art work, archaeology, and their relationship to the natural and cultural environment of the Native American is viewed with an appreciation and understanding of non-European cultures. Discussion of possible solutions for some of the problems that confront Native Americans in Western society today is included.

**ANT 205 Physical Anthropology (2-2) 3 crs.**

Studies the origins and evolution of humans as physical and cultural beings. Includes origin, history, and behavior of primates; fossil records; and the principles of population genetics and their application to study of human variation. IAI S1 902

**ANT 206 Archeology (3-0) 3 crs.**

Surveys archeological concepts, research, and methods for the study of prehistoric cultures. Includes rise and development of modern civilization, land and land use, agriculture, current archeological investigations, interpretations of finds and introduction to field work techniques. IAI S1 903

**ANT 207 Ancient Civilization of Mexico and Central America (3-0) 3 crs.**

Studies the origin and development of ancient civilizations of Mexico and Central America using historical and archeological evidence. This course will explore the world of the Aztec, Maya, Toltec, and others as seen through architecture, art, food production, politics and religion.

**ANT 208 Archeology of the Near East (3-0) 3 crs.**

Studies origins and development of civilization of ancient Near East. Includes archeology and cultural history of such countries as Egypt, Mesopotamia and Palestine.

**ANT 209 Anthropological Theory (3-0) 3 crs.**

Surveys the theoretical origin and development of modern anthropology. Includes examination of works by Benedict, Boas, Dukheim, Khaldun, Malinowski, Mead, Morgan, Tylor, Weber and others.

**Prerequisite:** ANT 101 or SOC 101 with a grade of C or better.

**ANT 210 Cultural Ecology (3-0) 3 crs.**

Examines the technologies and behaviors that people have applied to the natural environment to sustain themselves and their societies. Also, the resultant environmental changes will be investigated with emphasis on food production, industrialization, and population increase and their historic and prehistoric impact on our world.

**ANT 215 Introduction to Forensic Anthropology (2-2) 3 crs.**  
Studies the field dealing with human skeletal remains resulting from unexplained deaths. Both osteology (bones) and odontology (teeth) will be investigated. Students will learn the techniques involved including: basic human skeletal analysis, preliminary examination methods, burial aspects, distinguishing human from animal remains, identifying the sex of an individual, estimating the age of death, calculating stature, trauma analysis of different types (e.g., blunt, sharp, projectile), as well as various related topics. (NOTE: Although skeletal lab materials will be provided, no soft tissues will be examined.)

**ANT 220 Topics in Anthropology (1-0 to 6-0) 1-6 crs.**  
Studies selected problems or topics in social science. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated two times to a maximum of 6 credit hours.

**ANT 250 Field Methods in Archeology I (1-4) 3 crs.**  
Provides intensive introduction to the methods and techniques of archeological survey and excavation through practical fieldwork, accompanied by lecture and discussion. The student will participate in laboratory analysis of materials excavated within the Midwest. (NOTE: This course is taught only at an archeological site during the summer.)  
**Prerequisite:** ANT 101 with a grade of C or better and/or consent of instructor.

**ANT 255 Field Methods in Archeology II (1-4) 3 crs.**  
Designed for students who have had previous field school experience at the introductory level. This is an intensive course in advanced field methods in archeology. In addition to the continued pursuit of excavation procedures and techniques, the student will be concerned with some of the theoretical and interpretative aspects of archeological analysis. NOTE: This course is taught only at an archeological site during the summer.  
**Prerequisite:** ANT 101 and ANT 250 with grades of C or better and/or consent of instructor.

## ARC Architectural Studies

**ARC 105 Presentation and Communication Tools (2-2) 3 crs.**  
Introduces various communication and presentation tools commonly used throughout the field of architecture. Covers the fundamentals of hand drafting and lettering as well as industry-wide drafting standards; computer presentation techniques using various software titles after a CAD drawing has been prepared; three-dimensional building models, materials and techniques; and media, methods and techniques for various types of architectural rendering.

**ARC 106 Introduction to Architecture (1-5) 3 crs.**  
Introduces the profession of architecture as well as the technical procedures for creating typical drawing types. Covers the role of the architect and other professionals within the AEC industry as well as architectural education and basic architectural design thought and theories. Manual drafting techniques are used to create standard drawings including plans, sections, elevations and perspectives.

**ARC 110 Architectural Design Principles (2-6) 4 crs.**  
Develops methods and strategies to apply design principles to fundamental architectural problems. Employment of 2- and 3-dimensional exercises to explore concepts of mass, space, and structure, as well as principles such as proportion, rhythm, scale, symmetry and procession. Exercises will be designed to promote an understanding of the process of concept formation and application.  
**Prerequisite:** ART 121 with a grade of C or better, or consent of instructor.

**ARC 113 Building Materials I (3-3) 4 crs.**  
Introduces masonry, wood and non-fireproofed steel construction for one- and two-story buildings. Concrete foundation and footing details, wall and building sections are covered as well as construction details.

**ARC 116 Architectural CAD I (2-2) 3 crs.**  
Introduces computer hardware and state-of-the-art software as applied to applications in architecture, interior design and other related fields. Develops understanding of basic parameters for design and drafting technologies: entity creating and editing, printing and plotting, and file/data management. Projects are correlated primarily to architectural design issues.

**ARC 117 Architectural CAD II (2-2) 3 crs.**  
Covers advanced CAD techniques and procedures developed in two-dimensional architectural drafting and detailing. Develops a working knowledge and understanding of command structures, detailed data management and manipulation techniques, and software customization procedures. Projects are correlated primarily to architectural construction, drafting and detailing issues.  
**Prerequisite:** ARC 116 with a grade of C or better, or consent of instructor.

**ARC 125 Chicago's Architectural History (3-0) 3 crs.**  
Introduces an historical survey of culture and technology impact on Chicago's architecture. Emphasizes ideas and trends in modern building originating with the balloon frame and continuing through to the skyscraper.

**ARC 201 Architectural Design Studio I (2-6) 4 crs.**  
Applies and advances design principles and processes gained in ARC 110. Studio projects representing practical architectural problems are assigned. These incorporate multiple issues and principles as well as site, user and context parameters. Project solutions will be documented with accurate drawings and possibly models.  
**Prerequisite:** ARC 110 with a grade of C or better, or consent of instructor.

**ARC 202 Architectural Design Studio II (2-6) 4 crs.**  
Applies and advances architectural design principles and processes gained in ARC 201 on larger, more complex project types. Studio projects representing advanced architectural problems are assigned. These incorporate multiple issues and principles as well as site, user and context parameters. Project solutions will be documented with accurate drawings and models.  
**Prerequisite:** ARC 201 with a grade of C or better, or consent of instructor.

**ARC 213 Building Materials II (2-4) 4 crs.**  
Develops construction strategies of multi-storied steel and concrete commercial and residential buildings. Covers stairs, elevators, and toilet room layouts. Reviews fire-resistive construction technologies, window walls, ceiling grids, lighting, partition details, mechanical and electrical requirements.  
**Prerequisite:** ARC 113 with a grade of C or better, or consent of instructor.

**ARC 223 History of Architecture (3-0) 3 crs.**  
Surveys architecture from prehistorical times through the Renaissance, including Western and non-Western cultures. Stylistic and technological developments of architecture are studied in relationship to the cultural diversity of social, political, and religious contexts and historical periods.

## ART Art

**ART 100 Art Seminar (1-0) 1 cr.**  
Introduces art majors to the opportunities, concerns and the problems that relate to the artist. This course may be repeated up to two hours credit.

- ART 105 Introduction to Visual Art (3-0)** 3 crs.  
Introduces the visual arts with an emphasis on creating awareness of aesthetics, artistic concepts, media, theory and criticism. In addition, students will develop a critical understanding of art and build visual literacy. IAI F2 900
- ART 110 Drawing I (0-6)** 3 crs.  
Introduces students to descriptive and expressive approaches to drawing with black and white media. Line work, shading, perspective and experimental techniques are practiced. Students learn to accurately depict everyday objects and surroundings, and to develop an awareness of drawing as a creative process. IAI ART 904
- ART 111 Drawing II (0-6)** 3 crs.  
Builds on the content of ART 110 (Drawing I) with applications beyond observation-based approaches. Emphasizes intent, idea development and use of colored media. IAI ART 905  
**Prerequisite:** ART 110 (Drawing I) with a grade of C or better, or consent of instructor.
- ART 114 Introduction to Film (2-2)** 3 crs.  
Examines the different ways of looking at film to improve understanding and appreciation of the medium as an art form. Includes critical analysis of different directors, film genres, historical trends and lecture about the technique and process of filmmaking. Between 10 and 15 films will be examined. IAI F2 908
- ART 121 Design I (0-6)** 3 crs.  
Introduces students to skills fundamental to two-dimensional visual organization. Explores elements such as line, shape and color, and principles such as unity, balance and variation. Provides a foundation for all areas of art and design. IAI ART 907
- ART 122 Design II (0-6)** 3 crs.  
Introduces students to skills fundamental to three-dimensional visual organization. Explores elements such as form, space, and process and principles such as unity, balance and variation. Provides a foundation for all areas of three-dimensional art and design. IAI ART 908  
**Prerequisite:** ART 121 (Design I) with a grade of C or better, or consent of instructor.
- ART 130 Ancient and Medieval Art (3-0)** 3 crs.  
Follows the historical development of the visual arts produced by Western civilizations, focusing on major artistic styles, works of art and monuments. Works are examined as expressions of the ideas, beliefs and practices of artists, cultures and societies. Covers the history of art from pre-history to the medieval age. IAI F2 901
- ART 131 Gothic Through Romantic Art (3-0)** 3 crs.  
Follows the historical development of the visual arts produced by Western civilizations, focusing on major artistic styles, works of art and monuments. Works are examined as expressions of the ideas, beliefs and practices of artists, cultures and societies. Covers the history of art from the medieval age to the end of the eighteenth century. IAI F2 902
- ART 132 Modern and Contemporary Art (3-0)** 3 crs.  
Follows the historical development of the visual arts produced by Western civilizations, focusing on major artistic styles, works of art and monuments. Works are examined as expressions of the ideas, beliefs and practices of artists, cultures and societies. Covers the history of art from the nineteenth-century to the present time. IAI F2 902
- ART 133 Non-Western Art (3-0)** 3 crs.  
Follows the historical development of the visual arts produced by non-western civilizations, focusing on major artistic styles, works of art and monuments. Works are examined as expressions of the ideas, beliefs and practices of artists, cultures and societies. Covers the history of art of Africa, China, India, Japan, Middle East, Oceania, and the Americas. IAI F2 903N
- ART 150 Digital Art Studio (0-6)** 3 crs.  
Presents a digital-based multimedia approach to making art. Computer hardware, software, mobile devices and web-based applications are employed to capture, manufacture and network images and ideas.
- ART 151 Digital Photography Studio (0-6)** 3 crs.  
Employs digital technology as a medium for producing works of photographic art. Basic techniques and processes for using a digital still camera, image editing software and archival print technology are used to investigate straight photography as well as highly manipulated images.
- ART 206 Printmaking Studio (0-6)** 3 crs.  
Emphasizes traditional and contemporary methods of graphic reproduction of visual ideas pertaining to the fine arts. May be repeated up to six hours credit.  
**Prerequisite:** ART 111 and ART 121 with grades of C or better, or consent of instructor.
- ART 225 Figure Drawing Studio (0-6)** 3 crs.  
Introduces students to descriptive and expressive approaches to drawing the human figure with an emphasis on anatomy, proportion, contour, gesture and volume. These concepts and techniques are practiced primarily through direct observation of live, nude models using black and white media. May be repeated up to six credit hours. (IAI ART 906 effective Fall 2017)  
**Prerequisite:** ART 111 with a grade of C or better, or consent of instructor.
- ART 261 Painting Studio (0-6)** 3 crs.  
Emphasizes the relationship between painting and visual ideas. May be repeated up to six hours credit.  
**Prerequisite:** ART 111 and ART 121 with a grade of "C" or better, or consent of instructor.
- ART 280 Topics in Art History (1-0 to 6-0)** 1-6 crs.  
Studies selected topics or debates in art history. The exact content and instructional methodology will vary semester to semester depending on the material studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated two times to a maximum of six credit hours.
- ART 281 Topics in Studio Art (0-6)** 3 crs.  
Explores selected practices in studio art. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A topic-specific syllabus containing additional information will be available in the Liberal Arts Division Office with other pre-registration materials each time that the course is offered. This course may be repeated to a maximum of 6 credit hours.  
**Prerequisite:** ART 111 and ART 122 with grades of C or better, or consent of instructor.
- ART 291 Ceramics Studio (0-6)** 3 crs.  
Emphasizes the exploration of ceramic media as related to the expression of visual ideas. May be repeated up to six hours credit.  
**Prerequisite:** ART 122 with a grade of C or better, or consent of instructor.
- ART 296 Sculpture Studio (0-6)** 3 crs.  
Emphasizes the exploration of sculptural media as related to visual ideas. May be repeated up to six hours credit.  
**Prerequisite:** ART 122 with a grade of C or better, or consent of instructor.

**AST Astronomy****AST 100 Astronomy Survey (3-0) 3 crs.**

Introduces the main concepts of contemporary astronomy using a scientific approach. Topics include the scientific method, the celestial sphere, celestial motions, gravity, light, telescopes, the Solar System, stars, the interstellar medium, galaxies, and cosmology. Current research in the different areas will be discussed. Knowledge of high school algebra is assumed. For science and non-science majors. IAI P1 906

**AST 101 Introductory Astronomy (3-2) 4 crs.**

Introduces the various topics of astronomy using a scientific approach. Covers the origin of the universe, structure and composition of galaxies, properties and life cycle of stars, the solar system, historical astronomy, constellations, meteors, and comets. Knowledge of high school algebra is assumed. IAI P1 906L

**AST 112 The Solar System (3-2) 4 crs.**

Introduces the main concepts of solar system astronomy. Topics include the fundamentals of astronomy, planetary motion, the Earth, the Moon, terrestrial planets, Jovian planets, small bodies in the solar system, the Sun, the formation of the solar system, other planetary systems, and the possibility of extraterrestrial life. Current research in the different areas will be discussed. Knowledge of high school algebra is assumed. For science and non-science majors. IAI P1 906L

**AST 115 Stars and Galaxies (3-2) 4 crs.**

Introduces the main concepts of stellar, galactic, and extra-galactic astronomy. Topics include life cycles of stars, supernovae, black holes, interstellar medium, structure of the Milky Way galaxy, galaxy classification, galaxy interactions, dark matter, dark energy and the Big Bang model. Current research in the different areas will be discussed. Knowledge of high school algebra is assumed. For science and non-science majors. IAI P1 906L

**AST 150 Observational Techniques (1-2) 2 crs.**

Introduces students to telescopes and astronomical imaging devices. Includes properties and usage of telescopes, types of imaging devices, such as cameras and CCDs, methods of astronomical observations, and astrophotography. This class is only offered at night. For science and non-science majors.

**Prerequisite:** AST 100, AST 112 or AST 115 with a grade of C or better, or consent of instructor.

**AST 201 Advanced Astronomy (3-2) 4 crs.**

Extends topics in stellar and galactic astronomy using a mathematical approach. Covers stellar magnitudes, Hertzsprung-Russell Diagram, stellar formation, the interstellar medium, Mass-Luminosity Relationship, element synthesis, active galaxies and quasars. Laboratory experiences will quantitatively address these topics.

**Prerequisite:** AST 101 and MTH 080 or higher (or required math placement exam score) with grades of C or better.

**BIO Biology****BIO 101 Biology Survey (3-0) 3 crs.**

Surveys the science of biology, emphasizing the human organism. Includes chemical and physical properties, physiological systems of control, growth, differentiation, reproduction, genetics, ecology, evolution and ethical considerations. Also includes a broader overview of the plant and animal kingdoms and humans' place in, and interactions with, those kingdoms. (NOTE: Not Lab science credit.) IAI L1 900

**BIO 103 Man and Environment (3-0) 3 crs.**

Surveys and analyzes man's role as an environmental modifier. Ecological, social cultural, economic and political influences on environment are considered. The historical and current pollution problems and other environmental disruptions are analyzed and evaluated. Possible remedial courses of action are discussed and evaluated. (NOTE: Not Lab science credit.) IAI L1 905

**BIO 104 Environmental Laboratory Biology (2-4) 4 crs.**

Examines and analyzes the parameters of the biosphere as a biological support system and the implications of natural and human caused changes in that support system. An examination of biosphere (natural world) and industriosphere (technological world) interactions is included. (NOTE: Lab science credit.) IAI L1 905L

**BIO 105 Heredity, Evolution and Society (3-0) 3 crs.**

Examines life and the evolutionary record with emphasis on human genetics and inheritance. Factors such as current applications of biotechnology and its ethical, political and social implications in the 21st century are considered. (NOTE: Not Lab science credit.) IAI L1 906

**BIO 110 Principles of Biology (3-3) 4 crs.**

Studies and emphasizes cell structure and function by exploring the various patterns that have evolved within cells for carrying out important life functions. This includes cell ultra structure, cell surface-volume relationships, cellular metabolism and energetics, mitosis and meiosis, genetics, DNA, RNA and protein synthesis, gene action, population genetics, development and environment. Knowledge of high school biology is assumed. (NOTE: Lab science credit.) IAI L1 910L, IAI BIO 910

**BIO 115 Fundamentals of Cellular Biology (3-3) 4 crs.**

Introduces fundamental processes of organisms operating at the molecular and the cellular level of organization. Topics include chemical and molecular aspects of life, cellular metabolism, genetic information flow, theory of inheritance, genetic engineering and principles of physiology. This is the first course of a two-course series. (NOTE: Lab science credit.) IAI L1 900L, IAI BIO 910

**Prerequisite:** MTH 080 (Intermediate Algebra) or higher with a grade of C or better, or required MTH 103 (College Algebra) placement test score AND placement into ENG 101.

**BIO 116 Fundamentals of Organismal Biology (3-3) 4 crs.**

Introduces students to higher levels of biological organization from the organism to the ecosystem. Topics include organismal diversity, mechanisms of micro and macroevolution, animal behavior, and the dynamics and organization of populations, communities and ecosystems. (NOTE: Lab science credit.) IAI L1 900L, IAI BIO 910

**Prerequisite:** BIO 115 (Fundamentals of Cellular Biology) with a grade of C or better, or consent of instructor.

**BIO 120 General Botany (3-3) 4 crs.**

Emphasizes scientific inquiry through selected concepts in biology, such as organization, function, heredity, diversity, evolution and ecology, using plants as the type of organism. Topics include plant structure, diversity, growth, genetics, evolution, physiology and reproduction. Economic, cultural, environmental and medical relationships between plants and humans are emphasized. Knowledge of high school biology is assumed. (NOTE: Lab science credit.) IAI L1 910L, IAI BIO 910

**BIO 130 Microbiology (2-4) 4 crs.**

Examines characteristics and importance of microorganisms; emphasis on identification, anatomy and physiology, control, relationship to health and disease and economic importance. College chemistry or equivalent is desirable. Strongly recommended preparation: One year of high school biology with a grade of C or better taken within the last five years, or BIO 110. (NOTE: Lab science credit.)

**Prerequisite:** Placement into ENG 101.



**BIO 135 Introduction to Human Anatomy and Physiology (4-0) 4 crs.**

Surveys the human body, with emphasis on basic physical and chemical concepts, anatomy, physiology and embryology. Designed to meet the needs of students in certain allied health career programs. Knowledge of high school biology is assumed. (NOTE: Not Lab science credit.)

**BIO 136 Introduction to Human Disease (3-0) 3 crs.**

Surveys the nature of human disease with emphasis on the functional disturbances within the body systems. Designed to meet the needs of students in certain allied health career programs. Knowledge of high school biology assumed. (NOTE: Not Lab science credit.)

**BIO 140 General Zoology (3-3) 4 crs.**

Emphasizes scientific inquiry through selected concepts in animal biology. Surveys the animal kingdom based on theory of organic evolution, including morphology, histology, physiology, taxonomy, parasitology, embryology and ecology. Economic, environmental and medical relationships between animals and humans are emphasized. Knowledge of high school biology is assumed. (NOTE: Lab science credit.) IAI L1 910L, IAI BIO 910

**BIO 150 Field Biology (2-4) 4 crs.**

Emphasizes field and laboratory work with soils, flora, fauna, their identification, ecological relationships and human impact upon ecosystems. Assists students in acquiring basic working knowledge in biological field work. Students should expect field work or a field trip every class day, weather permitting. Field trips may be to local, regional or international locations which may vary from year to year. (See specific section for field trip focus.) Classes are held on campus prior to the off-campus learning experience as scheduled. Travel expenses are paid for by the student. This course may be repeated up to a maximum of 8 credit hours if field trip focus is different. Knowledge of high school biology is assumed; permission to register required. (NOTE: Lab science credit.) IAI L1 905L

**BIO 160 Human Anatomy (3-2) 4 crs.**

Introduces the anatomy of the human body; the following systems studied either regionally or systemically: integumentary, skeletal, articular, muscular, circulatory, lymphatic, nervous, respiratory, digestive, excretory, endocrine and reproductive. Includes some introductory histology. Specially designed for students in health careers, biology, and physical education. Strongly recommended preparation: One year of high school biology with a grade of C or better taken within the last five years, or BIO 110. (NOTE: Lab science credit.)

**Prerequisite:** Placement into ENG 101.

**BIO 161 Human Physiology (3-2) 4 crs.**

Emphasizes physiological principles at the molecular, cellular, tissue, organ and system level, as they pertain to the human organism. The following systems are studied in detail: skeletal, muscular, circulatory, nervous, digestive, respiratory, urinary, reproductive and endocrine. In this course, special applications will be made to meet the needs of students in health careers, biology and physical education. (NOTE: Lab science credit.)

**Prerequisite:** BIO 160 with a grade of C or better, or consent of instructor.

**BIO 295 Independent Research in Biology I (0-3 to 0-9) 1-3 crs.**

Provides experimental exploration of a scientific research topic under the supervision of a faculty member. This laboratory course is designed to teach the principles and practice of experimental Biology in an area of both student interest and faculty expertise. Before registering, students must submit to the Biology Department a contract with the instructor for accomplishing a defined research task. Credit is contingent on the submission of a final report.

**Prerequisite:** BIO 110 or BIO 115 with a grade of C or better, prior consultation with instructor, completed contract, and consent of department chair.

**BIO 296 Independent Research in Biology II (0-3 to 0-9) 1-3 crs.**

Provides additional opportunity for students to do experimental exploration of a scientific research topic under the supervision of a faculty member. This laboratory course is designed to give students more time to work on a research project. Before registering, students must submit to the Biology Department a contract with the instructor for accomplishing a defined research task. Credit is contingent on the submission of a final report.

**Prerequisite:** BIO 295 with a grade of B or better, prior consultation with instructor, completed contract, and consent of department chair.

**BIO 297 Independent Research in Biology III (0-3 to 0-9) 1-3 crs.**

Provides additional opportunity for students to do experimental exploration of a scientific research topic under the supervision of a faculty member. This laboratory course is designed to give students more time to work on a research project. Before registering, students must submit to the Biology Department a contract with the instructor for accomplishing a defined research task. Credit is contingent on the submission of a final report.

**Prerequisite:** BIO 296 with a grade of B or better, prior consultation with instructor, completed contract, and consent of department chair.

**CAS Computer Applications Software****CAS 105 Word Processing Software (0.5-1) 1 cr.**

Provides an opportunity to become proficient in the use of a currently popular word processing package. Includes editing, formatting, creating tables and outlines and merging data.

**CAS 115 Spreadsheet Software (0.5-1) 1 cr.**

Provides an opportunity to become proficient in the use of a currently popular spreadsheet package. Includes creating, editing and formatting worksheets; working with formulas, functions and charts.

**CAS 125 Database Software (0.5-1) 1 cr.**

Provides an opportunity to become proficient in the use of a currently popular database package. Includes creating databases, tables and table relationships, maintaining and querying databases, and creating forms and reports.

**CAS 135 Presentation Software (0.5-1) 1 cr.**

Provides an opportunity to become proficient in the use of a currently popular business presentation package. Includes editing, formatting, themes, slide masters and presentation effects.

**CAS 160 Introduction to Business Software Packages (2-2) 3 crs.**

Provides an opportunity to become proficient in the use of currently popular software packages or suites. Includes word processing, spreadsheets, databases, presentation software and the integration of these applications.

**CAS 175 Desktop Publishing Software (0.5-1) 1 cr.**

Provides an opportunity to become proficient in the use of a currently popular desktop publishing software package. Includes editing, formatting, page layout, creating newsletters and brochures.

**CAS 205 Advanced Word Processing Software (0.5-1) 1 cr.**

Provides an opportunity to become proficient in the use of a currently popular advanced word processing package. Includes document sharing, advanced content formatting, references, mail merge, forms and macros.

**Prerequisite:** CAS 105 or CAS 160 with a grade of C or better.

**CAS 215 Advanced Spreadsheet Software (0.5-1) 1 cr.**

Provides an opportunity to become proficient in the use of a currently popular advanced spreadsheet package. Includes workbook sharing, advanced content formatting, data importing, filtering, charting, pivot tables, forms and macros.

**Prerequisite:** CAS 115 or CAS 160 with a grade of C or better.

**CAS 290 Office Assistant Capstone (1-2) 2 crs.**

Provides students the opportunity to integrate skills introduced in preceding CAS courses, through multi-task projects and case studies reflective of the current business office environment. Also provides a foundation for business office skills including time and workload management, records management, interpersonal skills, communication skills and leadership.

**Prerequisite:** CAS 125 and CAS 135 with grades of C or better AND CAS 205 and CAS 215 with grades of C or better or concurrent enrollment.

**CDV Career Development****CDV 110 Career Development (2-0) 2 crs.**

Provides the opportunity to explore career interests, experiences, skills, abilities and work related values. Examines information about the world of work including the nature of various careers, labor market trends, job search strategies, education and training requirements and diversity in the workplace. Information will be integrated so students will be able to develop educational and career goals.

**CGT Cardiographic Technician****CGT 101 Electrocardiography I (1.5-1) 2 crs.**

Provides instruction and practice in the performance and comprehensive interpretation of rhythm ECGs. Includes instruction in holter monitoring.

**Prerequisite:** BIO 135 or (BIO 160 and BIO 161) with grades of C or better.

**CGT 102 Electrocardiography II (1.5-1) 2 crs.**

Provides instruction and practice in the performance and comprehensive interpretation of 12 lead ECGs. Includes instruction in maximal stress testing.

**Prerequisite:** CGT 101 with a grade of C or better.

**CGT 204 Cardiovascular Principles (3-0) 3 crs.**

Examines important cardiovascular principles. Reviews cardiac anatomy, physiology and pharmacology. Explores cardiac embryology, cardiac hemodynamic principles, and coronary artery disease. Provides an overview of clinical cardiology.

**Prerequisite:** BIO 135 or (BIO 160 and BIO 161) with grades of C or better.

**CHM Chemistry****CHM 100 Chemistry for the Health Sciences (3-3) 4 crs.**

Introduces basic concepts of inorganic and organic chemistry and biochemistry. Emphasizes chemical principles applied to biological systems. Laboratory exercises apply theory to biological and consumer products. Especially designed for students in allied health sciences. Meets the prerequisite of the Nursing program. IAI P1 902L

**CHM 103 The Chemistry Connection (3-3) 4 crs.**

Introduces chemical principles to illustrate the significance of chemistry in the world today. Practical applications and current issues related to general chemistry, organic chemistry and biochemical topics will be integrated with chemical concepts. Recommended for non-science majors. IAI P1 903L

**CHM 105 Chemical World (3-3) 4 crs.**

Relates biological and physical systems to chemistry. Focuses on four major themes: the sociology of science, chemical composition and change, the chemistry of life, chemistry and society. Corresponding laboratory is inquiry based. Designed to provide a higher level of scientific literacy to non-science majors and to provide elementary education majors, in particular, with the content knowledge and disposition about science that is necessary in order to be able to teach science in engaging and meaningful ways to their students. Aligned with State of Illinois teacher preparation standards. IAI P1 903L

**Prerequisite:** MTH 080 or higher (or required math placement exam score) with a grade of C or better, or concurrent enrollment.

**CHM 110 Fundamentals of Chemistry (3-3) 4 crs.**

Introduces concepts of chemistry. Emphasizes the composition of matter, the periodic table, the chemistry of solutions and chemical calculations. The laboratory experiments utilize many common household materials to demonstrate applications of chemical concepts. For students whose preparation does not permit enrollment in CHM 121. IAI P1 902L

**Prerequisite:** MTH 080 or higher (or required math placement exam score) with a grade of C or better, or concurrent enrollment.

**CHM 121 General Chemistry I (4-3) 5 crs.**

Studies principles of atomic and molecular structure, bonding, stoichiometry, states of matter, kinetic molecular theory, and solutions. Corresponding laboratory experiments include volumetric and gravimetric analyses, a qualitative study of reactions, visible spectrophotometry, and problem-based analyses. Intended for all students whose majors require general chemistry, including science majors and pre-professionals. The course also satisfies a general education laboratory science requirement for students with previous chemistry experience. IAI P1 902L, IAI CHM 911

**Prerequisite:** (Two semesters of high school chemistry or CHM 110 with a grade of C or better) AND (MTH 080 or higher with a grade of C or better, or required MTH 103 placement test score.)

**CHM 122 General Chemistry II (4-3) 5 crs.**

Continues CHM 121 as the second semester of a general chemistry sequence intended for all students whose major requires a full year of general chemistry, including science majors and pre-professionals. Includes the principles of chemical kinetics, equilibrium, acid-base reactions, electrochemistry, and thermodynamics. Also introduces topics in organic, nuclear, transition metal, and descriptive chemistry. Laboratory includes experiments related to the lecture material. IAI CHM 912

**Prerequisite:** CHM 121 with a grade of C or better, or consent of instructor.

**CHM 125 Organic and Biochemistry for the Health Sciences (3-3) 4 crs.**

Introduces principles and health applications of organic chemistry and biochemistry. Studies the structure, nomenclature and reactions of organic compounds. Also studies carbohydrates, lipids, proteins, enzymes, nucleic acids, metabolic pathways and bioenergetics. Includes related laboratory exercises. Intended for students in the allied health sciences but open to all non-physical science majors.

**Prerequisite:** CHM 110 or CHM 121 with a grade of C or better.

**CHM 201 Basic Organic Chemistry (3-3) 4 crs.**

Surveys topics of organic chemistry covering nomenclature, structure, reactions and synthesis of the major classes of organic compounds, including hydrocarbons, alcohols, aldehydes, ketones, carboxylic acids and amines. The laboratory includes experiments in distillation, crystallization, chromatography, extraction, synthesis and analysis.

**Prerequisite:** CHM 100, CHM 110, or CHM 121 with a grade of C or better, or consent of instructor.

**CHM 204 Organic Chemistry I (3-6) 5 crs.**

Applies modern theories of electronic structures to the study of chemical and physical properties of alkanes, alkenes, alkynes, and alkyl halides. Students also study reaction mechanisms and stereochemistry as they apply to the above classes of organic compounds. Laboratory includes syntheses, qualitative organic analyses, IR and visible spectrophotometry, gas chromatography, thin layer chromatography, HPLC, polarimetry, and refractometry. Intended primarily for science majors and pre-professionals. IAI CHM 913

**Prerequisite:** CHM 122 with a grade of C or better, or consent of instructor.

**CHM 205 Organic Chemistry II (3-6) 5 crs.**

Continues CHM 204 with further study of nomenclature, stereochemistry, reactions, and mechanisms of the following functional groups: conjugated dienes, aromatics, alcohols, ethers, aldehydes, ketones, carboxylic acids and their derivatives, and nitrogen containing compounds. Laboratory includes syntheses, qualitative organic analyses, NMR, IR and UV-Vis spectrophotometry, gas chromatography, thin layer chromatography, HPLC, polarimetry, and refractometry. Intended primarily for science majors and pre-professionals. IAI CHM 914

**Prerequisite:** CHM 204 with a grade of C or better.

**CHM 210 Quantitative Analysis (3-6) 5 crs.**

Introduces theory and applications of sampling and quantitative chemical analysis with a focus on acid-base equilibria, complexation, extraction and chromatography, solubility, precipitation, redox reactions, and activity. Considerable emphasis is placed on extended equilibrium concepts and the fundamentals of spectroscopy. Laboratory experiments are related to lecture topics; they emphasize experimental precision and accuracy and include spreadsheet-based computer calculations.

**Prerequisite:** CHM 122 or equivalent with a grade of C or better.

**CHM 220 Biochemistry (3-3) 4 crs.**

Introduces the chemical and physical properties of all classes of biological molecules and their assemblies including small molecules, macromolecules, and processes found in living organisms. Includes structures of amino acids, nucleotides, lipids, and sugars, as well as their corresponding macromolecular structures, i.e., proteins, nucleic acids, membranes, and polysaccharides as related to their biological functions; kinetics and mechanism of enzymatic reactions, the central metabolic pathways, and the genetic code. Introduces current biochemical techniques and the proper use of laboratory tools and equipment utilized in a biochemistry lab.

**Prerequisite:** CHM 122 with a grade of "C" or better and either CHM 201 or CHM 204 with a grade of "C" or better or consent of the instructor.

**CHM 295 Independent Research in Chemistry I (0-3 to 0-9) 1-3 crs.**

Provides experimental exploration of an authentic scientific research topic under the supervision of a faculty member. This laboratory course is designed to teach the principles and practice of modern experimental chemistry. Before registering, students must submit to the Chemistry Department a contract with the instructor for accomplishing a defined research task. Credit is contingent on the submission of a final report.

**Prerequisite:** CHM 121 with a grade C or better, prior consultation with instructor, completed contract, and consent of the department chair.

**CHM 296 Independent Research in Chemistry II (0-3 to 0-9) 1-3 crs.**

Provides additional opportunity for students to do experimental exploration of an authentic scientific research topic under the supervision of a faculty member. This laboratory course is designed to give students more time to work on a research project. Before registering, students must submit to the Chemistry Department a contract with the instructor for accomplishing a defined research task. Credit is contingent on the submission of a final report.

**Prerequisite:** CHM 295 with a grade B or better, prior consultation with instructor, completed contract and consent of the department chair.

**CHM 297 Independent Research in Chemistry III (0-0 to 3-9) 1-3 crs.**

Provides additional opportunity for students to do experimental exploration of an authentic scientific research topic under the supervision of a faculty member. This laboratory course is designed to give students more time to work on a research project. Before registering, students must submit to the Chemistry Department a contract with the instructor for accomplishing a defined research task. Credit is contingent on the submission of a final report.

**Prerequisite:** CHM 296 with a grade B or better, prior consultation with instructor, completed contract, and consent of the department chair.

**CHN Chinese****CHN 101 Elementary Chinese I (4-0) 4 crs.**

Develops the basic knowledge of Mandarin Chinese and the Chinese culture. A communicative approach is used to engage students in activities to practice listening, speaking, reading and writing skills. This course is the first of a two-course sequence designed for students with no prior knowledge of spoken or written Chinese.

**CHN 102 Elementary Chinese II (4-0) 4 crs.**

Continues to develop the basic knowledge of Mandarin Chinese and the Chinese culture. Uses a communicative approach to engage students in activities to practice listening, speaking, reading and writing skills. This course is the second of a two-course sequence designed for students with no prior knowledge of spoken or written Chinese.

**Prerequisite:** CHN 101 with a grade of C or better, or consent of instructor.

**CHN 201 Intermediate Chinese I (4-0) 4 crs.**

Continues to develop communicative skills and knowledge of the Chinese language and culture. Uses a communicative approach to engage students in the activities to practice listening, speaking, reading and writing skills. This course is the first of a two-semester sequence of the second-year Mandarin Chinese program.

**Prerequisite:** CHN 102 or equivalent.

**CHN 202 Intermediate Chinese II (4-0)** 4 crs.  
Further develops communicative skills and knowledge of the Chinese language and culture. Uses a communicative approach to engage students in the activities to practice listening, speaking, reading and writing skills. This course is the second of a two-semester sequence of the second-year Mandarin Chinese program. IAI H1 900  
**Prerequisite:** CHN 201 or equivalent

### CHW Community Health Worker

**CHW 101 Introduction to Community Health Work (3-0)** 3 crs.  
Introduces the student to the role of the community health worker. The evolution of community health work will be explored with an emphasis on the current core competencies for the field. Students will be introduced to case management, home visits, and group facilitation.

**CHW 210 Professional Practice Experience (1-10)** 4 crs.  
Offers observation and participation in the field of Community Health Work. Students will document 125 hours of supervised field study per semester and will attend the equivalent of 1 hour of class time per week.  
**Prerequisite:** CHW 101, HED 203, HMS 102, HMS 121 and HSC 112 with grades of C or better, and consent of coordinator.

### CIS Computer Information Systems

**CIS 100 Computer and Digital Literacy (2-2)** 3 crs.  
Provides students with an introduction to computers in society and digital literacy. Includes computer hardware and operating systems, word processing, spreadsheets, presentation software, networking, Internet usage, communication and collaboration, computer safety and ethics. This course is not intended for computer information system majors.

**CIS 101 Introduction to Computer Information Systems (2-2)** 3 crs.  
Provides students with an introduction to computer and information systems used in business environments. Includes computer hardware and operating systems, word processing, spreadsheets, presentation software, database management software, networking and Internet, information systems, programming concepts, and computer security and ethics. IAI BUS 902

**CIS 106 Computer Logic and Programming Technology (2-2)** 3 crs.  
Familiarizes the student with the necessary tools to design efficiently the steps in a business computer program. Introduces object-oriented programming with an appropriate programming language. Requires the students to code and debug their own sample cases. Also teaches documentation, problem analysis, structured programming logic, decision tables, and table utilization.  
**Prerequisite:** Math placement in MTH 101 or higher.

**CIS 137 Computer Internship I (1-15)** 3 crs.  
Provides students with coordinated job experience in an information technology professional position such as computer networking or Web design. This course is repeatable up to a maximum of six credit hours. The one lecture hour per week will involve a seminar regarding technology issues.  
**Prerequisite:** Minimum of six credit hours of CIS courses with a GPA of 2.5 or better. Consent of program coordinator and internship instructor.

**CIS 143 Introduction to Database Systems (2-2)** 3 crs.  
Provides students with a comprehensive introduction to database concepts. Primary focus is on the relational model of database management and querying databases using Structured Query Language (SQL). Existing relational databases are examined and manipulated, and new relational databases are created.  
**Prerequisite:** CAS 160 with a grade of C or better and math placement in MTH 101 or higher.

**CIS 168 Java Software Development I (3-2)** 4 crs.  
Introduces students to the Java programming language and its object-oriented (OO) approach for developing platform independent applications. Students will learn how to develop basic Java applications, including object-oriented programming, event handling, and Graphical User Interface (GUI) using the Java Swing library.  
**Prerequisite:** CIS 106 with a grade of C or better, or consent of instructor.

**CIS 182 Visual C# Software Development (3-2)** 4 crs.  
Introduces students to Visual C# software development using the Microsoft .NET Framework. Includes the Visual Studio development environment, variables and constants, decision and repetition structures, methods, exception handling, classes, arrays, file processing, the .NET Framework, and ADO.NET.  
**Prerequisite:** CIS 106 with a grade of C or better.

**CIS 211 IT Project Management Design (2-2)** 3 crs.  
Provides students with a comprehensive introduction to Information Technology project management. Includes project selection, initiation, planning, execution, monitoring and closure. Hands-on activities are performed using a currently popular project management software package.  
**Prerequisite:** CAS 105, CAS 115 and CAS 125 with grades of C or better, OR CAS 160 with a grade of C or better; AND math placement in MTH 101 or higher.

**CIS 220 Topics in Computer Information Systems (1-0 to 6-0)** 1-6 crs.  
Studies selected problems, computer software or computer languages. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information with pre-registration materials will be available each time the course is offered. This course may be repeated up to a maximum of six credit hours.  
**Prerequisite:** Consent of instructor.

**CIS 230 Computer Programmer Internship (1-15)** 3 crs.  
Applies computer skills in practical situations and also involves a field project in local computer installation. Open only to computer degree candidates. Fourth semester standing with an overall GPA of 3.0 and 3.5 GPA in computer courses.  
**Prerequisite:** Consent of program coordinator.

**CIS 243 Database Administration (2-2)** 3 crs.  
Provides students with hands-on experience installing, configuring, maintaining and supporting a currently popular relational database management system (DBMS). Includes installation, configuration, backup and restore, security, performance monitoring and replication.  
**Prerequisite:** CIS 143 with a grade of C or better.

**CIS 244 Database Design and Implementation (2-2)** 3 crs.  
Provides students with hands-on experience designing and implementing databases using a currently popular relational database management system (DBMS). Includes logical design, physical design, database creation, data import/export, views, stored procedures, triggers, transactions, performance and security.  
**Prerequisite:** CIS 143 with a grade of C or better.

**CIS 268 Java Software Development II (3-2) 4 crs.**

Expands upon CIS 168 by introducing students to Java input/output, threads, collections, networking, advanced Swing, Remote Method Invocation, Java Database Connectivity, and JAR files. Students will develop advanced Java applications that interact with files, the TCP/IP network, remote objects, SQL database, and GUI users.

**Prerequisite:** CIS 168 with a grade of C or better, or consent of instructor.

**CIS 281 Microsoft.NET Web Development (3-2) 4 crs.**

Provides experience creating, configuring and deploying web applications using Visual Basic or Visual C# and the Microsoft.NET Framework. Includes web application development, data integration, custom controls, authentication, authorization and personalization.

**Prerequisite:** CIS 143, CIS 182 and WEB 150 with grades of C or better.

**CIS 299 Software Development Capstone (1-4) 3 crs.**

Provides hands-on experience analyzing, designing, developing and implementing a software project. Includes quality assurance, project management basics and documentation. May use case studies to demonstrate concepts. Students will carry a project through all phases of analysis, design and development.

**Prerequisite:** CIS 211 and prior or concurrent enrollment in either CIS 268 or CIS 281 with grades of C or better.

**CNA Certified Nursing Assistant****CNA 101 Nursing Assistant Training (4-5) 6 crs.**

Provides theory and training in the basic skills essential to the practice of health care workers who will assist the nurse in the care of patients in a variety of health care settings. Includes simulated practice and opportunity for clinical application. This course is approved by the Illinois Department of Public Health, Office of Health Regulations. Successful completion is required for application for the Nurse Aide Competency Exam. NOTE: Students are required to have a valid Social Security number, pass a criminal background check and meet health requirements. Special fees apply.

**Prerequisite:** ENG 001, ENG 100 or ENG 101 with a grade of C or better; or ESL 073 with a grade of B or better; or RDG 090 or RDG 099 with a grade of C or better; or an ACT Reading score of 20 or higher, or required placement test scores.

**CSC Computer Science****CSC 121 Computer Science I (3-2) 4 crs.**

Introduces a disciplined approach to problem solving and algorithm development. Introduces both procedural and object-oriented design strategies; selection, repetition and sequence control structures; and containers (mathematical manipulation, searching, sorting, etc.). Emphasizes program design, testing, and documentation using good programming style in a high-level, object-oriented programming language. Emphasizes mathematics, engineering, science and computer science applications. Designed as the first of a sequence of courses (CSC 121, CSC 122, CSC 216 and CSC 217) for students majoring in Computer Science. IAI CS 911

**Prerequisite:** MTH 140 with a grade of C or better; or required math placement test score (ALKM score of 76 or higher); or ACT of 28 or higher; or consent of instructor.

**CSC 122 Computer Science II (3-2) 4 crs.**

Uses an object-oriented approach to introduce the design and implementation of large scale problems. Introduces data structures: arrays, files, sets, pointers, lists, stacks, queues, trees, and graphs. Introduces program verification and complexity. Builds on previous knowledge of searching and sorting to help introduce the student to recursion as well as give practical examples of complexity analysis. Emphasizes mathematics, engineering, science, and computer science applications. Designed as the second of a sequence of courses (CSC 121, CSC 122, CSC 216, CSC 217) for students majoring in Computer Science. IAI CS 912

**Prerequisite:** CSC 121 and MTH 200 with grades of C or better, or consent of instructor.

**CSC 208 Problem Solving for Science and Engineering Using FORTRAN (3-2) 4 crs.**

Emphasizes problems analysis and problem solving. Includes problem formulation, data storage and retrieval techniques, algorithm analysis and development, flow chart or pseudocode construction. Introduces the student to numerical methods and simulations. Develops working knowledge of current version of FORTRAN. Designed to use the computer in the study of problems in engineering, mathematics and/or physical sciences. Intended for the mathematics, science, computer science or engineering student.

**Prerequisite:** MTH 200 or higher with a grade of C or better, or consent of instructor.

**CSC 211 Introduction to C Programming and UNIX (3-2) 4 crs.**

Develops working knowledge in the use of the computer in the C programming language. Includes problem formulation, data storage and retrieval, algorithms, flowcharts or pseudocode, numerical analysis and structural programming, lexical analysis and string manipulation. Introduces student to a UNIX-like operating system environment. Intended for the computer science or engineering student.

**Prerequisite:** CSC 121 or CSC 208 with a grade of C or better, or consent of instructor.

**CSC 214 Introduction to Java Programming (3-2) 4 crs.**

Introduces the Java language in a UNIX environment. Includes algorithms, problem formulation, structured programming, variables, data types, input/output repetition, selection, arrays, functions, classes/objects, and recursion. Applications emphasize math, science, engineering, and computer science. This course will build on topics covered in CSC 121 (only in a new language).

**Prerequisite:** CSC 121 with a grade of C or better, or consent of instructor.

**CSC 216 Data Structures and Algorithm Analysis (3-2) 4 crs.**

Provides exposure to techniques for storing and manipulating data. Includes discussion of insertion, deletion, and retrieval algorithms for stacks, queues, deques, linked lists, trees, etc. Emphasizes algorithm analysis as it builds on topics from previous course (CSC 122). Emphasizes mathematics, engineering, science, and computer science applications. Designed as the third of a sequence of courses (CSC 121, CSC 122, CSC 216 and CSC 217) for students majoring in Computer Science.

**Prerequisite:** CSC 122 with a grade of C or better, or consent of instructor.

**CSC 217 Assembler Programming and Machine Organization (3-2) 4 crs.**

Emphasizes machine-level programming, instruction sets, data representation, subroutines, I/O hardware and software, linking and loading related to higher level languages. Designed as the fourth in a sequence of courses (CSC 121, CSC 122, CSC 216 and CSC 217) for students majoring in Computer Science.

**Prerequisite:** CSC 216 with a grade of C or better, or consent of instructor.

**DCS Diagnostic Cardiac Sonography****DCS 101 Electrocardiography I (1.5-1) 2 crs.**

Provides instruction and practice in the performance and comprehensive interpretation of rhythm ECGs. Includes instruction in holter monitoring.

**Prerequisite:** BIO135 or (BIO160 and BIO161) with grades of C or better.

**DCS 102 Electrocardiography II (1.5-1) 2 crs.**

Provides instruction and practice in the performance and comprehensive interpretation of 12 lead ECGs. Includes instruction in maximal stress testing.

**Prerequisite:** DCS 101 with a grade of C or better.

**DCS 105 Ultrasound Physics/Instrumentation 1 (2-0) 2 crs.**

Instructs students in the ultrasound imaging programs in the principles of ultrasound physics and instrumentation. Examines continuous and pulsed sound, sound wave intensities, interaction of sound and media, sound propagation, axial resolution, transducer basics, anatomy of a sound wave, and basic display modalities.

**Prerequisite:** Admission into the DCS program.

**DCS 106 Ultrasound Physics/Instrumentation 2 (2-0) 2 crs.**

Continues to instruct students in the ultrasound imaging programs in the principles of ultrasound physics and instrumentation. Examines real-time imaging, ultrasound instrumentation, displays, signal processing, harmonics and Doppler principles. Concludes with imaging artifacts, bioeffects and quality assurance.

**Prerequisite:** DCS 105 with a grade of C or better.

**DCS 107 Sonography Theory I (2-0) 2 crs.**

Discusses the role of a sonographer and the sonography profession. Examines the different sonography specialty areas and related sonographic exams. Explores the ultrasound cross-sectional anatomy of the abdomen, pelvis, chest and neck. Maps the circulation of the cerebral vascular system. Introduces the normal and abnormal cerebrovascular ultrasound. Investigates cerebrovascular disease and trains the student to interpret cerebrovascular ultrasound exams.

**Corequisite:** DCS 109.

**DCS 108 Sonography Theory II (2-0) 2 crs.**

Builds on the theoretical foundations covered in DCS 107 (Sonography Theory I). Explores the ultrasound cross sectional vascular anatomy of the extremities. Maps the circulation from the trunk to the periphery. Introduces the normal and abnormal peripheral arterial and venous sonogram. Investigates peripheral vascular disease. Trains the student to interpret peripheral arterial and venous sonographic studies.

**Prerequisite:** DCS107 with a grade of C or better.

**Corequisite:** DCS110.

**DCS 109 Sonography Lab I (0-2) 1 cr.**

Provides supervised laboratory instruction and practice in the basics of ultrasound imaging. Introduces professional expectations of the student sonographer. Covers proper procedure and body mechanics for an ultrasound exam. Orients the student to imaging body habitus. Instructs on the operation of ultrasound equipment. Trains the student to perform diagnostic carotid sonograms. Pass/fail grade.

**Corequisite:** DCS 107.

**DCS 110 Sonography Lab II (0-2) 1 cr.**

Provides supervised laboratory instruction and practice in peripheral vascular ultrasound imaging. Trains the student to perform diagnostic peripheral arterial and venous sonographic examinations. Non-imaging physiological peripheral arterial examination techniques are also covered. Expands upon the professional expectations of the student sonographer. Pass/fail grade.

**Prerequisite:** DCS109 with a grade of C or better.

**Corequisite:** DCS 108.

**DCS 112 Sonography Lab III (0-2) 1 cr.**

Provides additional laboratory practice in common vascular ultrasound exams. This course is not required for graduation. Pass/fail grade.

**DCS 204 Cardiovascular Principles (3-0) 3 crs.**

Examines important cardiovascular principles. Reviews cardiac anatomy, physiology and pharmacology. Explores cardiac embryology, cardiac hemodynamic principles, and coronary artery disease. Provides an overview of clinical cardiology.

**Prerequisite:** BIO 135 or (BIO 160 and BIO 161) with grades of C or better.

**DCS 207 Cardiac Sonography Theory I (5-0) 5 crs.**

Explores the ultrasound cross-sectional anatomy of the heart. Maps the cardiac circulation. Introduces the normal and abnormal echocardiogram. Investigates valvular, coronary and pulmonary heart disease. Also examines right and left ventricular systolic dysfunction. Trains the student to interpret these pathologies on an echocardiogram.

**Prerequisite:** DCS 106 with a grade of C or better.

**Corequisite:** DCS 209.

**DCS 208 Cardiac Sonography Theory II (5-0) 5 crs.**

Investigates a host of cardiac and other conditions that impact the heart and the echocardiogram. Covers pericardial, myocardial, endocardial, aortic, diastolic, hypertensive, and diabetic heart disease. Examines heart transplant, valvular repair and replacement, cardiac masses and trauma, and coronary artery anomalies. Investigates systemic conditions that alter the heart. Trains the student to interpret these conditions on an echocardiogram. Introduces transesophageal, stress, contrast, 3D and other advanced echo modalities.

**Prerequisite:** DCS207 with a grade of C or better.

**Corequisite:** DCS210.

**DCS 209 Cardiac Sonography Lab I (0-4) 2 crs.**

Provides supervised laboratory instruction and practice in cardiac ultrasound imaging. Trains the student to perform a basic adult echocardiogram. Reinforces the professional expectations of the student sonographer. Pass/fail grade.

**Prerequisite:** DCS 106 with a grade of C or better.

**Corequisite:** DCS 207.

**DCS 210 Cardiac Sonography Lab II (0-4) 2 crs.**

Continues supervised laboratory instruction and practice in cardiac ultrasound imaging. Trains the student to perform advanced targeted adult echocardiograms. Reinforces the professional expectations of the student sonographer. Pass/fail grade.

**Prerequisite:** DCS 209 with a grade of C or better.

**Corequisite:** DCS 208.

**DCS 220 Intro to Cardiac Sonog Clinical (1.5-1.5) 2 crs.**

Prepares students for their formal clinical experience by orienting them to all aspects of the hospital environment and the specific procedures for completing sonograms in the medical setting. Explores relevant policy, business implications, management of the inpatient, and how chart review impacts the direction of the study. Examines prudent professional, ethical, and culturally competent patient interaction. Grooms the student for their future career by covering job search, credentialing and professional development, lab leadership and educational advancement. Includes a three-day observational experience in the clinical ultrasound department.

**Prerequisite:** DCS 207 and DCS 209 with grades of C or better.  
**Corequisite:** DCS 208 and DCS 210.

**DCS 230 Cardiac Sonography Clinical (0-25) 5 crs.**

Provides the student with practical clinical experience performing adult echocardiograms in a hospital or other clinical setting. Orients the student to that hospital environment and the specific policies and procedures for completing sonograms in that medical setting. Allows the student to perform these echocardiograms on patients under the close supervision of clinical staff. Provides an opportunity for students to develop and demonstrate the knowledge base, clinical skills, and professional skills required of an entry level sonographer.

**Prerequisite:** DCS 208, DCS 210 and DCS 220 with grades of C or better.

**DCS 260 Advanced Sonography Seminar (1-0) 1 cr.**

Introduces new or advanced topics in sonography. Explores the evolution and provides necessary background in terms of related anatomy, hemodynamics, physics and pathology. Presents related ultrasound case studies and trains in the interpretation of the ultrasound examination. Covers implications to the performance of the sonographic procedure including protocols, modalities and specific assessment techniques. Enhances the skill of the sonographer past entry level. May be repeated up to six credit hours.

**DHY Dental Hygiene****DHY 100 Pre-Clinic (3-6) 5 crs.**

Introduces the student to clinical dental hygiene with emphasis on the role of the dental hygienist in the control and prevention of dental disease. NOTE: Students must be admitted into the Dental Hygiene program to register for this course.

**DHY 101 Clinical Dental Hygiene I (2-9) 5 crs.**

Applies theoretical concepts in a clinical setting and introduces periodontology. Refines clinical skills and emphasizes the preventive aspects of dentistry. The student performs traditional dental hygiene clinical functions.

**Prerequisite:** DHY 100, DHY 159, and DHY 161 with grades of C or better.

**DHY 111 Dental Radiology (2-3) 3 crs.**

Provides theory in radiation physics, safety and the biological effects of ionizing radiation. Intraoral exposure techniques, darkroom procedures and film interpretation are emphasized in the laboratory. Practical experience provided on mannequins and selected patients.

**Prerequisite:** DHY 100, DHY 159, and DHY 161 with grades of C or better.

**DHY 119 Oral Health Management of Special Needs Populations (2-0) 2 crs.**

Introduces characteristics and oral health management needs of geriatrics, special populations and the medically compromised with diabetes and cardiovascular disease. Physical, psycho/social and oral characteristics associated with special needs populations are discussed. Modifications of comprehensive dental hygiene care will be emphasized. The caregiver team concept will be incorporated.

**Prerequisite:** DHY 101, DHY 111, and DHY 190 with grades of C or better.

**DHY 151 Clinical Dental Hygiene II (0-6) 2 crs.**

Provides clinical practice in oral prophylaxis on adult patients, including preventive techniques, exposing radiographs and patient management.

**Prerequisite:** DHY 101, DHY 111, and DHY 190 with grades of C or better.

**DHY 159 Head and Neck Anatomy (3-0) 3 crs.**

Introduces anatomy of the head and neck regions with special emphasis on the human dentition. Skeletal, muscular, glandular, circulatory, nervous and epithelial structures are considered in detail. Also includes introductory material on human histology and orofacial embryology. NOTE: Students must be admitted into the DHY program to register for this course.

**DHY 161 Dental Anatomy (1-2) 2 crs.**

Introduces the student to terms and anatomic structures of the oral cavity including a detailed study of crown and root morphology of both primary and permanent dentitions. NOTE: Students must be admitted into the Dental Hygiene program to register for this course.

**DHY 190 General and Oral Pathology (2-0) 2 crs.**

Studies fundamentals of microscopic and gross pathology and general pathological processes. Specifically emphasizes diseases of dental and periodontal tissues and of the supporting oral structures. Correlates clinical manifestations of disease with dental hygiene practice.

**Prerequisite:** DHY 100, DHY 159, and DHY 161 with grades of C or better.

**DHY 200 Periodontology (1-2) 2 crs.**

Reviews etiological and histological components of periodontal disease emphasizing current theoretical concepts in treatment and management of periodontally involved patients. Provides laboratory experience to refine non-surgical techniques.

**Prerequisite:** DHY 119, DHY 151, DHY 269, and DHY 270 with grades of C or better.

**DHY 201 Ethics, Jurisprudence and Practice Management (2-0) 2 crs.**

Studies the development of dental office and clinic practice management procedures and professional interrelationships. Considers the role of the dental hygienist in the various dental specialties and various employment modalities.

**Prerequisite:** DHY 200, DHY 202, DHY 220, DHY 230, DHY 240, and DHY 250 with grades of C or better.

**DHY 202 Radiology I (0-2) 1 cr.**

Continues practice in the techniques of exposing, processing, mounting and evaluating dental radiographs.

**Prerequisite:** DHY 119, DHY 151, DHY 269 and DHY 270 with grades of C or better.

**DHY 203 Radiology II (0-2) 1 cr.**

Continues DHY 202.

**Prerequisite:** DHY 200, DHY 202, DHY 220, DHY 230, DHY 240 and DHY 250 with grades of C or better.

**DHY 220 Community Dental Health I (1-2) 2 crs.**

Introduces the principles of dental public health and its application to dental hygiene, including: epidemiology, disease prevention, assessment methods, program planning and resource identification. Reviews and interprets dental scientific literature and introduces the utilization of research tools and statistical analysis.

**Prerequisite:** DHY 119, DHY 151, DHY 269 and DHY 270 with grades of C or better.

**DHY 221 Community Dental Health II (1-2) 2 crs.**

Emphasizes the direct application of preventive dentistry services in the community and the design of treatment plans to meet identified community needs. Community fluoridation, school-based services, tobacco cessation, and consumer education and health promotion will be included. Students will be required to participate in group activities to share service learning experiences.

**Prerequisite:** DHY 200, DHY 202, DHY 220, DHY 230, DHY 240 and DHY 250 with grades of C or better.

**DHY 230 Pain Management (1-2) 2 crs.**

Provides students with the basic and current concepts of local anesthetics and pain control and to provide for the safe and effective administration of local anesthetics. Includes the rationale for pain control, psychological considerations, armamentarium, anatomy, neurophysiology and pharmacology of anesthetic agents. Provides laboratory instruction and clinical practice in topical and local anesthetic techniques. Introduces the use and administration of nitrous oxide analgesia.

**Prerequisite:** DHY 119, DHY 151, DHY 269 and DHY 270 with grades of C or better.

**DHY 240 Dental Pharmacology (2-0) 2 crs.**

Examines the principles of drug actions and characteristics of major drug groups. Emphasis is placed on drugs used in dentistry and the management of dental patients who receive drug treatment for medical problems.

**Prerequisite:** DHY 119, DHY 151, DHY 269 and DHY 270 with grades of C or better.

**DHY 250 Clinical Dental Hygiene III (1-12) 5 crs.**

Continues clinical practice of dental hygiene with emphasis on the comprehensive treatment of periodontally involved patients.

**Prerequisite:** DHY 119, DHY 151, DHY 269 and DHY 270 with grades of C or better.

**DHY 251 Clinical Dental Hygiene IV (1-12) 5 crs.**

Continues DHY 250.

**Prerequisite:** DHY 200, DHY 202, DHY 220, DHY 230, DHY 240 and DHY 250 with grades of C or better.

**DHY 269 Science of Dental Materials (1-0) 1 cr.**

Studies the characteristics, properties, composition and function of materials used in dentistry. Includes familiarization with techniques and procedures used in the dental profession.

**Prerequisite:** DHY 101, DHY 111 and DHY 190 with grades of C or better.

**DHY 270 Dental Materials Laboratory Techniques (0-2) 1 cr.**

Introduces the student to the use and manipulation of materials used in dentistry, with an emphasis on the clinical application of materials that relate directly to the functions of the dental hygienist.

**Prerequisite:** DHY 101, DHY 111 and DHY 190 with grades of C or better.

**DIT Dietetic Technician****DIT 101 Fundamentals of Nutrition (3-0) 3 crs.**

Introduces the science of nutrition and its relationship to health and disease. Nutrients found in foods, their digestion, absorption and metabolism by the body; cultural, socioeconomic and psychological influences on food selection; and application of these concepts to promote good nutritional health and prevent disease will be covered.

**DIT 102 Medical Nutrition Therapy (3-0) 3 crs.**

Studies the nutritional care of clients with chronic and acute disease conditions.

**Prerequisite:** DIT 101 with a grade of C or better.

**DIT 103 The Nutrition Care Process (3-0) 3 crs.**

Introduces the components of the nutrition care process including methods of nutrition screening which is the framework used by dietetics professionals for the provision of nutritional services. Issues related to the dietetics profession including responsibilities of dietetic professionals, code of ethics, standards of professional performance, credentialing and development of a professional portfolio are also covered.

**DIT 110 Principles of Food Preparation (2-2) 3 crs.**

Introduces the scientific principles of food preparation. Emphasis is placed on food selection and basic food preparation practices. Laboratory experience includes application of these principles, sensory evaluation and recipe modification.

**DIT 150 Dietetic Clinical Laboratory I (1-12) 5 crs.**

Offers student assigned clinical laboratory experience in approved health care and community agencies. Emphasis will be placed on development of skills required of the dietary manager.

**Prerequisite:** DIT 103 and DIT 220 with grades of C or better, and prior or concurrent enrollment in DIT 102.

**DIT 200 Dietetic Clinical Laboratory II (0-12) 4 crs.**

Offers student assigned clinical laboratory experience in approved health care and community agencies. Emphasis will be placed on the nutrition care planning process.

**Prerequisite:** BIO 135, BIO 136, DIT 150 and HSC 112 with grades of C or better. MTH 060 or higher with a grade of C or better or math placement test score into MTH 080 or above. Prior or concurrent enrollment in HSC 165.

**DIT 201 Nutrition Education Techniques (3-0) 3 crs.**

Studies the skills necessary to present effective nutrition education programs to individuals, small groups and community populations. Emphasis will be placed on developing appropriate strategies, techniques and materials for health improvement and disease prevention that are culturally sensitive, age appropriate and at the educational level of the audience.

**Prerequisite:** DIT 102 and DIT 103 with grades of C or better.

**DIT 202 Nutrition Care Seminar (3-0) 3 crs.**

Reviews planning, implementing and evaluating nutrition care given to individuals and groups of people having specific disease conditions, both acute and chronic.

**Prerequisite:** Prior or concurrent enrollment in DIT 200 with a grade of C or better.

**DIT 205 World Cultures and Food (2-2) 3 crs.**

Examines the uniqueness of food patterns from around the world as shaped by geographic, historical, socioeconomic and religious factors. Explores how food can be a bridge to understanding multiculturalism through the preparation of traditional recipes in the laboratory setting.



**DIT 220 Food Systems Administration (3-0)** 3 crs.  
Introduces the principles of administering food systems, with emphasis on menu planning, procurement of quantity foods, quantity foods equipment, staffing, and financial controls. Includes an introduction to computer use within food systems.  
**Prerequisite:** Prior or concurrent enrollment in FSM 114 with a grade of C or better.

**DIT 225 Sports Nutrition (3-0)** 3 crs.  
Provides in-depth study of the physiological principles behind sports nutrition as it relates to the influence of nutrition on exercise performance, exercise training and recovery. (Also listed as KIN 225. Credit will be given for either DIT 225 or KIN 225, but not both.)

**DIT 250 Dietetic Clinical Laboratory III (0-6)** 2 crs.  
Offers student assigned clinical laboratory experience in approved health care and community agencies. Emphasis will be placed on nutrition interventions which promote wellness and disease prevention.  
**Prerequisite:** DIT 201 with a grade of C or better. Prior or concurrent enrollment in DIT 200.

## DIV Diversity

**DIV 101 Exploring Diversity in the U.S. (3-0)** 3 crs.  
Focuses on culture and other diversity issues and topics utilizing an interactive personal development format. Students will discuss dimensions of their own culture and cultures of others within the United States. They will have the opportunity to examine discrimination and prejudice between groups and analyze the impact of these power differences on peoples' lives. The experiential nature of this course will give students the opportunity to develop skills necessary to interact effectively in a diverse society.

## DMS Diagnostic Medical Sonography

**DMS 105 Ultrasound Physics/Instrumentation 1 (2-0)** 2 crs.  
Instructs students in the ultrasound imaging programs in the principles of ultrasound physics and instrumentation. Examines continuous and pulsed sound, sound wave intensities, interaction of sound and media, sound propagation, axial resolution, transducer basics, anatomy of a sound wave, and basic display modalities.  
**Prerequisite:** Admission into the DMS program.

**DMS 106 Ultrasound Physics/Instrumentation 2 (2-0)** 2 crs.  
Continues to instruct students in the ultrasound imaging programs in the principles of ultrasound physics and instrumentation. Examines real time imaging, ultrasound instrumentation, displays, signal processing, harmonics, and Doppler principles. Concludes with imaging artifacts, bioeffects, and quality assurance.  
**Prerequisite:** DMS 105 with a grade of C or better.

**DMS 107 Sonography Theory I (2-0)** 2 crs.  
Discusses the role of a sonographer and the sonography profession. Examines the different sonography specialty areas and related sonographic exams. Explores the ultrasound cross sectional anatomy of the abdomen, pelvis, chest and neck. Maps the circulation of the cerebral vascular system. Introduces the normal and abnormal cerebrovascular ultrasound. Investigates cerebrovascular disease and trains the student to interpret cerebrovascular ultrasound exams.  
**Corequisite:** DMS 109

**DMS 108 Sonography Theory II (2-0)** 2 crs.  
Builds on the theoretical foundations covered in Sonography Theory I. Explores the ultrasound cross sectional vascular anatomy of the extremities. Maps the circulation from the trunk to the periphery. Introduces the normal and abnormal peripheral arterial and venous sonogram. Investigates peripheral vascular disease. Trains the student to interpret peripheral arterial and venous sonographic studies.  
**Prerequisite:** DMS 107 with a grade of C or better.  
**Corequisite:** DMS 110.

**DMS 109 Sonography Lab I (0-2)** 1 cr.  
Provides laboratory practice in the basics of ultrasound imaging. Introduces professional expectations of the student sonographer. Covers proper procedure and body mechanics for an ultrasound exam. Orients the student to imaging body habitus. Instructs on the operation of ultrasound equipment. Trains the student to perform diagnostic carotid sonograms. Pass/fail grade.  
**Corequisite:** DMS 107.

**DMS 110 Sonography Lab II (0-2)** 1 cr.  
Provides laboratory practice in peripheral vascular ultrasound imaging. Trains the student to perform diagnostic peripheral arterial and venous sonographic examinations. Non-imaging physiological peripheral arterial examination techniques are also covered. Expands upon the professional expectations of the student sonographer. Pass/fail grade.  
**Prerequisite:** DMS 109 with a grade of C or better.  
**Corequisite:** DMS 108.

**DMS 112 Sonography Lab III (0-2)** 1 cr.  
Provides additional laboratory practice in common vascular ultrasound exams. This course is not required for graduation. Pass/fail grade.

**DMS 201 Introduction to the Medical Sonography Clinical (1.5-1.5)** 2 crs.  
Prepares students for their formal clinical experience by orienting them to all aspects of the hospital environment and the specific procedures for completing sonograms in the medical setting. Explores relevant policy, business implications, management of the inpatient, and how chart review impacts the direction of the study. Examines prudent, professional, ethical, and culturally competent patient interaction. Grooms the student for their future career by covering job search, credentialing and professional development, lab leadership, and educational advancement. Includes a three day observational experience in the clinical ultrasound department.  
**Corequisite:** DMS 204, DMS 205, and DMS 206.

**DMS 204 Abdominal and Small Parts Sonography Theory I (4-0)** 4 crs.  
Explores the ultrasound cross sectional anatomy of the major structures and organs of the abdomen. Maps the related abdominal circulation. Introduces the normal and abnormal ultrasound of the liver, gallbladder, pancreas, spleen and urinary system. Investigates pathologies of these same structures. Trains the student to interpret these pathologies on ultrasound.  
**Prerequisite:** DMS 106 with a grade of C or better.  
**Corequisite:** DMS 205 and DMS 206.

**DMS 205 Obstetrical and Gynecological Sonography Theory I (3-0)** 3 crs.  
Explores the ultrasound cross sectional anatomy of the female pelvis. Maps the related pelvic circulation. Introduces the normal and abnormal ultrasound of the uterus, ovaries, adnexa, neonatal and pediatric pelvis, and the first trimester pregnancy. Investigates pathologies of these same structures. Trains the student to interpret these pathologies on ultrasound. Introduces the role of ultrasound in evaluating female infertility.  
**Prerequisite:** DMS 106 with a grade of C or better.  
**Corequisite:** DMS 204 and DMS 206.

**DMS 206 Medical Sonography Lab I (0-4) 2 crs.**

Provides supervised laboratory instruction and practice in abdominal and gynecologic ultrasound imaging. Trains the student to perform an ultrasound of the aorta, liver, gallbladder, pancreas, spleen, urinary system, and female pelvis. Reinforces the professional expectations of the student sonographer. Pass/fail grade.

**Prerequisite:** DMS 106 with a grade of C or better.

**Corequisite:** DMS 204 and DMS 205.

**DMS 207 Medical Sonography Clinical I (0-25) 5 crs.**

Provides the student with practical clinical experience performing abdominal, small parts, vascular, obstetrical and gynecological ultrasound in a hospital or other clinical setting. Orients the student to that hospital environment and the specific policies and procedures for completing sonograms in that medical setting. Allows the student to perform these ultrasounds on patients under the close supervision of clinical staff. Provides an opportunity for students to develop and demonstrate the knowledge base, clinical skills, and professional skills required of an entry level sonographer.

**Prerequisite:** DMS 201, DMS 204, DMS 205 and DMS 206 with grades of C or better.

**DMS 208 Abdominal and Small Parts Sonography Theory 2 (4-0) 4 crs.**

Continues to explore the ultrasound cross sectional anatomy of the abdomen and of specific small parts. Introduces the normal and abnormal ultrasound of the thyroid, scrotum, pediatric abdomen, gastrointestinal tract, abdominal walls and cavities, liver and urinary circulation, breast, neonatal spine and brain, and some specific musculoskeletal structures. Investigates pathologies of these same structures. Trains the student to interpret these pathologies on ultrasound. Reinforces vascular interpretation skills covered in previous coursework. Introduces ultrasound-guided interventional techniques and emergent abdominal ultrasound procedures.

**Prerequisite:** DMS 204 with a grade of C or better.

**Corequisite:** DMS 209 and DMS 210.

**DMS 209 Medical Sonography Lab II (0-4) 2 crs.**

Continues supervised laboratory instruction and practice in abdominal, gynecologic, and vascular ultrasound; expanding into more advanced or targeted ultrasound imaging. Trains the student to perform liver and kidney doppler as well as thyroid, breast, scrotal, transvaginal, obstetric and common musculoskeletal sonographic examinations. Reinforces the professional expectations of the student sonographer. Pass/fail grade.

**Prerequisite:** DMS 206 with a grade of C or better.

**Corequisite:** DMS 208 and DMS 210.

**DMS 210 Obstetrical and Gynecological Sonography Theory II (3-0) 3 crs.**

Builds on the theoretical foundations covered in DMS 205 (Obstetrical and Gynecological Sonography Theory I.) Explores the ultrasound cross-sectional anatomy of the second and third trimesters. Maps fetal embryology. Introduces the normal and abnormal ultrasound of the first, second and third trimester pregnancy. Investigates pathologies of the pregnant uterus and the developing fetus. Trains the student to interpret these pathologies on ultrasound. Introduces 3D and 4D sonographic evaluations of fetal anomalies.

**Prerequisite:** DMS 205 with a grade of C or better.

**Corequisite:** DMS 208 and DMS 209.

**DMS 211 Medical Sonography Clinical II (0-25) 5 crs.**

Continues the student's practical clinical experience performing abdominal, small parts, vascular, obstetrical and gynecological ultrasounds in a hospital or other clinical setting. Allows the student to perform these ultrasounds on patients under the close supervision of clinical staff. Continues to provide an opportunity for students to develop and demonstrate the knowledge base, clinical skills, and professional skills required of an entry-level sonographer.

**Prerequisite:** DMS 207 with a grade of C or better.

**DMS 260 Advanced Sonography Seminar (1-0) 1 cr.**

Introduces new or advanced topics in sonography. Explores the evolution and provides necessary background in terms of related anatomy, hemodynamics, physics and pathology. Presents related ultrasound case studies and trains in the interpretation of the ultrasound examination. Covers implications to the performance of the sonographic procedure including protocols, modalities and specific assessment techniques. Enhances the skill of the sonographer past entry level. May be repeated up to six credit hours.

**ECE Early Childhood Education**

**ECE 101 Introduction to Early Childhood Education (3-0) 3 crs.**

Provides an overview of early childhood care and education, including the basic values, structure, organization and programming. Examination of the student's personal qualities in relationship to expectations of the field. Directed observation in a variety of programs and settings. Fifteen (15) hours of observation required. (NOTE: The program's health requirements must be completed prior to observation.)

**ECE 102 Child Development (3-0) 3 crs.**

Provides a study of human development from conception through adolescence. Includes research methods and developmental theories. Address all major areas of development (physical, social, emotional and cognitive) and the interaction among these areas. Examines theories of Piaget, Erikson, Vygotsky, Skinner, Gardner and others. Explores child development in the context of gender, family, culture, and society. Emphasis is on the implication for early childhood professional practice.

**ECE 111 Infant/Toddler Programs (3-0) 3 crs.**

Examines the theories and research (including early intervention) related to infants and toddlers with a focus on methods of care given in home-based and school-based infant programs. Five (5) hours of observation of infants/toddlers and related program are required.

**ECE 112 Play and Assessment of the Young Child (3-0) 3 crs.**

Develops observational skills to assess and record a child's level of development during play. Identification of types, goals and appropriate materials for play, strategies for communicating and working with parents and team members.

**Prerequisite:** Prior or concurrent enrollment in ECE 102 with a grade of C or better.

**ECE 115 Principles of Early Childhood Curriculum (3-0) 3 crs.**

Provides an overview of principles involved in planning, implementing and evaluating developmentally appropriate curriculum. Includes lesson plans, emerging curriculum, scheduling, room arrangement, materials and equipment; individual, small and large group activities; short and long term goals; and teacher's roles and responsibilities in curriculum development. Three (3) hours of observation required.

**Prerequisite:** Prior or concurrent enrollment in ECE 102 with a grade of C or better.

- ECE 140 Family Child Care Management (3-0)** 3 crs.  
Provides guidelines and responsibilities in providing care in a Family Child Care setting for infants and young children. Ten (10) hours of observation in a family child care setting are required.
- ECE 149 Topics in Early Childhood Education (1-0 to 3-0)** 1-3 crs.  
Studies selected problems or topics in early childhood. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. This course may be repeated up to a maximum of three credit hours.
- ECE 209 Language Development and Activities for the Young Child (3-0)** 3 crs.  
Provides an in-depth knowledge and understanding of language development, the stages involved, the role that adults play, and the relationship of language to other aspects of development. Introduces the student to a wide variety of language activities appropriate for young children and develops skills in preparing, presenting and evaluating language activities.  
**Prerequisite:** ECE 115.
- ECE 210 Creative Activities for Young Children (2-2)** 3 crs.  
Examines the theoretical framework for art, creativity, music and movement. Acquaints the student with a variety of creative art materials and methods appropriate for use in programs for young children. Includes firsthand experience with materials and planning an arts program. Stresses the relationship of creative experiences within the curriculum and the role of creative experiences within the early childhood program.  
**Prerequisite:** ECE 115.
- ECE 221 Math and Science for the Young Child (3-0)** 3 crs.  
Introduces the theory and practice related to math and science for young children. Emphasis will be placed on the development and evaluation of developmentally appropriate activities and instructional materials.  
**Prerequisite:** ECE 115.
- ECE 226 Assessment and Guidance (3-0)** 3 crs.  
Understand concepts of appropriate assessment, expected educational outcomes, the teacher's responsibility in assessment and how young children develop and learn. Students will understand how appropriate assessments can measure and evaluate child growth and development and how the use of assessment tools can influence decisions in early childhood education with an emphasis on appropriate guidance techniques and strategies. Four (4) hours of observation are required.  
**Prerequisite:** Prior or concurrent enrollment in ECE 102 with a grade of C or better.
- ECE 230 Movement and Rhythms for the Young Child (3-0)** 3 crs.  
Presents research, theory and practical application as it relates to teaching music and movement; illustrates appropriate methods, materials and equipment for use in classroom programming.  
**Prerequisite:** ECE 115.
- ECE 235 Principles of School Age Care (3-0)** 3 crs.  
Relates theory and practice of school age programming. Emphasizes program planning, implementation and assessment, use of materials, principles of growth and development, role of teacher and techniques of classroom management. Students will observe and participate in school age child care.
- ECE 250 Health, Nutrition and Safety (3-0)** 3 crs.  
Focuses on personal health of the individual, including nutrition and health and safety issues, with emphasis on meeting health needs for children in group settings. A healthy lifestyle, preventive health and community health are examined. One (1) hour of observation is required.
- ECE 252 Child-Family-Community (3-0)** 3 crs.  
Concentrates on teacher's role in working with children within the context of family and community. Stresses effective communication, diversity, professionalism and social policy. Includes an in-depth study of community resources. Two (2) hours of observation are required. (IAI ECE 915 effective Fall 2017)
- ECE 253 Administration of Early Childhood Programs (3-0)** 3 crs.  
Provides guidelines for the establishment and operation of a child development center. Emphasizes the director's role in programming, school policies, budgeting, record keeping, licensing, municipal codes, insurance, staff development, evaluation procedures, parent communication and community resources.  
**Prerequisite:** Completion of 15 credit hours including ECE 102 and ECE 115 with grades of C or better, or consent of program coordinator.
- ECE 254 Interpersonal Relationships in Early Child Education (1-0)** 1 cr.  
Explores personal experiences within the work environment, impact of sex-roles, organizational policies and professional standards. Emphasizes team building and the development of effective interpersonal communication skills.
- ECE 290 Family Child Care Practicum (1-10)** 3 crs.  
Emphasizes the practical application of early childhood education principles and theories in a Family Child Care setting. The student will be supervised by a qualified Family Child Care Provider for 50 documented hours.  
**Prerequisite:** ECE 140 with a grade of C or better and consent of coordinator.
- ECE 291 Early Childhood Practicum I (1-10)** 3 crs.  
Emphasizes the practical application of principles and theories in early childhood education within a supervised setting, while working with young children. The student will be supervised by a qualified professional for 160 documented hours at an approved site and attend weekly seminars. (NOTE: The program's health requirements, background check and CPR Basic Rescuer certification must be completed prior to placement in practicum).  
**Prerequisite:** ECE 101, ECE 102, ECE 115, ECE 209, ECE 226 and ENG 101 with grades of C or better, or consent of instructor.
- ECE 292 Early Childhood Practicum II (1-10)** 3 crs.  
Emphasizes the practical application of early childhood education principles and theories in a supervisory capacity, while working with young children aged 0-3 years. The student will be supervised by a qualified professional for 160 documented hours at an approved site and attend a weekly seminar (NOTE: The program's health requirements, background check and CPR Basic Rescuer certification must be completed prior to placement in practicum).  
**Prerequisite:** ECE 111 and ECE 291 with grades of C or better, and consent of instructor.
- ECE 293 Early Childhood Director Practicum (1-10)** 3 crs.  
Emphasizes the practical application of early childhood education principles and theories in a supervisory capacity, while working with a director, staff, parents, and young children. The student will be supervised by a qualified director for 300 documented hours as mandated by the State of Illinois Director Credentials.  
**Prerequisite:** ECE 253, MGT 160 and MKT 245 AND consent of coordinator.

**ECO Economics****ECO 115 Consumer Economics (3-0) 3 crs.**

Introduces the concepts of personal financial planning within the current economic environment. Emphasizes topics such as basic macroeconomic theory, obtaining credit, purchasing insurance, investment alternatives, basic real estate finance and tax planning.

**ECO 200 Introduction to Economics (3-0) 3 crs.**

Covers descriptive rather than a quantitative approach to the study of economics. Major topics cover economic history, the elements of macroeconomics, microeconomics and a comparative look at other economic systems. Specifically designed for students in career-vocational curricula. IAI S3 900

**ECO 210 Money and Banking (3-0) 3 crs.**

Stresses the practical aspects of money and banking, and emphasizes the basic monetary theory needed by the banking student to apply his knowledge to his particular job. Historical treatment has been kept to a minimum. Emphasis is placed on such problems as economic stabilization, types of spending, the role of gold, limitations of central bank control, governmental fiscal policy, balance of payments and foreign exchange, showing their repercussions on the banking industry in affective yield curves and the structuring of portfolios.

**Prerequisite:** ECO 200 or ECO 212 with a grade of C or better.

**ECO 211 Microeconomics (3-0) 3 crs.**

Covers economic problems faced by the individual and the firm. Examination of market structures, price and output determination. The microeconomic approach. IAI S3 902

**ECO 212 Macroeconomics (3-0) 3 crs.**

Covers economic problems faced by our society. Examination of resource allocation, national income and economic development, from a macroeconomic approach. IAI S3 901

**EDU Education****EDU 201 Introduction to Education (3-0) 3 crs.**

Provides an introduction to teaching as a profession in the American education system. Offers a variety of perspectives on education including historical, philosophical, social, legal, and ethical issues in a diverse society. Includes organizational structure and school governance. There is a mandatory 15 hour clinical component in this course; therefore, the student must pass a criminal background check for successful completion of this course.

**EDU 202 Pre-Student Teaching Clinical Experience (0-2) 1 cr.**

Provides an in-depth study of classroom practices in the subject and age category that each student is training to teach. Students will complete the clinical component of this course by observing classrooms in their area of interest and will attend a seminar once weekly to discuss their experience; therefore, the student must pass a criminal background check for successful completion of this course.

**EDU 211 Educational Psychology (3-0) 3 crs.**

Examines psychological principles underlying educational practice. Theories concerning cognitive and psychological development, human learning, and motivation are studied with emphasis on application for instruction, including assessment. Emphasis will also be placed on learner-centered instruction and diversity. There is a clinical component in this course, therefore; the student must pass a criminal background check for successful completion of this course.

**Prerequisite:** PSY 101 or consent of instructor.

**EDU 219 Students With Disabilities in School (3-0) 3 crs.**

Presents the historical, philosophical and legal foundations of special education as well as an overview of the diverse characteristics of individuals with exceptional cognitive, physical, social and emotional needs, including, but not limited to, children identified as learning disabled. Covers identification, intervention strategies, cross-categorical methods of instruction and programs to meet their needs, including, but not limited to, assistive technologies, Positive Behavioral Interventions and Supports (PBIS), behavioral interventions, and Universal Design. Studies applicable state and federal laws and requirements, including Individuals with Disabilities Education Act (IDEA), American with Disabilities Act (ADA), Individualized Family Service Plan (IFSP), Individual Education Plan (IEP), Response to Intervention (RTI) and inclusive programming. This course addresses the coursework identified in the Illinois Administrative Code 25, Section 25:25 for professional educator licensure. There is a mandatory fifteen (15) hour clinical component in this course; therefore, the student must pass a criminal background check for successful completion of this course. (IAI ECE 913 Effective Fall 2017)

**EDU 220 Diversity in Schools and Society (3-0) 3 crs.**

Provides an introduction to diversity issues in schools and society today. Examines how schooling is shaped by the social contexts in which it occurs, particularly in multicultural and global contexts. Includes examination of both social and global perspectives.

**EDU 230 Introduction to Language Arts in Elementary/Middle School Teaching (3-0) 3 crs.**

Examines the foundations of effective practices in supporting student progress toward both fluent and strategic reading and writing. Provides an introduction to the theory and practices of language arts education for students who are interested in becoming teachers. Focuses on construction of meaning from print, the relationship between reading and writing, and the principles of classroom assessment. Provides an introduction to the Illinois Learning Standards for English Language Arts.

**EDU 250 Introduction to Technology in Education (2-2) 3 crs.**

Introduces educators to the knowledge and skills required to demonstrate their proficiency in the current technology standards. The course focuses on both knowledge and performance, and includes hands-on technology activities.

**Prerequisite:** Keyboarding, basic skill word processing, spreadsheet, and database programs, or consent of instructor.

**EDU 290 Topics in Education (0.5-0 to 3-0) 0.5-3 crs.**

Studies selected problems or topics in education. The exact content and instructional method will vary from semester to semester. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated up to a maximum of three credit hours.

**EDU 999 Preparing for the TAP (1-3) 1-3 crs.**

Prepares prospective teachers to take and pass the Test of Academic Proficiency (TAP) by refreshing and/or improving skills and abilities in reading, language arts, writing and mathematics. NOTE: Students must have basic computer skills prior to enrolling in this course. This course may be repeated three times.

**EGR Engineering****EGR 100 Introduction to Engineering (1-1) 1 cr.**

Introduces engineering techniques, methods and history. Explores career options and requirements for various engineering fields. Covers interrelationships within and between engineering, technology and science to allow differentiation between various career choices.

**EGR 110 Introduction to Electrical and Computer Engineering (3-3) 4 crs.**

Provides an integrated introduction to selected fundamental concepts and principles in electrical and computer engineering including circuits, electromagnetics, communications, electronics, controls, and computing. Laboratory experiments focus on practical applications which will be applied to a design project.

**Prerequisite:** MTH 200 or higher with a grade of C or better or concurrent enrollment.

**EGR 120 Engineering Graphics I (CAD) (2-5) 4 crs.**

Introduces engineering graphics and design. Includes drafting, dimensioning, tolerancing, fasteners, and descriptive geometry. Engineering graphics topics include multi-view orthographic representations, principal auxiliary views, section views and production drawings. Laboratory work is supported by three-dimensional CAD utilizing solid modeling techniques. IAI EGR 941

**Prerequisite:** MTH 070 (or equivalent) with a grade of C or better or Geometry placement test, or consent of instructor.

**EGR 121 Engineering Graphics II (CAD) (1-5) 3 crs.**

Covers the analysis of common geometric entities emphasizing planes, surfaces and geometric features contained in typical engineered products. Includes intersections and developments, surface modeling, solid modeling including both features and assemblies, and three-dimensional annotation techniques. Laboratory is supported by commercial CAD software utilizing solid modeling and surfacing techniques.

**Prerequisite:** EGR 120 with a grade of C or better, or consent of instructor.

**EGR 210 Analytical Mechanics - Statics (3-1) 3 crs.**

Emphasizes analysis of force systems using vectors. Topics include particle statics, general principles and force vectors, rigid body equilibrium, moments of inertia, distributed forces and centroids, analysis of structures, virtual work and friction. IAI EGR 942

**Prerequisite:** MTH 200 and PHY 201 with grades of C or better.

**EGR 211 Analytical Mechanics - Dynamics (3-1) 3 crs.**

Emphasizes dynamic analysis of rigid bodies. Topics include particle kinematics (rectilinear and curvilinear), Newton's laws, energy, work, and momentum methods, planar dynamics and rigid bodies, rigid body kinematics, impulse and momentum, and vibrations. IAI EGR 943

**Prerequisite:** EGR 210 and PHY 201 with grades of C or better.

**EGR 212 Mechanics of Solids (3-1) 3 crs.**

Covers elastic and inelastic relationships involving deformable bodies. Topics include concepts of stress and strain, material properties (elastic and plastic), torsion, shear stresses and deformations, thermal stresses, thin-walled pressure vessels, pure bending, stresses and strains, transverse loading of beams, shear stress and combined loadings, transformation of stress and strain (Mohr's Circle), design of beams and shafts for strength, shear and moment diagrams, deflection of beams, energy methods, and columns. IAI EGR 945

**Prerequisite:** EGR 210 with a grade of C or better.

**EGR 240 Thermodynamics (3-0) 3 crs.**

Introduces classical thermodynamics. Topics include basic concepts and definitions, the zeroth law of thermodynamics, the first and second laws of thermodynamics, ideal and real gas behaviors, control-volume energy analysis, entropy, non-reactive ideal gas mixtures and psychrometrics and cycles.

**Prerequisite:** MTH 202 and PHY 202 with grades of C or better.

**EGR 260 Introduction to Circuit Analysis (4-0) 4 crs.**

Introduces analysis of electric circuits, electrical components, and networks. Topics include concepts of electricity and magnetism, circuit variables (units, voltage, inductance, power and energy), circuit elements (R, L, C and operational amplifiers), simple resistive circuits, circuit analysis (node-voltage, mesh-current, equivalents, and superposition), transient analysis, and sinusoidal steady state (analysis and power). IAI EGR 931L

**Prerequisite:** MTH 202 (Calculus with Analytic Geometry III) and PHY 202 (General Physics II-Electricity/Magnetism) with a grade of C or better.

**EGR 262 Electrical Circuits Laboratory (1-2) 2 crs.**

Introduces standard electrical instruments and measurement techniques. Includes practical applications to topics of EGR 260. Covers circuit response, elementary filter response and resonance measurements. Includes basic measurements of transistors and operational amplifiers. IAI EGR 931L

**Prerequisite:** EGR 260 (Introduction to Circuit Analysis) with a grade of C or better or concurrent enrollment.

**EGR 270 Introduction to Digital Systems (3-2) 4 crs.**

Introduces computer engineering. Topics include representation of information, binary systems, Boolean algebra, switching circuits, combinational switching circuits, and sequential switching circuits, macro-circuits and wired and stored program processor concepts. IAI EGR 932L

**Prerequisite:** PHY 202 with a grade of C or better.

**ELA English Literacy Acquisition****ELA 001 English Literacy Acquisition I (1-0 to 6-0) 1-6 crs.**

Develops English conversation and literacy skills for Adult Education NRS (National Reporting System) Beginning ESL Literacy Learners. Develops the listening, speaking, reading, and writing skills necessary for basic survival needs. Develops critical thinking by recalling facts and terms. Topics may include social skills/American culture, health, housing, civics, goal-setting, employment skills, math and consumer skills, and technology. Grammar points are integrated as appropriate. Focuses on vocabulary acquisition and beginning listening and receptive literacy skills. This course is the first in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 002 English Literacy Acquisition II (1-0 to 6-0) 1-6 crs.**

Further develops English conversation and literacy skills for Adult Education NRS (National Reporting System), Beginning ESL Literacy and Low-Beginning ESL Learners. Develops the listening, speaking, reading and writing skills necessary for basic survival needs. Develops critical thinking by recalling facts, terms and basic concepts. Topics may include social skills/American culture, health, housing, civics, goal-setting, employment skills, math and consumer skills, and technology. Grammar points are integrated as appropriate. Focuses on vocabulary acquisition and beginning listening and productive literacy skills. This course is the second in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 003 English Literacy Acquisition III (1-0 to 6-0) 1-6 crs.**

Develops English conversation and literacy skills for Adult Education NRS (National Reporting System), Low-Beginning ESL Learners. Develops the listening, speaking, reading and writing skills necessary for survival needs. Develops critical literacy skills by recalling and organizing facts and basic concepts. Topics may include personal data, social skills/American culture, health, housing, civics, goal setting, employment skills, math and consumer skills, and technology. Grammar points are integrated as appropriate. Focuses on basic vocabulary acquisition and literacy skills in daily routine situations. This course is the third in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 004 English Literacy Acquisition IV (1-0 to 6-0) 1-6 crs.**

Further develops English conversation and literacy skills for Adult Education NRS (National Reporting System), High-Beginning ESL Learners. Develops the listening, speaking, reading and writing skills necessary for survival needs. Develops critical literacy skills by recalling, organizing and comparing facts and basic concepts. Topics may include personal data, social skills/American culture, health, housing, civics, goal setting, employment skills, math and consumer skills, and technology. Grammar points are integrated as appropriate. Focuses on using basic vocabulary and literacy skills in daily routine situations. This course is the fourth in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 005 English Literacy Acquisition V (1-0 to 6-0) 1-6 crs.**

Develops English conversation and literacy skills for Adult Education NRS (National Reporting System), Low-Intermediate ESL Learners. Develops the listening, speaking, reading and writing skills necessary for life and work. Develops critical thinking by organizing, comparing, and interpreting facts. Topics may include social skills/American culture, health, housing, civics, goal-setting, employment skills, math and consumer skills, and technology. Grammar points are integrated as appropriate. This course is the fifth in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 006 English Literacy Acquisition VI (1-0 to 6-0) 1-6 crs.**

Further develops English conversation and literacy skills for Adult Education NRS (National Reporting System), Low-Intermediate ESL Learners. Develops the listening, speaking, reading and writing skills necessary for life and work. Develops critical thinking by organizing, comparing, and interpreting facts, giving descriptions, and stating main ideas. Topics may include social skills/American culture, health, housing, civics, goal-setting, employment skills, math and consumer skills, and technology. Grammar points are integrated as appropriate. This course is the sixth in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 007 English Literacy Acquisition VII (1-0 to 6-0) 1-6 crs.**

Develops English conversation and literacy skills for Adult Education NRS (National Reporting System) High-Intermediate ESL Learners. Develops the listening, speaking, reading and writing skills necessary for civic involvement, employment and pre-academic preparation. Introduces pre-academic reading, writing, technology, math and study skills in preparation for academic ESL or the workforce. Develops critical thinking skills by solving problems in new situations by applying acquired knowledge, facts, techniques and rules in a new way. Topics may include social skills/American culture, health, civics, housing, consumer skills/financial literacy, employment, transportation, education/U.S. school system, and science and technology. Grammar points are integrated as appropriate. This course is the seventh in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 008 English Literacy Acquisition VIII (1-0 to 6-0) 1-6 crs.**

Further develops English conversation and literacy skills for Adult Education NRS (National Reporting System) High-Intermediate ESL Learners. Develops the listening, speaking, reading and writing skills necessary for civic involvement, employment and pre-academic preparation. Introduces pre-academic reading, writing, technology, math and study skills in preparation for academic ESL or the workforce. Develops critical thinking skills by solving problems in new situations by applying acquired knowledge, facts, techniques and rules in a new way. Topics may include social skills/American culture, health, civics, housing, consumer skills/financial literacy, employment, transportation, education/U.S. school system, and science and technology. Grammar points are integrated as appropriate. This course is the eighth in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 009 Transition to HSE/Postsec Training I (1-0 to 6-0) 1-6 crs.**

Develops English conversation and literacy skills for Adult Education NRS (National Reporting System) Advanced ESL Learners. Develops the listening, speaking, reading and writing skills necessary to prepare students for High School Equivalency (HSE) Preparation, Academic ESL, the workplace and career programs. Develops academic reading, writing, technology and math skills. Focuses on study skills, test-taking and other pre-academic skills necessary for college success. Develops critical thinking skills by analyzing, making inferences and finding evidence to support generalizations. Topics may include life skills, employment, current events, civics, U.S. History and government, geography, science and technology and literature. Grammar points are integrated as appropriate. This is the ninth in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELA 010 Transition to HSE/Postsec Training 2 (1-0 to 6-0) 1-6 crs.**

Further develops English conversation and literacy skills for Adult Education NRS (National Reporting System) Advanced ESL Learners. Further develops the listening, speaking, reading and writing skills necessary to prepare students for High School Equivalency (HSE) Preparation, Academic ESL, the workplace and career programs. Develops academic reading, writing, technology and math skills. Focuses on study skills, test-taking and other pre-academic skills necessary for college success. Develops critical thinking skills by analyzing, making inferences and finding evidence to support generalizations. Topics may include life skills, employment, current events, civics, U.S. history and government, geography, science and technology, and literature. Grammar points are integrated as appropriate. This is the last in a sequence of ten courses. It is for students of English who have limited native language literacy skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**ELT Electronics Engineering Technology****ELT 101 DC Network Analysis (3-3) 4 crs.**

Studies direct current (DC) resistive networks. Definitions, symbols and notations for electrical quantities are taught. Circuit properties and their applications to significant circuit configurations are examined. High school algebra is recommended.

**ELT 102 AC Network Analysis (3-3) 4 crs.**

Examines steady state alternating current (AC), resistor-capacitor (RC) and resistor-inductor (RL) circuits. Also examines RC and RL single time constant circuits. Single phase and polyphase AC networks are also studied.

**Prerequisite:** ELT 101 and MTH 103 with grades of C or better, or consent of instructor.

**ELT 103 RF Network Analysis (3-3) 4 crs.**

Examines basic radio frequency (RF) networks, series and parallel resonance, filters, selectivity and bandwidth, and impedance matching.

**Prerequisite:** ELT 102 with a grade of C or better, or consent of instructor.

**ELT 110 Introductory Electronics (3-3) 4 crs.**

Introduces fundamentals of electricity and magnetism. Covers basic electrical laws and principles. Presents electrical quantities, units, symbols and notation. Examines foundational electronic materials and components. Presents elementary DC (direct current) and AC (alternating current) network analysis, key semiconductor devices, and simple analog and digital circuits. Also covers electrical safety considerations, laboratory instrumentation and test and measurement techniques.

**ELT 111 Semiconductor Devices and Circuits (1-2) 2 crs.**

Examines basic semiconductor component families and characteristics. Fundamentals of proper circuit operation and typical applications are further examined.

**Prerequisite:** ELT 110 with a grade of C or better, or consent of instructor.

**ELT 120 Introductory Industrial Electronics Maintenance (1-2) 2 crs.**

Introduces students to the fundamentals of industrial electronics maintenance. Provides an overview of the various technologies encountered in the field as they relate to industrial electronic control of buildings and facilities. This includes basic electrical and electromechanical components and machinery, motors and controls, electrical and electronic interfaces, and electronic controllers. Also covers fluid power and piping systems. Emphasis is placed on safety, installation and preventative maintenance. Use of tools, test instrumentation and the importance of record keeping will be discussed.

**ELT 125 Fiber Optics (1-2) 2 crs.**

Investigates optics for the purpose of working with communications, control and measurement systems. Principles of physical and geometric optics are presented.

**ELT 135 Optics and Sensors (1-2) 2 crs.**

Investigates sensor operation and application for a variety of functions: tactile, photo, fiber-optic, magnetic, thermal, sonic, pressure and vision systems.

**ELT 140 Programmable Logic Controllers (1-2) 2 crs.**

Examines the procedures and mechanisms by which programmable logic controller functions are used. Programming in ladder logic and controller code focuses on the direct application of a variety of input and output devices. Hardware, programming, peripherals and accessories are emphasized.

**ELT 142 Electrical Wiring (1-2) 2 crs.**

Introduces students to wiring topics as they relate to the residential electrical service. A safety review followed by terminology, principles, and test and measurement equipment use associated with residential alternating current (AC) power are examined. Emphasis is placed on the practical application, operation, installation and maintenance of low voltage control systems and single-phase AC power equipment and systems. Select portions of the National Electric Code are studied.

**ELT 143 Advanced Electrical Wiring (1-2) 2 crs.**

Introduces students to advanced wiring topics as they relate to the commercial electrical service. A safety review followed by terminology, principles, and test and measurement equipment use associated with commercial alternating current (AC) power are examined. Emphasis is placed on the practical application, operation, installation and maintenance of low voltage control systems and single and three-phase AC power equipment and systems. Select portions of the National Electric Code are studied.

**ELT 144 AC and DC Motors (1-2) 2 crs.**

Introduces students to fractional horsepower motors for residential and commercial applications. A safety review followed by terminology, principles, and test and measurement equipment use associated with motors and motor controls are examined. Emphasis is placed on the practical application, operation, installation and maintenance of direct current (DC) motors and controls, and single three-phase alternating current (AC) motors and controls.

**ELT 145 Variable Frequency Drives (1-2) 2 crs.**

Introduces students to variable frequency drives (VFDs) as they pertain to residential and commercial motor control applications. A safety review followed by terminology, principles, test and measurement equipment use associated with VFDs and typical applications are examined. Emphasis is placed on the practical application, operation, installation and maintenance of VFDs.

**ELT 146 Industrial Motor Controls (1-2) 2 crs.**

Introduces students to industrial motor controls. Reviews solid state (or semiconductor) types and operation. Examines industrial solid state devices, motor starters and pilot devices, control circuitry for direct current (DC) and alternating current (AC) motors, motor drives, and solid state motor controllers. A safety review followed by terminology, principles, and test instrumentation use associated with these topics is also discussed. Emphasis is placed on practical application, operation, installation and maintenance.

**Prerequisite:** ELT 110 with a grade of C or better, or consent of instructor.

**ELT 147 Radio Frequency ID Systems (1-2) 2 crs.**  
 Introduces students to Radio Frequency Identification (RFID) Systems. Topics include an overview of RFID systems and hardware, system lifecycles, frequency ranges, antennas, tags, interrogators, regulations and standards, and typical applications. Terminology, principles, and test and measurement equipment use associated with RFID systems are examined. Emphasis is placed on practical application, operation, installation and maintenance.

**ELT 150 Solar Power Generation Systems (1-2) 2 crs.**  
 Introduces students to solar power generation systems as they pertain to industrial, commercial and residential applications. Includes an overview of solar-to-electrical energy conversion, solar panels and collectors, energy storage, power supply and inverter operation, energy management and control, electrical interface regulations and standards and typical applications. Examines terminology, principles, and test and measurement equipment use associated with solar power. Emphasizes practical application, operation, installation and maintenance.

**ELT 151 Wind Power Generation Systems (1-2) 2 crs.**  
 Introduces students to wind power generation systems as they pertain to industrial, commercial and residential applications. Includes an overview of wind-to-electrical energy conversion, turbines and gear boxes, energy storage, power supply and inverter operation, energy management and control, electrical interface regulations and standards and typical applications. Examines terminology, principles, and test and measurement equipment use associated with wind power. Emphasizes practical application, operation, installation and maintenance.

**ELT 161 Industrial Control Applications (2-4) 4 crs.**  
 Emphasizes an application with a project focus as the goal. This course is self-paced. The student is responsible for planning, organizing and assembling a project that integrates many of the following: computer, pneumatics, hydraulics, programmable logic controllers (PLCs), sensors, motion and data acquisition.

**ELT 203 Digital Electronics (3-3) 4 crs.**  
 Examines digital logic circuitry from the underlying structure of Field Effect Transistors (FETs) through how these devices are built into complex integrated circuits (ICs). Includes combinational and sequential logic circuits, binary and hexadecimal number systems, error detection and correction, Boolean algebra, Karnaugh maps, counters, state machines, semiconductor memories, and programmable devices with special emphasis on microcontrollers.  
**Prerequisite:** ELT 110 with a grade of C or better.

**ELT 204 Analog Electronics (3-3) 4 crs.**  
 Examines electronic circuits using diodes, transistors and operational amplifiers. Applies linear equivalent circuits as an analysis tool. Studies amplifiers, feedback principles, and operational amplifier configurations as practical applications of the linear analysis techniques.  
**Prerequisite:** ELT 111 with a grade of C or better, or consent of instructor.

**ELT 207 Communications Systems (3-3) 4 crs.**  
 Introduces students to communications systems. The historical, technical and commercialization aspects of key technologies and inventions from the onset of early communications equipment to contemporary telecommunications systems are discussed. Covers systems, equipment, and radiating systems and radiation. Topical areas in these segments include wireline and wireless systems, modulation and demodulation, receivers, transmitters and transceivers, transmission lines, antennas, matching networks and wave propagation. Emphasizes system applications, operation and analysis.  
**Prerequisite:** ELT 110 with a grade of C or better, or consent of instructor.

**ELT 208 Advanced Communications Systems (3-3) 4 crs.**  
 Focuses on the equipment aspects of wireless communications systems. Covers receiving and transmitting equipment, and radiating systems. Topical areas in these segments include super heterodyne receivers, transmitters and transceivers, analog vs. digital platforms, and software defined radios. Radiating systems involving transmission lines, antennas, matching networks and tower structures are also covered. Emphasizes equipment applications, operation and analysis.  
**Prerequisite:** ELT 207 with a grade of C or better, or consent of instructor.

**ELT 215 Industrial Control Systems (3-3) 4 crs.**  
 Introduces students to industrial control systems. Covers fluid power fundamentals, and pneumatic and hydraulic circuit theory. Examines the integration of optics, sensors, and various electronic control systems including programmable logic controller (PLC) and personal computer (PC) controllers. Infrared (IR) emitters and detectors, and laser systems are also examined. Introduces the application and control of automated robotic systems. The course culminates with a capstone team project involving the development, design, construction, presentation and ultimate demonstration of a fully operational automated industrial control system.  
**Prerequisite:** ELT 110 or RAC 105 with a grade of C or better, or consent of instructor.

**ELT 218 Embedded Microcontroller/Processor Systems (3-3) 4 crs.**  
 Examines the basics of microcontroller/microprocessor systems. Includes digital and analog input/output (I/O), serial buses, memories/caches, and interfacing to peripherals including sensors, displays, servos and motors. An example of such a system is Arduino hardware and the writing of Arduino C code that are covered in detail.  
**Prerequisite:** ELT 203 with a grade of C or better, or consent of instructor.

**ELT 281 Topics in Electronics Engineering Technology (1-0 to 4-0) 1-4 crs.**  
 Examines selected problems or topics in electronics engineering technology. The specific course content and instructional methodology will vary from semester to semester depending on the material presented. A syllabus containing specific topics will be available with pre-registration materials each time the course is offered. This course may be repeated to a maximum of four credit hours.  
**Prerequisite:** Consent of instructor.

**EMG Emergency and Disaster Management**

**EMG 101 Introduction to Emergency Management (3-0) 3 crs.**  
 Provides a foundation overview of emergency management. Students will examine the need for emergency management, processes and elements involved in disaster mitigation, preparedness, response and recovery.

**EMG 103 Leadership, Influence, Decision Making and Problem Solving (3-0) 3 crs.**  
 Presents differences in personal values and interpersonal influence styles, and to apply situational leadership behaviors in emergency management. The course content reinforces existing management skills required for building an emergency management system.

**EMG 107 Incident Management Systems (3-0) 3 crs.**  
 Introduces students to the Emergency Management System and elements involved which include incident command, unified command, and incident action planning. Emergency management systems which will be examined will include the Incident Command System (ICS) and the National Incident Management System (NIMS). Managing post incident critiques and evaluations also will be explored.



**EMG 131 Public Safety Dispatcher I (3-0) 3 crs.**

Introduces students to the field of emergency services dispatching and provides an overview of its components and responsibilities. As such, it will provide the foundation for statewide competency as a public safety telecommunicator as outlined by the Illinois Law Enforcement Training and Standards Board (ILETSB) in its Public Safety Telecommunicator Training and Standards document, Basic Level Training Curriculum (September 1996).

**EMG 150 Public Information, Education and Community Relations (3-0) 3 crs.**

Provides students with the necessary skills and knowledge in public information, education, community relations, communications and involved elements including writing, public speaking, and understanding the media. The course content will also introduce concepts of volunteer program utilization and maintenance.

**EMG 151 Emergency Management Policy and Planning (3-0) 3 crs.**

Provides students with the skills to develop plans and policy as an Emergency Management Specialist. Examines the concepts of writing an emergency operations plan and the elements necessary for inclusion in the plan (all-risk hazard planning).

**Prerequisite:** EMG 103 with a grade of C or better.

**EMG 153 Hazard Analysis and Mitigation (3-0) 3 crs.**

Introduces students to various means of hazard analysis used to prioritize response activities, allocate resources, and specifically request other resources to save and sustain lives. Students will examine the need for mitigation programs and discuss the appropriate methods to implement various mitigation programs.

**Prerequisite:** EMG 101 with a grade of C or better.

**EMG 155 Social Dimensions of Disaster (3-0) 3 crs.**

Introduces students to the various aspects of sociology and recovery from disasters. Topics will include aspects of a disaster such as behavioral and organizational responses to disasters as well as the impact of the media. Students will study the concept of building a disaster-resistant community. This course will also cover topics related to terrorism such as a terrorist sociological analysis, the dimension of terrorism.

**Prerequisite:** EMG 101 with a grade of C or better.

**EMG 201 International Disaster Management (3-0) 3 crs.**

Examines globally how disasters are on the increase, impacting communities and nations with grave social and economic consequences. Studies the international response to disasters which is convoluted, at times chaotic, and always complex. Students will learn about shifting socio-economic situations, unplanned urbanization, environmental degradation, climate variability and change, geological hazards, and the struggle for scarce natural resources. Because disasters increasingly impact the global economy and the sustainable development of developing countries, the student will learn how to apply international emergency disaster management.

**Prerequisite:** EMG 101 with a grade of C or better.

**EMG 205 Crisis Exercise Design and Evaluation (3-0) 3 crs.**

Introduces students to different aspects of crisis exercise design and evaluation. Students will identify specific needs to adhere to federal or state directives pertaining to required exercises, to utilize proper training strategies and to identify performance gaps. The course will include exercise design and group dynamics, conducting an exercise, analyzing the results, conducting a critique and implementation of corrective actions and recommendations.

**Prerequisite:** EMG 151 and EMG 153 with grades of C or better.

**EMG 231 Public Safety Dispatcher II (3-0) 3 crs.**

Builds upon the foundation laid through EMG 131 and provides students with specific knowledge required to professionally handle emergency as well as non-emergency calls for service in the public safety environment. At the conclusion of this course, students will possess a basic understanding of the role, responsibility and equipment utilized by telecommunicators to accomplish their mission.

**Prerequisite:** EMG 131 with a grade of C or better.

**EMG 251 Select Problems in Emergency Management (3-0) 3 crs.**

Exposes students to various aspects of select problems in emergency management including environmental, funding and political issues. Students will learn about local governments and jurisdictions, the political process, support agencies, crisis management for business and industry and contingency planning. This course will also address long-term incidents and professional development.

**Prerequisite:** EMG 101 with a grade of C or better.

**EMG 253 Ideologies of Terrorism (3-0) 3 crs.**

Examines the various analytical approaches to the study of terrorism. Students will be exposed to the ideologies and composition of known terrorist groups, review terrorist tactics and examine police and governmental responses to reduce or eliminate the incidence of terrorism.

**EMG 299 Emergency Management Systems Practicum (0-5) 1 cr.**

Provides practical emergency management experience in a supervised professional setting focused on the integration of theory and practice. Actual experience in various phases of emergency management will be provided through mutually agreed upon cooperative projects with government and industry.

**Prerequisite:** Prior or concurrent enrollment in EMG 205, EMG 251 and EMG 253 with grades of C or better.

**EMS Emergency Medical Services****EMS 110 Emergency Medical Technician Training (7-4) 9 crs.**

Provides entry-level emergency medical care knowledge and skills associated with the delivery of Basic Life Support (BLS). Content is derived from the National EMS Education Standards and specific enabling objectives are listed on the cover of each presentation's handout. This course has been approved by the Illinois Department of Public Health (IDPH) Division of EMS and Highway Safety. Upon successful completion of this course with a grade of 80% or better, students can sit for the National Registry of Emergency Medical Technicians (NREMT) exam. NOTE: Please visit harpercollege.edu to complete a permit to register.

**Prerequisite:** You must be at least 18 years old and have a high school diploma or GED to register for this course. A minimum GPA of 2.0 is needed for enrolled/previously enrolled Harper students.

**EMS 210 Paramedic Preparatory (9-3) 10 crs.**

Designed to expand upon entry-level knowledge and skills acquired in an Emergency Medical Technician (EMT), Advanced Emergency Medical Technician (AEMT), or Emergency Medical Technician Intermediate (EMT-I) course. EMS 210 provides the foundations of paramedic (PM) practice upon which all other instruction is based and must be passed to continue in the program. Content and objectives are mapped to the National EMS Education Standards.

**Prerequisite:** (1) Unencumbered Emergency Medical Technician (EMT), Advanced EMT (AEMT), or EMT-Intermediate (EMT-I) license with practice privileges in Illinois and admission into the Emergency Medical Services degree program or the Paramedic Certificate program; (2) valid and current CPR for Healthcare Providers card; and (3) field internship acceptance by a NWC EMS Agency.

**EMS 211 Paramedic Medical Emergencies I (5-1) 5 crs.**

Provides comprehensive coverage of acute and chronic respiratory disorders, acute and chronic cardiovascular disorders, cardiac arrest management, and electrocardiography (ECG) interpretation. This course must be passed to continue in the program. Content and objectives are mapped to the National Emergency Medical Services (EMS) Education Standards.

**Prerequisite:** EMS 210 with a grade of C or better.

**Corequisite:** EMS 214.

**EMS 212 Paramedic Medical Emergencies II (7-1) 7 crs.**

Presents a wide scope of obstetrics (OB), pediatric, geriatric and medical emergencies. This course must be passed to continue in the program. Content and objectives are mapped to the National Emergency Medical Services (EMS) Education Standards.

**Prerequisite:** EMS 211 with a grade of C or better.

**EMS 213 Paramedic Trauma/Special Populations/EMS Operations (6-1) 6 crs.**

Presents a wide scope of trauma emergencies, special patient populations, and those with physical challenges. Concludes with field experts presenting the EMS response to multiple patient incidents and the incident management system, hazardous materials awareness, active shooter incidents/weapon safety, and ambulance operations. This course must be passed to continue in the program. Content and objectives are mapped to the National EMS Education Standards.

**Prerequisite:** EMS 212 with a grade of C or better.

**Corequisite:** EMS 214.

**EMS 214 Paramedic: Hospital Internship (0-15) 3 crs.**

Provides a minimum of 200 clinical hours in a variety of experiences and situations as specified by the EMS Medical Director and endorsed by the Advisory Committee. Each student shall have access to adequate numbers of patients, proportionally distributed by illness, injury, gender, age, and common problems encountered in the delivery of emergency care. While in the clinical units, students apply instructional theory into practice to deliver safe, entry-level EMS care in a controlled environment under the direct supervision of a unit-assigned preceptor. Rotations include the following areas: adult and pediatric emergency departments, critical care units, labor and delivery, operating room, mental health unit, skilled nursing facility or elder care environment, and one elective.

**Prerequisite:** EMS 210 with a grade of C or better, successful completion of health screening, immunization requirements, background check, and purchase of FIDAP software license.

**EMS 215 Paramedic: Field Internship (0-20) 4 crs.**

Integrates the theoretical concepts and practical skills acquired during EMS 210, EMS 211, EMS 212, EMS 213 and EMS 214. Requires students to use higher order thinking and critical reasoning to safely care for patients in the out of hospital environment under the direct supervision of an approved paramedic preceptor. The internship is divided into two phases of ascending mastery and accountability with each having a minimum number of patient care contacts and competencies. A full description of the objectives and expectations is contained in the NWC Paramedic Student Handbook and on the internship forms. (NOTE: This course has an additional fee of \$1500 to cover the cost of field preceptors.)

**Prerequisite:** EMS 213 with a grade of C or better and EMS 214 with a grade of P.

**EMS 216 Paramedic Seminar (3-0) 3 crs.**

Provides weekly seminars during the last half of the Field Internship offering an opportunity for intellectual engagement and allows students to integrate and apply didactic concepts presented during the course to actual EMS practice. It concludes with the comprehensive summative final written and practical exams. During the first four weeks, each class is offered twice (Wednesday and Thursday) from 9:00 am to 5:00 pm. Students may select the day they attend after consultation with the Provider Agency with which they are completing the Field Internship. The last week is back to full time and students must attend each day. Students must be prepared to present cases based on a disease or trauma diagnosis identified in advance by the instructor.

**Prerequisite:** EMS 213 with a grade of C or better and EMS 214 with a grade of P.

**ENG English**

**ENG 001 Read, Write and Think Critically (3-2) 4 crs.**

Prepares students for the rigors of college by developing the skills necessary for analyzing and synthesizing information. In this writing intensive course, students will read, analyze, discuss and critically respond to fiction and non-fiction prose. Activities include analytical writing, composition of paragraphs and essays, active reading, annotation, group learning, and grammar instruction. Carries no transfer credit. NOTE: This course is intended for students who place into ENG 098 and/or RDG 090.

**Prerequisite:** Required placement exam scores for ENG 098 and/or RDG 090.

**ENG 080 Writing Skills I-Deaf/Hard-of-Hearing (4-0) 4 crs.**

Introduces grammar consistent with deaf and hard-of-hearing students' distinct learning needs. Verb tense agreement, article and proposition usage, grammar in context and other problems common to deaf/hard-of-hearing students will be emphasized. Strategies to self-correct and fully develop sentence and paragraph structure will be central to this course. Practical applications of writing skills will be stressed through the use of vocational related materials. Carries no transfer credit.

**ENG 085 Writing Skills II-Deaf/Hard-of-Hearing (4-0) 4 crs.**

Continues the development of writing skills from ENG 080. Writing strategies and paragraph development will be emphasized. Grammar topics introduced in ENG 080 will be reviewed and more complex grammar introduced. American Sign Language (ASL) will be used in the classroom to improve the students' contextual and linguistic understanding. Practical applications of writing skills will be stressed. Carries no transfer credit.

**Prerequisite:** ENG 080 with a grade of C or better.

**ENG 098 Composition (3-0) 3 crs.**

Provides instruction in developing basic writing skills essential for effective written discourse by giving students the conceptual tools necessary for developing a basic framework for writing. Prepares students for entry into ENG 100. Carries no transfer credit

**Prerequisite:** English placement exam.

**Recommended Corequisite:** RDG 090.

**ENG 100 Composition (3-0) 3 crs.**

Develops skills in reading comprehension and in writing standard effective English through the study of language, grammar, sentence structure, and the paragraph and essay form. Activities include the analytical reading of paragraphs and short essays, the writing of paragraphs and essays, and practice with usage, diction, semantics, basic mechanics and sentencng. This course does not meet the General Education requirements for the A.A. and A.S. degrees.

**Prerequisite:** ENG 098 and either RDG 090 or RDG 099 with grades of C or better, or ENG 001 with a grade of C or better, or satisfactory scores in both English and Reading placement exams.

**ENG 101 Composition (3-0) 3 crs.**

Emphasizes the writing of expository prose. Introduction to the critical reading of nonfiction prose. IAI C1 900

**Prerequisite:** ENG 100 and RDG 099 with grades of C or better; an ACT English score of 19 or more and an ACT reading score of 20 or more; a 7- or 8-semester high school GPA of 3.0 on a 4-point scale or 4.0 on a 5-point scale; or an essay submitted through the Testing Center with a score of 4 or 5. ESL students need one of the following options: ESL 073 and ESL 074 with grades of B or better; ESL 073 and ESL 086 with grades of B or better; ESL 073 and ESL 099 with grades of B or better; ESL 073 with required writing placement test score; or ESL 074 with required reading placement test score.

**ENG 102 Composition (3-0) 3 crs.**

Continues ENG 101. Reading literature and writing of various types of prose. Introduces methods used in writing investigative papers. IAI C1 901R

**Prerequisite:** ENG 101 with a grade of C or better, or consent of instructor or department chair.

**ENG 103 Technical and Report Writing (3-0) 3 crs.**

Introduces the various types of writing and communication used in business and technology. Includes instructions, procedures, abstracts, proposals, visuals and reports.

**Prerequisite:** ENG 101 with a grade of C or better, or consent of instructor or department chair.

**ENG 130 Business Writing (3-0) 3 crs.**

Teaches formal and psychological aspects of business correspondence. Introduction to various kinds of business letters, memoranda and reports. Improvement of grammar, spelling and word usage.

**Prerequisite:** Satisfactory score on English placement test or ENG 100 with a grade of C or better.

**ENG 200 Professional Writing: Grammar and Style (3-0) 3 crs.**

Investigates the elements of English grammar, usage, and style important for effective academic and public writing, such as letters, essays, reports and proposals.

**Prerequisite:** ENG 101 with a grade of C or better, or consent of instructor or department chair.

**ENG 201 Advanced Composition (3-0) 3 crs.**

Teaches additional skills in critical reading and thinking, the forms of public expository and argumentative writing and the elements of an effective public writing style.

**Prerequisite:** ENG 102 with a grade of C or better, or consent of instructor.

**ENG 220 Creative Writing (3-0) 3 crs.**

Provides guided practice in various types of creative writing. Emphasizes skills common to creative expression, including description, plotting, narration, dialogue, and verse.

**Prerequisite:** ENG 102 with a grade of C or better, or consent of instructor.

**ENG 221 Writing Fiction (3-0) 3 crs.**

Explores the art and craft of fiction-writing in depth. Students will examine the writing process in terms of story form, structure, pacing, writing vividly, using varied sentence patterns, building characterization, creating appropriate settings in time and place, using various points of view, developing themes, exploiting style and various poetic devices in prose, and practicing the crucial step of revision. Students will participate in peer workshops.

**ENG 222 Writing Poetry (3-0) 3 crs.**

Provides language-interested students with practice in writing fixed-form poetry (English and Italian sonnets, villanelles, and more) and free-form poetry. Includes a detailed introduction to the rhythms of poetry in English, including stress patterns (iambic, trochee, anapest, etc.) and patterns of line length (trimeter, tetrameter, pentameter, etc.). Asks students to read diverse models of quality poetry in its various forms. Encourages each student through drafting and revision to develop a uniquely personal writing voice and style and to learn to express him/herself and evaluate the world at large--whether in tightly structured stanzas or in free-verse narratives--in genuinely imaginative ways.

**ENG 230 Topics in English (1-0 to 3-0) 1-3 crs.**

Examines selected eras or topics in the various fields of English and/or composition studies. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A topic-specific syllabus containing additional information will be available in the Liberal Arts Division Office with other pre-registration materials each time the course is offered. This course may be repeated to a maximum of 12 credit hours.

**ESL English as a Second Language****ESL 005 Topics in English as a Second Language/Low Intermediate (0.5-0 to 4-0) 0.5-4 crs.**

Focuses on academically oriented topics in English as a Second Language (ESL) at the low intermediate level. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with registration materials each time that the course is offered. This course may be repeated up to a maximum of four credit hours. Carries no transfer credit.

**Prerequisite:** ESL 020 or ESL 026 with a grade of C or better, OR required placement test scores.

**ESL 006 ESL: Guided Language Lab Instruction (0-2) 1 cr.**

Develops English language skills for beginning to advanced students of English as a Second Language. Following consultation with the instructor, students work independently in the language laboratory on the skills of their choice and at the recommended level of proficiency. The instructor provides further support via in-person meetings, telephone or e-mail. Carries no transfer credit.

**Prerequisite:** Required placement test scores, no permission needed.

**ESL 007 Topics in English as a Second Language/High Intermediate (0.5-0 to 4-0) 0.5-4 crs.**

Focuses on academically oriented topics in English as a Second Language (ESL) at the high intermediate level. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with registration materials each time that the course is offered. This course may be repeated up to a maximum of four credit hours. Carries no transfer credit.

**Prerequisite:** ESL 053 and ESL 063 with grades of C or better, OR required placement test scores.

**ESL 008 Grammar Review for Levels I and II (2-0) 2 crs.**

Focuses on verb tenses, nouns, and determiners for low intermediate students of English as a Second Language. Reviews the form and function of the grammatical patterns. Includes practice in recognizing and accurately producing the patterns, with focus on listening and speaking. Carries no transfer credit.

**Prerequisite:** ESL 020, ESL 024 or ESL 026 with a grade of C or better, OR required placement test scores.

**ESL 009 Grammar Review for Levels III and IV (2-0) 2 crs.**

Focuses on verb tenses and modals and related structures for intermediate students of English as a Second Language. Reviews the form and function of the grammatical patterns. Includes practice in recognizing and accurately producing the patterns in spoken and written forms. Carries no transfer credit.

**Prerequisite:** ESL 040 with a grade of C or better and required ESL Writing test score, OR ESL 046 with a grade of C or better and required ESL Writing test score, OR ESL 044 and ESL 056 with a grade of C or better, OR required placement test scores.

**ESL 010 ESL: Core Language Skills I (1-0 to 6-0) 1-6 crs.**

Focuses on grammatical structures and patterns of English for high beginning English as a Second Language student. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Carries no transfer credit.

**Prerequisite:** Required placement test scores.

**ESL 011 ESL Listening/Speaking I-IEP (2-0) 2 crs.**

Develops listening and speaking and conversation skills for high beginning English as a Second Language (ESL) students in an Intensive English Program (IEP) who read and write proficiently in their own languages. Includes pronunciation skills. Carries no transfer credit.

**Prerequisite:** Required placement test scores

**ESL 017 ESL Conversation I-IEP (4-0) 4 crs.**

Focuses on the development of conversation skills for high beginning English as a Second Language (ESL) students in an Intensive English Program (IEP) who read and write proficiently in their native languages. Concentrates on areas necessary for successful communication in a variety of American settings. Carries no transfer credit.

**Prerequisite:** ESL 010 with a grade of C or better OR required placement test scores.

**ESL 018 ESL: Conversation I (2-0) 2 crs.**

Focuses on the development of conversation skills for high-beginning English as a Second Language students who read and write proficiently in their native languages. Concentrates on areas necessary for successful communication in a variety of American settings. Carries no transfer credit.

**Prerequisite:** Required placement test scores.

**ESL 020 ESL: Core Language Skills II (1-0 to 6-0) 1-6 crs.**

Continues grammatical structures and patterns of English for high beginning English as a Second Language student. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Carries no transfer credit.

**Prerequisite:** ESL 010 or ESL 026 with a grade of C or better, OR required placement test scores.

**ESL 024 ESL: Reading and Writing I (4-0) 4 crs.**

Develops reading and writing skills for high beginning English as a Second Language student who read and write proficiently in their native languages. Includes sentence patterns and paragraph structure. Introduces multi-paragraph compositions. Carries no transfer credit.

**Prerequisite:** ESL 010 with a grade of C or better, OR required placement test scores.

**ESL 026 ESL: Grammar I (4-0) 4 crs.**

Focuses on grammatical structures and patterns of English for high beginning English as a Second Language students who read and write proficiently in their native languages. Emphasizes listening comprehension and speaking ability. Carries no transfer credit.

**Prerequisite:** ESL 010 with a grade of C or better, OR required placement test scores.

**ESL 027 ESL Conversation II-IEP (4-0) 4 crs.**

Focuses on the development of conversation skills for low intermediate English as a Second Language (ESL) students in an Intensive English Program (IEP) who read and write proficiently in their native languages. Concentrates on areas necessary for successful communication in a variety of American settings. Carries no transfer credit.

**Prerequisite:** ESL 017 with a grade of C or better or required placement test scores.

**ESL 028 ESL: Conversation II (2-0) 2 crs.**

Continues the development of conversation skills for high beginning English as a Second Language student who read and write proficiently in their native languages. Concentrates on areas necessary for successful communication in a variety of American settings. Carries no transfer credit.

**Prerequisite:** ESL 010 or ESL 018 with a grade of C or better, OR required placement test scores.

**ESL 030 ESL: Core Language Skills III (1-0 to 6-0) 1-6 crs.**

Focuses on increasingly complex grammatical structures and patterns of English for intermediate English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Carries no transfer credit.

**Prerequisite:** ESL 020 with a grade of C or better, OR ESL 026 with a grade of C or better and required ESL Writing test score, OR required placement test scores.

**ESL 032 ESL Conv/Lstng/Spkg III-IEP (3-0) 3 crs.**

Develops listening and speaking and conversation skills for intermediate English as a Second Language (ESL) students in an Intensive English Program (IEP). Focuses on development of conversation skills. Concentrates on areas necessary for successful communication in a variety of American settings. Includes pronunciation skills. Carries no transfer credit.

**Prerequisite:** ESL 027 or ESL 045 with a grade of C or better OR required placement test scores.

**ESL 034 ESL: Reading II (4-0) 4 crs.**

Develops reading skills for low-intermediate English as a Second Language students. Focuses on the reading of narratives. Carries no transfer credit.

**Prerequisite:** ESL 024 or ESL 030 with a grade of C or better, OR required placement test scores.

**ESL 038 ESL: Conversation III (2-0) 2 crs.**

Focuses on the development of conversation skills for low-intermediate English as a Second Language students who read and write proficiently in their native languages. Concentrates on areas necessary for successful communication in a variety of American settings. Carries no transfer credit.

**Prerequisite:** ESL 020 or ESL 028 with a grade of C or better, OR required placement test scores.

**ESL 039 ESL: Conversation IV (2-0) 2 crs.**

Continues the development of conversation skills for low-intermediate English as a Second Language students who read and write proficiently in their native languages. Concentrates on areas necessary for successful communication in a variety of American settings. Carries no transfer credit.

**Prerequisite:** ESL 030 or ESL 038 with a grade of C or better, OR required placement test scores.

**ESL 040 ESL: Core Language Skills IV (1-0 to 6-0) 1-6 crs.**

Continues increasingly complex grammatical structures and patterns of English for intermediate English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Carries no transfer credit.

**Prerequisite:** ESL 026 and ESL 034, OR ESL 030 or ESL 044 with grades of C or better, OR required placement test scores.

- ESL 043 ESL: Writing II (4-0)** 4 crs.  
Focuses on the writing of paragraphs. Designed for low-intermediate English as a Second Language students. Continues study of sentence patterns and introduces editing skills. Carries no transfer credit.  
**Prerequisite:** ESL 024, ESL 030 or ESL 046 with a grade of C or better, OR required placement test scores.
- ESL 044 ESL: Writing II Intensive Program (2-0)** 2 crs.  
Focuses on the writing of paragraphs. Designed for low-intermediate English as a Second Language students. Introduces sentence patterns and editing skills. Carries no transfer credit.  
**Prerequisite:** ESL 024, ESL 030 or ESL 046 with a grade of C or better, OR required placement test scores.
- ESL 045 ESL Listening/Speaking II-IEP (1-0)** 1 cr.  
Continues the development of listening and speaking skills for low-intermediate English as a Second Language (ESL) students in an Intensive English Program (IEP). Includes pronunciation skills. Carries no transfer credit.  
**Prerequisite:** ESL 011 with a grade of C or better OR required placement test scores.
- ESL 046 ESL: Grammar II (4-0)** 4 crs.  
Focuses on grammatical structures and patterns of English for low-intermediate English as a Second Language students. Includes practice of patterns introduced previously. Emphasizes the recognition and production of grammatical structures and how these structures affect meaning in both spoken and written English. Carries no transfer credit. **Prerequisite:** ESL026 or ESL030 with a grade of "C" or better, or required placement test scores.
- ESL 048 ESL: American Culture I (2-0)** 2 crs.  
Explores contemporary American culture for intermediate English as a Second Language students. Focuses on areas necessary for successful communication in American society including nonverbal communication, classroom practices and work values. Emphasizes and enhances listening comprehension and speaking skills. Carries no transfer credit.  
**Prerequisite:** ESL 030 or ESL 044, OR ESL 026 and ESL 034 with grades of C or better, OR required placement test scores.
- ESL 050 ESL: Core Language Skills V (1-0 to 6-1)** 1-6 crs.  
Focuses on complex grammatical structures and patterns of English for high intermediate English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Carries no transfer credit.  
**Prerequisite:** ESL 040 or ESL 046 with a grade of C or better, OR required placement test scores.
- ESL 053 ESL: Reading III (4-0)** 4 crs.  
Develops reading techniques for intermediate English as a Second Language students. Focuses on the reading of a variety of materials. Promotes independent reading in English. Carries no transfer credit.  
**Prerequisite:** ESL 034 with a grade of C or better and required ESL Writing test score, OR ESL 044 with a grade of C or better and required ESL Reading Compass score, OR ESL 034 and ESL 044 with a grade of C or better, OR ESL 050 with a grade of C or better, OR required placement test scores.
- ESL 056 ESL: Grammar III (4-0)** 4 crs.  
Focuses on the study of grammatical structures and patterns of English for intermediate English as a Second Language students. Includes practice of patterns introduced previously. Emphasizes the recognition and production of grammatical structures and how these structures affect meaning in both spoken and written English. Carries no transfer credit.  
**Prerequisite:** ESL 046 or ESL 050 with a grade of C or better, OR required placement test scores.
- ESL 057 ESL: Reading IV (4-0)** 4 crs.  
Develops reading techniques for high intermediate English as a Second Language students. Focuses on the reading of a variety of materials in their original form. Promotes independent reading in English. Carries no transfer credit.  
**Prerequisite:** ESL 044 with a grade of C or better and required ESL Reading Compass score, OR ESL 053 with a grade of C or better and required ESL Writing test score, OR ESL 044 and ESL 053 with a grade of C or better, OR ESL 053 and ESL 063 with a grade of C or better, OR ESL 063 with a grade of C or better and required standard Reading Compass score, OR required placement test scores.
- ESL 058 ESL: Spelling Strategies (2-0)** 2 crs.  
Focuses on the spelling system of American English for intermediate students of English as a Second Language who are having difficulty with American English spelling. Includes memory techniques, dictionary use, study of word parts and spelling aids in word processing programs. Carries no transfer credit.  
**Prerequisite:** ESL 030 with a grade of C or better and required ESL Writing test score, OR ESL 034, ESL 040, ESL 044 or ESL 046 with a grade of C or better, OR required placement test scores.
- ESL 059 ESL: Conversation V (2-0)** 2 crs.  
Focuses on development of conversation skills for intermediate English as a Second Language students. Concentrates on areas necessary for successful communication in a variety of American settings. Carries no transfer credit.  
**Prerequisite:** ESL 039 or ESL 040 with a grade of C or better, OR required placement test scores.
- ESL 060 ESL: Core Language Skills VI (1-0 to 6-0)** 1-6 crs.  
Continues complex grammatical structures and patterns of English for high intermediate English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Carries no transfer credit.  
**Prerequisite:** ESL 050 or ESL 056 with a grade of C or better, OR required placement test scores.
- ESL 063 ESL: Writing III (4-0)** 4 crs.  
Develops academic writing for intermediate English as a Second Language students. Emphasizes expository paragraphs and introduces essays. Carries no transfer credit.  
**Prerequisite:** ESL 044 with a grade of C or better and required ESL Reading Compass score, OR ESL 044 with a grade of C or better and required standard Reading Compass score, OR ESL 060 with a grade of C or better, OR ESL 034 and ESL 044 with grades of C or better, OR ESL 034 with a grade of C or better and required ESL Writing test score, OR required placement test scores.
- ESL 067 ESL: Writing IV (4-0)** 4 crs.  
Develops academic writing for high intermediate English as a Second Language students. Emphasizes expository essays. Carries no transfer credit.  
**Prerequisite:** ESL 034 with a grade of C or better and required ESL Writing test score, OR ESL 063 with a grade of C or better and required ESL Reading Compass score, OR ESL 063 with a grade of C or better and required standard Reading Compass score, OR ESL 034 and ESL 063 with grades of C or better, OR ESL 053 and ESL 063 with grades of C or better, OR required placement test scores.
- ESL 072 ESL Conv/Lstng/Spkg IV-IEP (3-0)** 3 crs.  
Develops listening and speaking and conversation skills for high intermediate English as a Second Language (ESL) students in an Intensive English Program (IEP). Includes communication practice in a variety of American settings and pronunciation skills. Carries no transfer credit.  
**Prerequisite:** ESL 032 with a grade of "C" or better OR required placement test scores.

**ESL 073 ESL: Reading V (4-0) 4 crs.**

Develops reading techniques for advanced English as a Second Language students. Focuses on the reading of college textbooks and academic discussion of literature. Carries no transfer credit.  
**Prerequisite:** ESL 057 with a grade of C or better and required ESL Writing test score, OR ESL 063 with a grade of C or better and required ESL Reading Compass score, OR ESL 057 and ESL 063 with grades of C or better, OR ESL 057 and ESL 067 with grades of C or better, OR ESL 067 with a grade of C or better and required standard Reading Compass score, OR required placement test scores.

**ESL 074 ESL: Writing V (4-0) 4 crs.**

Focuses on academic writing for advanced English as a Second Language students. Emphasizes expository essays. Carries no transfer credit.

**Prerequisite:** ESL 053 with a grade of C or better and required ESL Writing test score, OR ESL 067 with a grade of C or better and required ESL Reading Compass score, OR ESL 067 with a grade of C or better and required standard Reading Compass score, OR ESL 053 and ESL 067 with grades of C or better, OR ESL 057 and ESL 067 with grades of C or better, OR required placement test scores.

**ESL 075 ESL: Conversation VI (2-0) 2 crs.**

Focuses on the development of conversation skills for high intermediate English as a Second Language students. Concentrates on areas necessary for successful communication in a variety of American settings. Carries no transfer credit.

**Prerequisite:** ESL 050 or ESL 059 with a grade of C or better. OR required placement test scores.

**ESL 076 ESL: Grammar IV (4-0) 4 crs.**

Focuses on grammatical structures and patterns of English for high- intermediate English as a Second Language students. Includes practice of patterns introduced previously. Emphasizes the recognition and production of grammatical structures and how they affect meaning in both spoken and written English. Carries no transfer credit.

**Prerequisite:** ESL 056 with a grade of C or better, OR required placement test scores.

**ESL 077 ESL: Advanced Vocabulary I (2-0) 2 crs.**

Focuses on the vocabulary of formal American English speech and writing for advanced English as a Second Language students. Emphasizes words and expressions associated with academic style and register. Carries no transfer credit.

**Prerequisite:** ESL 053, ESL 056, ESL 060 or ESL 063 with a grade of C or better, OR required placement test scores.

**ESL 078 ESL: American Culture II (2-0) 2 crs.**

Explores contemporary American culture for advanced English as a Second Language students. Focuses on areas necessary for successful communication in American society including basic American values and the roles of government and the family. Emphasizes and enhances listening comprehension and speaking skills. Carries no transfer credit.

**Prerequisite:** ESL 053, ESL 056, ESL 060 or ESL 063 with a grade of C or better, OR required placement test scores.

**ESL 079 Self-Study for the TOEFL (0-2) 1 cr.**

Focuses on developing skills in vocabulary recognition, listening, speaking, reading and writing in English for non-native speakers who plan to study in colleges and universities where English is the language of instruction. Familiarizes students with the test-taking skills necessary to be successful on the IBT TOEFL (Internet-based Test of English as a Foreign Language). Carries no transfer credit.

**Prerequisite:** ESL 053, ESL 056 or ESL 063 with a grade of C or better, OR required placement test scores.

**ESL 085 ESL: Pronunciation Skills (2-0) 2 crs.**

Focuses on improvement of pronunciation skills. Designed for advanced English as a Second Language students. Emphasizes connected speech, including such features as sounds, stress, intonation, and timing. Carries no transfer credit.

**Prerequisite:** ESL 053, ESL 056, ESL 060 or ESL 063 with a grade of C or better, OR required placement test scores.

**ESL 086 ESL: Editing Skills (2-0) 2 crs.**

Provides intensive writing practice with a focus on editing skills for advanced English as a Second Language students. Reviews essay development, mechanics and the features of American English grammatical structure that are most difficult for ESL students. Carries no transfer credit.

**Prerequisite:** ESL 053 with a grade of C or better and required ESL Writing test score; or ESL 067 with a grade of C or better and required ESL Reading Compass score; or ESL 067 with a grade of C or better and required standard Reading Compass score; or ESL 053 and ESL 067 with grades of C or better; or ESL 057 and ESL 067 with grades of C or better; or required ESL placement test scores.

**ESL 087 ESL: Advanced Vocabulary II (2-0) 2 crs.**

Focuses on the vocabulary of informal American English speech and writing for advanced English as a Second Language students. Emphasizes the high-frequency idiomatic expressions that are most troublesome for advanced ESL students. Carries no transfer credit.

**Prerequisite:** ESL 053, ESL 056, ESL 060 or ESL 063 with a grade of C or better, OR required placement test scores.

**ESL 089 Preparation for the TOEFL (2-0) 2 crs.**

Develops advanced skills in vocabulary recognition, listening, speaking, reading and writing in English for non-native speakers who plan to study in colleges and universities where English is the language of instruction. Familiarizes students with the test-taking skills necessary to be successful on the IBT TOEFL (internet-based Test of English as a Foreign Language). Carries no transfer credit.

**Prerequisite:** ESL 056 and either ESL 057 or ESL 067 with grades of C or better, OR required placement test scores.

**ESL 096 ESL: Grammar V (4-0) 4 crs.**

Focuses on grammatical structures and patterns of English for advanced English as a Second Language students. Includes practice of patterns introduced previously. Emphasizes sentence patterns of formal written English. Carries no transfer credit.

**Prerequisite:** ESL 076 with a grade of C or better, OR required placement test scores.

**ESL 098 ESL: Listening and Speaking VIII (2-0) 2 crs.**

Focuses on listening and speaking skills specific to the American college classroom for advanced English as a Second Language students. Includes note taking skills, class discussion practice and formal speaking. Carries no transfer credit.

**Prerequisite:** ESL 060, ESL 076 or ESL 085 with a grade of C or better, OR required placement test scores.

**ESL 099 ESL: Writing--research Paper (2-0) 2 crs.**

Focuses on research skills and preparation of the American research paper for advanced English as a Second Language students. Reviews essay development. Carries no transfer credit.

**Prerequisite:** ESL 067 with a grade of C or better and required ESL Reading Compass score, or ESL 053 and ESL 067 with grades of C or better, or required placement test scores.

## ESP English for Special Purposes

### ESP 061 ESL Skills for the Health Care Field (2-0) 2 crs.

Focuses on the exploration of various health care fields, English language skills, and aspects of American culture specific to the field for English as a Second Language (ESL) students at the high intermediate level. Includes reading skills, idiomatic expressions, and vocabulary related to healthcare careers in both written and verbal English. Carries no transfer credit.

**Prerequisite:** ESL 053 and ESL 063 with grades of C or better, OR required placement test scores.

### ESP 071 ESL: Business Communication Skills (4-0) 4 crs.

Focuses on business English skills for English as a Second Language (ESL) students at the high intermediate level. Includes phone skills, writing e-mail and business letters, and using business phrases, idioms, and vocabulary in both written and verbal English. Carries no transfer credit.

**Prerequisite:** ESL 053 and ESL 063 with grades of C or better, OR required placement test scores.

## FAS Fashion Studies

### FAS 100 Industrial Sewing Methods (1-4) 3 crs.

Introduces students to the use and care of industrial sewing equipment, notion and supplies. Presents instruction in basic sewing techniques and their application to garment construction. (NOTE: This course is intended for students with little or no sewing experience.)

### FAS 101 Flat Pattern Design and Draping I (1-4) 3 crs.

Introduces basic industrial techniques of pattern making and draping. Variety of slopers (bodices, skirts, sleeves, etc.) developed. Accuracy and professional standards stressed. Pattern tested in muslin for fit.

**Prerequisite:** Prior or concurrent enrollment in FAS 100 with a grade of C or better.

### FAS 102 Flat Pattern Design and Draping II (1-4) 3 crs.

Continues development of basic sloper set. Manipulates basic sloper set to create original design. Patterns tested in muslin for fit. Garment is constructed from corrected patterns.

**Prerequisite:** FAS 101 with a grade of C or better.

**Corequisite:** FAS 113

### FAS 104 Apparel Design and Construction (1-4) 3 crs.

Develops patterns from basic sloper set. Actual construction of finished garments. Emphasis on styling, fit and professional finishing.

**Prerequisite:** FAS 102 with a grade of C or better.

### FAS 105 Fashion Design Illustration I (1-4) 3 crs.

Introduces basic fashion sketching (front, back and side views, and original design). Studies the relationship of figure and garment. Emphasizes development of individual style, basic layout and presentation.

### FAS 107 Textiles I (1-4) 3 crs.

Studies basic design and color principles in development of creative fabrics. General analysis and identification of fabrics and employment of various methods such as weaving, printing and dyeing.

### FAS 108 Textiles II (1-4) 3 crs.

Continues FAS 107. Techniques in fabric construction and surface design are studied.

**Prerequisite:** FAS 107 with a grade of C or better.

### FAS 109 Fashion Arts and Design (1-4) 3 crs.

Focuses on theory and principles of design for fashion, and familiarizes the student with major fabric names and constructions. Studies the use of unusual materials in design and applies those materials to individual projects. Studies the influence of present-day cultural trends in the field of design.

**Prerequisite:** FAS 104 with a grade of C or better.

### FAS 110 Costume History (2-2) 3 crs.

Introduces the elements of design and color in historical perspective. Surveys historical periods of time focusing on costumes. Examines the influences of social, political and economic forces on fashion in these periods.

### FAS 112 Fashion Basics (3-0) 3 crs.

Presents fashion merchandise through evaluation of fashion products. Develops awareness of construction, as well as workmanship and design elements, such as fabric, color, silhouette and taste.

### FAS 113 Advanced Industrial Sewing Methods (1-4) 3 crs.

Focuses on application and mastery of basic sewing skills in pattern and fabric recognition and problem solving related to individual creative design. Emphasis on technology, technical accuracy and appropriate use of selected materials and supplies. (NOTE: This course is intended for students with basic sewing skill and machine proficiency.)

**Prerequisite:** FAS 100 with a grade of C or better or placement as demonstrated through Fashion Design Department testing. Contact program coordinator for additional information.

### FAS 116 Fashion Industries Career Practicum and Seminar (1-10) 3 crs.

Studies an overview of career and employment possibilities in the fashion businesses and industries. Places emphasis on individual career path selections through interest testing and career counseling. (NOTE: Concurrent employment of ten hours or more in a fashion related field is required. Contact program coordinator for additional information.)

### FAS 117 Textiles Studio I (0-4) 2 crs.

Introduces students to methods of fabric construction and surface design techniques, such as weaving, knitting, felting, beading, embroidery, appliqué, and fabric printing.

**Prerequisite:** FAS 107

### FAS 118 Textiles Studio II (0-4) 2 crs.

Continues the study of fabric construction and surface design techniques, such as weaving, knitting, felting, beading, embroidery, appliqué, and fabric printing.

**Prerequisite:** FAS117 with a grade of C or better.

### FAS 125 Product Development I (1-4) 3 crs.

Introduces students to the first two stages of the product development process: planning the line and creating the design concept. Projects are individualized and may include apparel, millinery, handbags, accessories or knitwear.

**Prerequisite:** FAS107 with a grade of C or better.

### FAS 135 Product Development II (1-4) 3 crs.

Continues the stages of product development in design and planning production. Samples are made and used to determine cost of production. Projects are individualized and may include apparel, millinery, handbags, accessories, or knitwear.

**Prerequisite:** FAS 125 with a grade of C or better.

### FAS 201 Flat Pattern Design and Draping III (1-4) 3 crs.

Continues advanced development of creative designs using draping and basic sloper set. Patterns tested in muslin for fit and accuracy.

**Prerequisite:** FAS 102 with a grade of C or better.

## COURSE DESCRIPTIONS

### **FAS 204 Senior Collection (2-4) 4 crs.**

Works on collection of individual design and actual construction of coordinated garments. Course requirement includes garment entry and participation in annual fashion show.

**Prerequisite:** FAS 201 with grades of C or better.

### **FAS 208 Computer-Aided Patternmaking (2-3) 3 crs.**

Introduces student to the PAD Pattern CAD/CAM Design System. Students learn the general technical terminology and CAD tools to create and modify patterns.

**Prerequisite:** FAS104 with a grade of C or better.

### **FAS 210 Fashion Design Illustration II (1-4) 3 crs.**

Emphasizes work on a professional studio level. Focuses on work sketches as well as finished art. Studies illustration for advertising, publicity, promotion and display. Preparation of professional portfolio.

**Prerequisite:** FAS 105 with a grade of C or better.

### **FAS 212 Visual Fashion Merchandising (2-3) 3 crs.**

Studies the communication of design and methods of interpreting consumer needs and motivations. Explores the techniques of educating the consumer and promoting good design through visual display methods.

**Prerequisite:** FAS 112 with a grade of C or better.

### **FAS 220 Apparel Analysis (1-4) 3 crs.**

Analyzes construction standards and techniques used in the ready to wear market at various prices and quality levels. Emphasizes standard terminology necessary to describe and evaluate apparel. Basic sewing and research serves as a foundation for garment classifications, assembly and production.

**Prerequisite:** FAS 107.

### **FAS 225 Global Sourcing Apparel/Textiles (1-4) 3 crs.**

Defines global sourcing and provides an understanding of why and how companies participate in it. Explains how and where manufactured goods or components will be procured. Teaches that in today's global softgoods industry, sourcing has become a major competitive strategy for both manufacturers and retailers.

### **FAS 229 Promotion of Fashion (1-4) 3 crs.**

Introduces various techniques and methods to sell fashion. Helps to synthesize a number of skills such as critical and creative thinking, negotiating, teamwork, delegating and communication skills. Students will gain recognition and be responsible for team effort that is involved in the production of a fashion show.

### **FAS 230 Fashion Forecasting (3-0) 3 crs.**

Focuses on the social, economic, political and psychological forces that influence fashion. Introduces methods of forecasting fashion trends. Contemporary consumer lifestyles will be analyzed.

### **FAS 240 Fashion Projects (3-0) 3 crs.**

Studies the use of oral and written communication in a fashion career with special emphasis on preparing for and staging fashion shows and special events. The effects of personal appearance on communication are analyzed.

### **FAS 245 Topics in Fashion Design (1-0 to 3-0) 1-3 crs.**

Studies selected problems or topics in fashion design. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that course is offered. Different topics may be selected and the course repeated to a maximum of nine credit hours.

**Prerequisite:** FAS 107 with a grade of C or better, or consent of instructor.

### **FAS 250 Professional Studio Practices I (1-4) 3 crs.**

Continues the stages of product development through manufacturing. Students will develop a studio plan and complete the development of a small product line. Individualized projects may include apparel, millinery, handbags, accessories or knitwear.

**Prerequisite:** FAS 125 with a grade of C or better.

### **FAS 260 Professional Studio Practices II (1-4) 3 crs.**

Continues development and application of production processes and marketing strategies. Projects are individualized and may include garments, millinery, handbags, accessories or knitwear.

**Prerequisite:** FAS250 with a grade of C or better.

### **FAS 265 Creative Enterprise (2-4) 4 crs.**

Continues studio methods of production and develops goals, objectives, strategies, and tactics for realizing desired outcomes.

**Prerequisite:** FAS 260 with a grade of C or better.

## **FIN Financial Management**

### **FIN 101 Financial Institution Operations (3-0) 3 crs.**

Presents an overview of the evolution of the U.S. banking system; the fundamentals of money and banking; operations of banks; the role of governmental regulatory agencies such as the Federal Reserve and the FDIC; consumer and business products and services; and international banking. Provides an examination of the functioning of our economic system emphasizing contemporary and regulatory issues that impact the future of the banking industry.

### **FIN 200 Investment Management (3-0) 3 crs.**

Introduces the student to the fundamentals of equity and fixed income investing. Explores other investment management subjects such as mutual funds, international investing and retirement planning as well as tax-advantaged investments. Basic derivatives such as futures and options will also be discussed. (Credit will be given for either FIN 200 or MGT 170, but not both.)

### **FIN 215 Financial Statements Interpretation and Analysis (3-0) 3 crs.**

Explores the characteristics of financial statements and financial statements analysis. Emphasis is on the income statement, balance sheet, and sources and uses of funds statement. Effects of reserves, inventory valuations, depreciation, depletion, amortization, subsidiaries and affiliates are studied. Addresses cash flow, reported earnings, taxable earnings and interpretation of the financial data by means of ratio analysis.

**Prerequisite:** ACC 101 with a grade of C or better.

### **FIN 225 International Finance (3-0) 3 crs.**

Emphasizes international trade financing. Presents mechanics of importing and exporting, credit and political considerations. Focuses on credit considerations, market product profiles, letters of credit, collection, credit information outside the United States and entry into these markets.

## **FIS Fire Science**

### **FIS 100 Fundamentals of Fire and Emergency Services (3-0) 3 crs.**

Provides an overview of fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; fire protection systems; introduction to fire strategy and tactics.



**FIS 102 Fire Service Management/Leadership (3-0) 3 crs.**

Introduces the student to the role of the company officer. Provides an introduction to basic management theories, practices and functions with an emphasis on fire service leadership from the perspective of the company officer. Provides an introduction to the organization and management of a fire department and the relationship of government agencies to the fire service.

**Prerequisite:** FIS 100 and FIS 121 with grades of C or better.

**FIS 103 Firefighting Strategies and Tactics (3-0) 3 crs.**

Introduces basic principles and methods associated with fireground strategies and tactics as required of the company officer. Emphasizes the incident management system, fire behavior, basic firefighting size-up, pre-fire planning, engine company and truck company operations.

**Prerequisite:** FIS 100 and FIS 121 with grades of C or better.

**FIS 104 Building Construction for Fire Protection (3-0) 3 crs.**

Studies the components of building construction that relate to fire and life safety. Focuses on firefighter safety and the elements of construction and structure design as key factors when inspecting buildings, preplanning fire operations and operating at emergencies.

**Prerequisite:** FIS 100 with a grade of C or better.

**FIS 106 Fire Service Career Explor Practicum (0.5-2) 1 cr.**

Studies fire science career and employment possibilities in the fire service. Includes observation practices at various fire departments and attendance at a seminar to discuss related experiences. Students will gain an accurate perception of how their personal and professional goals match with the fire service, as well as learn about ways to reach their goals. Specifically, the course challenges students to look at their values, interests, and skills as they relate to a career in the fire service.

**FIS 109 Basic Firefighter Certification (9-6) 12 crs.**

Provides a member of a regularly constituted fire department within the State of Illinois with instruction and certification as a state recognized Basic Operations Firefighter (Firefighter II). Satisfies the didactic and manipulative requirements for the Illinois Office of State Fire Marshall Basic Operations Firefighter (Firefighter II) certification course, meeting or exceeding the level identified in NFPA 1001. Student must be a member of an ILLINOIS fire department that has entered into a training agreement with Harper College. NOTE: This course has an additional fee of \$2300 to cover the cost of training at a contracted site.

**Prerequisite:** FIS 103, FIS 104, FIS 122, and FIS 260 with grades of C or better and consent of program coordinator.

**FIS 121 Fire Behavior and Combustion (3-0) 3 crs.**

Explores the theories and principles of how and why fires start, spread, and are brought under control. Students will be able to relate the principles by which fires spread with the appropriate methods of control.

**FIS 122 Fire Prevention Principles (3-0) 3 crs.**

Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with the built-in fire protection systems, fire investigation, and fire and life-safety education.

**FIS 132 Hazardous Materials (3-0) 3 crs.**

Reviews basic chemistry, storage, handling, laws, standards and fire fighting practices pertaining to hazardous materials. Emphasis on identification, labeling, handling, firefighting, and mitigation of hazardous materials emergencies. Students who wish to satisfy the Illinois Office of the State Fire Marshall Certificate Requirements must successfully complete this course as well as the required practical skills evaluation prior to taking the state examination by the Authority Having Jurisdiction (A.H.J.).

**FIS 145 Fire and Emergency Services Instructor (3-0) 3 crs.**

Provides instruction to individuals in the fire and emergency services. Provides basic fundamentals in human relations in the teacher-student learning environment, methods of instruction and proper methods of writing lesson plans.

**FIS 200 Fire Service Internship (1-10) 3 crs.**

Applies and expands fire science skills and knowledge in the workplace environment. Conducted under joint partnership agreements between Harper College and a host fire department. Regularly conducted review sessions will be conducted to assess the student's progress, problem areas, and to review appropriateness of work involvement. Actual permissible duties and activities will be determined based upon the student's qualifications and host department restrictions. Student must complete a minimum of 100 contact hours to earn 3 hours of credit. Appropriate skills to the fire science technology field.

**Prerequisite:** FIS 100, FIS 103, FIS 121 and FIS 122 with grades of C or better.

**FIS 210 Fire-Arson Investigation (3-0) 3 crs.**

Provides the identification of the nature and behavior of fire, combustion properties, sources of ignition, the techniques and procedures for the identification of the cause and origin of fires, the detection of arson, the role of the fire investigator, the role of the crime laboratory, arson law, and fire report writing.

**Prerequisite:** FIS 100 and FIS 121 with grades of C or better.

**FIS 212 Fire Protection Systems (3-0) 3 crs.**

Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

**Prerequisite:** FIS 100 with a grade of C or better.

**FIS 230 Fire and Emergency Services Law (3-0) 3 crs.**

Enables the student to acquire a basic knowledge of the law in specified subject areas that directly or indirectly affect fire and emergency services by providing basic knowledge of the methodology through which to locate, read and comprehend various statutes, regulations, and cases that are the framework of the law.

**FIS 240 Fire Apparatus Engineer (2-2) 3 crs.**

Provides students with a foundation of theoretical knowledge and psychomotor skills in order to understand principles of the use of water in fire protection and to apply hydraulic principles to analyze and solve water supply problems. Also provides students with the psychomotor requirements to satisfy the Illinois Office of State Fire Marshal Fire Apparatus Engineer Course. Evaluates students' ability to perform the manipulative functions required to properly operate a National Fire Protection Association compliant fire apparatus in simulated fireground settings.

**Prerequisite:** MTH 080 with a grade of C or better.

**FIS 250 Industrial Fire Protection (3-0) 3 crs.**

Studies the recommended practices for protection of industrial properties and processes from fire, explosion and damage specific to certain types of public and private industry; including fire and accident prevention programs, identification of special hazards, fire protection equipment and systems, handling of emergencies, the development of policy, rules, and regulations, the inspection and investigation of accidents, and standardized record keeping.

**FIS 260 Emergency Services Safety (3-0) 3 crs.**

Provides a foundation of knowledge and understanding of safety as applied to emergency services. Examines the need for safety in the everyday performance of all aspects of their jobs and gain an understanding of the essential elements needed to reduce accidents and injuries.

**FIS 270 Fire Service Technical Rescue (3-0) 3 crs.**

Provides students with a primary focus on the operations-level situations to which fire service rescue squads are called. Focuses on various complex rescue scenarios that firefighters are exposed to on a regular and on-going basis. Conforms and meets NFPA Standard 1670 on Operations and Training for Technical Search and Rescue incidents.

**Prerequisite:** FIS 100 with a grade of C or better.

**FIS 280 Firefighting Around the World (3-0) 3 crs.**

Introduces students to the rich history of firefighting throughout the world, explaining how traditions in this profession vary widely from country to country. Provides students with an understanding of those differences in fire equipment, mobile apparatus, strategy and tactics, as well as fire prevention, suppression, and investigation procedures involved in firefighting around the world. Focuses on the world's major fire organizations and how they directly relate or differ from the American Fire Service.

**FRN French****FRN 101 Elementary French I (4-0) 4 crs.**

Introduces the language skills of listening, understanding, speaking, reading, and writing in their logical sequence. Designed for students with no previous experience in French.

**FRN 102 Elementary French II (4-0) 4 crs.**

Continues FRN 101. Situational conversations in French; reading and writing stressed. One year of high school French is recommended.

**Prerequisite:** FRN 101 with a grade of C or better, or consent of instructor.

**FRN 201 Intermediate French (4-0) 4 crs.**

Continues FRN 102. Conversation with emphasis on pronunciation, intonation, stress and rhythm. Introduction to composition, reading of short stories and grammar review.

**Prerequisite:** FRN 102 with a grade of C or better, two years of high school French or consent of instructor.

**FRN 202 Intermediate French (4-0) 4 crs.**

Continues FRN 201. Further develops knowledge of the language and provides an overview of the culture of French-speaking peoples. Emphasizes the development of advanced reading, writing, speaking and listening comprehension skills. While review the grammar structures previously covered, this course uses an integrated skills approach to extend the growth of communicative proficiency in French and to develop the understanding of French culture. Throughout the semester, students will be engaged in a variety of writing and speaking interactive class activities. Through guided reading, students will also be introduced to more complex grammar structures. Course content is theme-based and encourages students to expand linguistic and cultural knowledge through reading and communicative activities. NOTE: Three years of high school French are recommended. IAI H1 900

**Prerequisite:** FRN 201 with a grade of C or better, or consent of instructor.

**FRN 205 French Intensive Oral Practice (3-0) 3 crs.**

Conversational practice to develop oral facility; specially designed exercises in pronunciation, stress and rhythm. Individual readings of modern French works discussed in class. Written and oral compositions based on readings. Designed to help students bridge the gap between the intermediate and advanced levels.

**Prerequisite:** FRN 202 with a grade of C or better or equivalent or consent of instructor.

**FRN 210 Introduction to Modern French Literature (3-0) 3 crs.**

Reading of selected 20th century masterpieces. Introduces poetry and "analyze de texte." Oral readings stressing pronunciation and diction. Speaking based on discussion of works read. Writing based on readings and class discussion. Designed to help students bridge the gap between the intermediate and advanced levels. IAI H3 917

**Prerequisite:** FRN 202 or equivalent with a grade of C or better, or consent of instructor.

**FSM Hospitality Management****FSM 107 Basic Quantity Bread and Pastry Arts (2-5) 4 crs.**

Introduces basic quantity baking of breads and pastries. Students will learn the fundamentals of baking science, terminology, ingredients, weights and measures, formula conversion, and storage. Sanitation and hygienic work habits conforming to health regulations are emphasized.

**FSM 108 Advanced Quantity Bread and Pastry Arts (2-5) 4 crs.**

Continues instruction in the finer arts of breads and pastry preparation, including emphasis on pastry arts work, pastries and breads as used in exclusive establishments, and ornamental skills for culinary exhibits.

**Prerequisite:** FSM 107 with a grade of C or better.

**FSM 109 Introduction to Food Prep/Production (2-5) 4 crs.**

Introduces basic cooking skills that can be developed to produce quality food products. Students will learn fundamentals of cooking and baking through daily assignments and production. All aspects of the industry will be covered including proper handling and storage, heating and holding, weights and measures, safety, sanitation, and personal hygiene.

**FSM 110 Advanced Quantity Culinary Arts (2-5) 4 crs.**

Continues FSM 109 with special emphasis in the dining experiences. Students will prepare meals for the College dining room, banquets, catered functions, and special culinary arts events. Students will discuss theory as well as procedures in the "back of the house."

**Prerequisite:** FSM 109 with a grade of C or better.

**FSM 111 Introduction to the Hospitality Industry (3-0) 3 crs.**

Orients students to the hospitality industry, its organizational structure and integration of the modern industry components. Operational considerations are discussed. Career opportunities are explored.

**FSM 113 Dining Room Operations (1-5) 3 crs.**

Introduces theory and practice of quantity food serving including practical experience in dining rooms and catering services. Involves set-up, tableside preparation and presentation of food and beverage. Examines various roles of dining room personnel.

**FSM 114 Food Standards and Sanitation (2-0) 2 crs.**

Introduces safe food handling practices and discusses the standardized procedures involved in the procurement, storage, preparation, holding, and service of safe food. Prepares students for the State of Illinois-approved Food Service Sanitation Manager's Certification test.

**FSM 115 Menu Planning (3-0) 3 crs.**

Studies menu planning theory and principles for various types of food service operations. Examines the relationship of menu planning to the functional areas within food facilities. Menu planning and its importance as a determination of food cost, selling price, and profitability is also emphasized.

**FSM 120 Front Office Operations (3-0) 3 crs.**

Establishes a systematic approach to front office operations detailing the flow of business through the hotel from reservations to checkout. Front office management is placed within the context of the overall operation of the hotel. Methods of handling guest folios, reservations systems, property management systems, and cash controls are discussed.

**FSM 162 Classical Cuisine (2-5) 4 crs.**

Introduces comprehensive integration of previous culinary production course work or work experience and provides food production for the department's special events, culinary competitions, and the College dining room. Demonstrations, food labs, and lectures are used to present the material.

**Prerequisite:** FSM 109 and FSM 110 with grades of C or better.

**FSM 163 Garde Manger (1-3) 2 crs.**

Provides students with skills and knowledge in the preparation of cold hors d'oeuvres, sandwiches, salads, garnishes, pates, terrines, mousses, vegetable carving, chaud froid sauce, tallow, and ice carving.

**Prerequisite:** FSM 109 with a grade of C or better.

**FSM 172 Classical Baking (1-3) 2 crs.**

Concentrates on methods and procedures for producing high quality specialty tortes and buffet items for bakeries and fine dining clubs, hotels, and restaurants. Pulled sugar, pastillage, nougat, marzipan, chocolate, ice cream, candies, and desserts are included. Emphasis is on individual skill development through practice.

**Prerequisite:** FSM 108 with a grade of C or better.

**FSM 173 Cake Decoration (1-3) 2 crs.**

Presents methods and procedures for producing high quality wedding and specialty cakes for bakeries and fine dining clubs, hotels, and restaurants. Emphasis is on individual skill development through practice.

**FSM 210 Hospitality Facility Maintenance (3-0) 3 crs.**

Focuses on the organization, duties, and administration of a restaurant and lodging facility maintenance department. Discusses purchasing, furniture, carpeting, linens, and supplies. Identifies and evaluates care and maintenance techniques of the areas serviced by a facility maintenance department.

**FSM 211 Purchasing and Storage (3-0) 3 crs.**

Standards and identification of quality meats, dairy products, produce, groceries, frozen foods and supplies. Methods of purchasing, purveyor relations, and proper storage techniques and purchase standards for convenience foods.

**FSM 212 Hospitality Supervision (3-0) 3 crs.**

Studies the theory and techniques of supervision as related to the hospitality industry.

**FSM 213 Seminar and Internship (1-15) 3 crs.**

Furnishes participation in a supervised cooperative work experience program in a College-approved hospitality operation. Enrollment is restricted to sophomores in the Hospitality Management program.

**Prerequisite:** FSM 212 with a grade of C or better.

**FSM 214 Hospitality Operations Analysis (3-0) 3 crs.**

Provides practical application of operational analysis used by food, lodging and travel-related fields. Use of ledgers, automated information systems and basic financial statements are discussed.

**FSM 215 Restaurant Layout and Equipment (3-0) 3 crs.**

Maximizing employee productivity through various types of food equipment and proper equipment arrangement. Effects of use of convenience foods on equipment planning.

**FSM 216 Introduction to Wine, Spirits and Beverage Management (3-0) 3 crs.**

Studies alcoholic beverage classifications, alcoholic beverage laws, wine regions, purchasing and control, promotion and service. Beverage management principles and theories are presented which support and reinforce the practical aspects.

**Prerequisite:** Minimum age of 21.

**FSM 220 Hospitality Promotions (3-0) 3 crs.**

Provides Hospitality Management majors with a solid background in hospitality promotions. Focuses on promoting highly perishable, people-intensive intangibles in a highly competitive environment.

**FSM 230 Hospitality Law and Risk Management (3-0) 3 crs.**

Surveys our legal system as applied to the hospitality industry. Examines contracts, torts and various labor laws pertinent to the industry. Analyzes insurance costs, including fire, accident, worker's compensation and employee liability and their effect on various types of facilities.

**FSM 299 Topics in Hospitality Management (0.5-0 to 3-0) 0.5-3 crs.**

Studies selected issues or topics in hospitality management. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated two times to a maximum of three credit hours.

**FYE First Year Experience****FYE 101 First Year Experience (1-0 to 2-0) 1-2 crs.**

Focuses on strategies that assist students in making a successful transition to college life. Students will identify personal strengths to increase self-efficacy as it relates to persistence in college. Students will interact with other students in a supportive environment. Using techniques designed to foster student engagement, students will learn to assume responsibility for their academic decision-making as it relates to success in college and in life.

**FYS First Year Seminar****FYS 101 First Year Seminar (1-0 to 3-0) 1-3 crs.**

Focuses on developing critical thinking and information literacy skills to make better-informed decisions regarding college and career planning. Special emphasis is given to the questions, methods, and career and college options relating to an area of academic or thematic interest. Additional information about material to be covered will be available with pre-registration materials each time that the course is offered.

**GEG Geography****GEG 100 Cultural Geography (3-0) 3 crs.**

Surveys the contemporary topics of human geography; population, migration, language, religion, ethnicity, and political, economic and urban geography. Teaches the methods and tools geographers use in their science and practice. IAI S4 900N

**GEG 101 World/Regional Geography (3-0) 3 crs.**

Surveys the major world regions emphasizing their physical, cultural, economic and historical geographies; provides a geographic interpretation of major current events. IAI S4 900N

**GEG 103 The Developing World (3-0) 3 crs.**

Surveys the technologically less developed regions of the World, including East Asia, South Asia, Middle and South America, Southwest Asia and North Africa, and Sub-Saharan Africa. Emphasis is placed on the spatial arrangement of resources, population, human institutions, economic activities, political patterns, religion, and cultural and physical landscapes. Each cultural realm is analyzed in respect to the larger international community with special attention to current events and issues. IAI S4 902N

**GEG 104 The Developed World (3-0) 3 crs.**

Surveys the technologically more developed regions of the world, including Europe, the United States and Canada, the former Soviet Union, Japan, Australia and New Zealand. Emphasis is placed on the spatial arrangement of resources, population, human institutions, economic activities, political patterns, religion, and cultural and physical landscapes. Each cultural realm is analyzed in respect to the larger international community with special attention given to current events and issues. IAI S4 901

**GEG 111 Physical Geography (3-0) 3 crs.**

Examines the spatial distribution of elements of Earth's four physical spheres: the atmosphere, the hydrosphere, the lithosphere, and the biosphere including landforms, climates, weather, vegetation, and soils. Consideration is given to the causes of these distributions and to their effects on human populations. IAI P1 909

**GEG 112 Physical Geography Laboratory (0-2) 1 cr.**

Applies the scientific method of observation, hypothesis formation, and experimentation to Earth's four physical spheres: the atmosphere, the hydrosphere, the lithosphere, and the biosphere. IAI P1 909L

**Prerequisite:** Prior or concurrent enrollment in GEG 111.

**GEG 150 GIS and Mapping Principles (2-2) 3 crs.**

Provides an introduction to geospatial technologies, such as Geographic Information Systems (GIS), Global Positioning Systems (GPS), and remote sensing through hands-on, computer-based exercises. Also includes the fundamental principles of map use, interpretation and design.

**GEG 151 Geographic Information Systems I (2-2) 3 crs.**

Introduces the concepts and problem solving capabilities of Geographic Information Systems (GIS). Spatial data sourcing and management will be learned using information acquired in the field or from other sources. Spatial analysis concepts will be introduced through hands-on exercises using GIS software.

**Prerequisite:** GEG 150 with a grade of C or better.

**GEG 152 Geographic Information Systems II (2-2) 3 crs.**

Continues GEG 151. Emphasizes the practical application of Geographic Information Systems (GIS) technology to solve problems and answer questions. Increases level of proficiency using GIS and performing spatial analysis of data. Introduces GIS operational and management issues.

**Prerequisite:** GEG 151 with a grade of C or better.

**GEG 153 Applications for GIS (2-2) 3 crs.**

Consolidates the concepts and techniques acquired through prior coursework within the Geographic Information Systems (GIS) certificate. Students will analyze case studies, understand GIS as a professional field, and apply GIS methods and workflows in classroom projects.

**Prerequisite:** GIS 152 with a grade of C or better.

**GEG 210 Economic Geography (3-0) 3 crs.**

Studies the spatial distribution and interaction of economic activities. Emphasis is on land use patterns, population movement, the principles governing the location of agricultural, manufacturing, and commercial centers and the impact of economic activity on the environment. IAI S4 903N

**GEO Geology****GEO 101 Physical Geology (3-2) 4 crs.**

Provides an introduction to the earth's minerals, rocks and natural resources and the processes which have shaped the Earth's surface such as sedimentation, mountain building, and action of water, wind, ice and downslope movements. Covers Earth's fundamental structure and the behavior of Earth materials. Focuses on the roles of volcanism, earthquakes, sea-floor spreading and paleomagnetism in explaining plate tectonic theory. IAI P1 907L

**GEO 102 Dinosaurs, Fossils and Planet Earth (3-2) 4 crs.**

Provides a comprehensive examination and exploration on how the face of the Earth has changed over the history of the solar system. The journey will focus on the geologic story of North America by examining the diverse geological processes that have shaped the continent over time. These will include: a review of rocks and minerals; sedimentation, weathering, erosion and depositional environments; fossilization processes; origin and evolution of life; defining and measuring geologic time; and the role that plate tectonics has played in shaping the Earth through time. Examples will be drawn from the diverse National Parks System, and an examination of the role dinosaurs and other extinct animals play in our understanding of our changing planet. One-day field trip to Starved Rock State Park is required. For science and non-science majors. IAI P1 907L

**GEO 103 Environmental Geology (3-2) 4 crs.**

Examines the relationships between humans and the geological environment. Includes the study of use and abuse of natural resources such as water, minerals, and energy; an overview of natural hazards; an examination of urban geology and land management issues, and the relationship between community status and land use; an analysis of pollution and waste disposal; and an introduction to climate change and global warming. Emphasis is on issues and practices in the Chicagoland area. Knowledge of high school algebra is assumed. IAI P1 908L

**GER German****GER 101 Elementary German I (4-0) 4 crs.**

Introduces the language skills of listening, understanding, speaking, reading and writing in their logical sequence. Designed for students with no previous experience in German.

**GER 102 Elementary German II (4-0) 4 crs.**

Continues GER 101. Situational conversation in German; reading and writing stressed. One year of high school German is recommended.

**Prerequisite:** GER 101 with a grade of C or better, or consent of instructor.

**GER 201 Intermediate German (4-0) 4 crs.**

Continues GER 102. Conversation with emphasis on pronunciation, intonation, stress and rhythm. Introduction to composition, reading of short stories and grammar review. Two years of high school German are recommended.

**Prerequisite:** GER 102 with a grade of C or better, or consent of instructor.

**GER 202 Intermediate German (4-0) 4 crs.**

Continues GER 201. Provides a crucial bridge between the basic grammar and language structure that is taught in the first three semesters and the more in-depth study of history, geography, literature and culture that is taught in the advanced German courses. Integrates students' basic German language skills and applies them to everyday living situations. Begins the study of German literature, focusing on the modern history and culture of the German-speaking peoples. Three years of high school German are recommended. IAI H1 900

**Prerequisite:** GER 201 with a grade of C or better, or consent of instructor.

**GER 205 German Intensive Oral Practice (3-0) 3 crs.**

Conversational practice to develop oral facility; specially designed exercises in pronunciation, stress and rhythm. Individual readings of modern German works discussed in class. Written and oral compositions based on readings. Designed to help students to bridge the gap between the intermediate and advanced levels.

**Prerequisite:** GER 202 with a grade of C or better, or equivalent or consent of instructor.

**GER 210 Introduction to Modern German Literature (3-0) 3 crs.**

Readings of selected 20th century masterpieces. Introduction to poetry. Oral readings stressing pronunciation and diction. Speaking based on discussion of works read. Writing based on readings and class discussions. Designed to help students bridge the gap between the intermediate and advanced levels. IAI H3 917

**Prerequisite:** GER 202 with a grade of C or better, or equivalent or consent of instructor.

**GER 230 German Civilization and Culture (3-0) 3 crs.**

Introduces students to multiple aspects of German culture and civilization from the 20th century to today. Familiarizes students with history, political institutions, economic development, literature, art and culture of Germany. Gives students an overview of the German-speaking regions of Austria, Switzerland and Liechtenstein. This course is taught in English.

<b>GRA Graphic Arts</b>
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**GRA 101 Introduction to Graphic Arts Technology (2-2) 3 crs.**

Gives students an overview of the graphic arts industry. Covers various occupations including basic information for making career and education choices. Builds the foundation for continuing education in the graphic arts program. Includes historical, current and potential developments in the printing industry. Provides a comprehensive understanding of desktop publishing software and the steps related to producing printed materials.

**GRA 102 Graphic Arts Desktop Publishing (2-2) 3 crs.**

Presents a clear understanding of graphic desktop software and their many functions in the printing industry. Provides hands-on training using the most current desktop publishing software. Focuses on project work, page layouts and output functions.

**Prerequisite:** Prior or concurrent enrollment in GRA 101.

**GRA 103 Digital Imaging I (2-2) 3 crs.**

Covers fundamentals of professional digital image-editing software (Adobe Photoshop). Emphasizes skills to manipulate photos using current software tools and special effects filters. Explores program tools, color correction, channels, layers and masks. Computer skills are required for success in this course.

**GRA 105 Color Management (2-2) 3 crs.**

Examines the fundamentals of color theory and color management, throughout the entire graphic arts process. Students will explore all color management techniques of input and output devices as well as tools and concepts for successful color control.

**Prerequisite:** GRA 101 or GRA 103 with a grade of C or better.

**GRA 111 Press Operations (2-2) 3 crs.**

Covers fundamentals of offset printing as well as new technologies in the digital print arena. Provides knowledge of press maintenance and safety, feeder systems, registration requirements, ink systems and color management tools and techniques in the print industry.

**Prerequisite:** GRA 101 with a grade of C or better.

**GRA 112 Digital Illustration I (2-2) 3 crs.**

Presents vector graphics software and its applications to the graphic arts industry. Explores tools and functions within the current software. Focuses on creating illustrations, working with type, color, and all tools needed to create multi-colored illustration and separation. Emphasizes techniques to create illustration files for use in digital print production. Computer skills are required for success in this course.

**GRA 113 Digital Imaging II (2-2) 3 crs.**

Covers advanced functions of digital image-editing software. Emphasizes advanced software functionality, color correction and color management needs as well as commercial imaging practices in a prepress environment. Focuses on different types of image capture and file manipulation.

**Prerequisite:** GRA 103 with a grade of C or better.

**GRA 120 Graphic Design I (2-2) 3 crs.**

Focuses on beginning fundamentals of graphic design utilizing all design principles and involves an overview of design and layout rendering techniques. Focuses on typography, images and graphics, utilizing design processes (including research and sketching) and current graphic software for print. Projects are critiqued for aesthetics and production for print.

**Prerequisite:** GRA 102 with a grade of C or better.

**GRA 130 Introduction to Photography (2-0) 2 crs.**

Explores beginning fundamentals of photography, its history, and the development of photography in both commercial and creative usage. Presents a past and present use of photography focusing on techniques and applications in a conventional camera-based environment emphasizing the digital photographic arena.

**GRA 131 Digital Photography I (2-2) 3 crs.**

Explores the techniques and applications of digital image capture, manipulating images in Photoshop and outputting digital images. Focuses on the technical aspect of digital photography, lighting needs, application use and color management basics. Project based instruction utilizing basic photographic concepts, commercially and creatively. A DSLR camera is required for this course.

**Prerequisite:** GRA 130 with a grade of C or better.

**GRA 145 Wordpress and Mobile Technologies (2-2) 3 crs.**

Introduces the student to WordPress fundamentals to create basic web pages. Hands-on computer activity includes WordPress templates, dashboard and widget usage; blogging/posts; adding links, videos, photo galleries; creating user accounts and theme changes. Student will also learn to translate the WordPress full web site into a mobile website and will integrate with social media platforms. An introduction to UI (user interface) design will be explored for mobile applications.

**Prerequisite:** GRA 102 with a grade of C or better, or consent of coordinator.

**GRA 202 Advanced Color Management (2-2) 3 crs.**

Analyzes real world color management in the digital and conventional print industry. Focuses on advanced under-the-hood technology in color management systems building closed loop systems. Covers color fidelity, models and the understanding of how devices interpret and deliver. Profile building and editing for input and output devices.

**Prerequisite:** GRA 105 with a grade of C or better.

**GRA 211 Project Management, Scheduling and Estimating (3-0) 3 crs.**

Provides essential information needed to estimate, schedule, and project manage a print job. Analyzes cost calculations of various functions within the graphic arts industry. Covers workflow, scheduling, and quantity estimation to produce a quality document. Explores CSR (Customer Service Representative) roles in graphic arts workflow.

**Prerequisite:** GRA 101 with a grade of C or better.

**GRA 213 Packaging, Finishing and Distribution (3-0) 3 crs.**

Provides instruction on manufacturing processes and techniques for various types of print graphics with an emphasis on 3D packaging. Studies production practices, material usage, flexography process, finishing and distribution processes and environmental/sustainability trends. Covers the interaction between products and the many roles that packaging plays in the supply chain. Presents methods of postal requirements, barcoding, how products get to market, costs, manufacturing needs and delivery of said product.

**Prerequisite:** GRA 111 or GRA 222 with a grade of C or better, or consent of program coordinator.

**GRA 214 Digital Illustration II (2-2) 3 crs.**

Explores advanced vector illustration graphic software in the graphic arts industry. Focuses on prepress techniques and print production uses. Includes an understanding of four-color print production requirements and advanced menus/tools.

**Prerequisite:** GRA 112 with a grade of C or better.

**GRA 220 Graphic Design II (2-2) 3 crs.**

Teaches advanced graphic design that is project- and process-focused to refine creative and technical skills. Projects will follow the design process from initial research and sketches to refined computer layouts and final production-ready art files. Assignments will utilize graphic design principles and current graphic software. Projects are critiqued for design process, aesthetics, presentation and file production accuracy. Projects may become part of a professional portfolio.

**Prerequisite:** GRA 120 with a grade of C or better.

**GRA 221 Graphic Portfolio Design (1-2) 2 crs.**

Covers preparation of portfolio book and digital portfolio presentation. Focus is on the understanding of the professional portfolio needs and its presentation in the graphic design job market. Existing projects are critiqued for aesthetics, arrangement and presentation. Graphic resume preparation.

**Prerequisite:** GRA 120 with a grade of C or better.

**GRA 222 Package Design (2-2) 3 crs.**

Provides instruction on marketing and branding strategies and the design of packaging products. Studies packaging structural implications and substrates as well as design and production for 3D packaging such as folding cartons, flexible bags, labels and shrink sleeves. Covers barcoding and postal preparation and standards; works with supplied CAD structures. Emphasizes the creative visual design of 3D packaging and prototype creation; focuses on the file production through manufacturing requirements of the packaging industry.

**Prerequisite:** GRA 112 with grade of C or better.

**GRA 229 Page Layout (2-2) 3 crs.**

Explores advanced multi-page layout techniques in InDesign software. Projects focus on creating documents that follow industry standards and best practice for print graphics. Emphasis is placed on projects for print and preflighting techniques.

**Prerequisite:** GRA 102 with a grade of C or better.

**GRA 230 Prepress Production (2-2) 3 crs.**

Covers prepress procedures, including preflight, the understanding of manufacturing specs and press layouts. Emphasis on postscripting, ripping in a high end workflow, press imposition of ripped files, trapping needs of files, proofing and film/plate output. Proof and plate assessment and quality control. Color management instruction for inputs and outputs as well as PDF requirements for file exchange.

**Prerequisite:** GRA 102 with a grade of C or better.

**GRA 231 Variable Data Technologies (2-2) 3 crs.**

Covers selected topics utilizing digital print technologies. Studies variable data applications, data management and cross media web-to-print solutions for the graphic arts industry. Includes aspects of personalized and customized data and marketing through text and images for print, web, email and phone delivery. Covers application training and utilization through output and trends, VDP procedures and languages, postal specifications and bindery needs.

**Prerequisite:** GRA 229 with a grade of C or better, or consent of program coordinator.

**GRA 232 Digital Photography II (2-2) 3 crs.**

Explores advanced techniques and applications of digital image capture, concentrating on application uses and output. Focuses on different types of digital photography in the graphic arts arena, from product shots, food, fashion and location techniques. Investigates different equipment and color management in a commercial studio environment. A DSLR camera is required for this course.

**Prerequisite:** GRA 105 and GRA 131 with grades of C or better.

**GRA 299 Digital Photography Capstone (0-15) 3 crs.**

Provides the digital photography student with a broad educational experience through observation and participation in an industry environment. Students gain hands-on experience by being assigned to a commercial photography company. Students will be supervised by an industry professional and must report on every work session.

**Prerequisite:** Prior or concurrent enrollment in GRA 232 and consent of coordinator.

**HED Health Education**

**HED 200 Health (3-0) 3 crs.**

Provides an in-depth look at the physical, psychological, emotional, social, spiritual and environmental factors which contribute to the overall quality of a person's life. An investigation of how our lifestyle compares with other people in the world and the role and impact of the World Health Organization is emphasized. Mental health, nutrition, fitness, communicable and non-communicable diseases, killer diseases, drugs, human sexuality, family living (marriage, divorce, parenting), middle and old age issues and death and dying are some of the topics covered. Physical and psychological assessments are included in this class.

**HED 201 Drugs in Our Culture (3-0) 3 crs.**

Presents materials that examine the physiological, psychological and sociological aspects of drug use and abuse. Provides a potpourri of the facts, attitudes and opinions necessary to understand what drugs do, how they do it, who uses them and why. Discusses treatment modalities as well as legal and ethical issues in drug abuse.

**HED 202 Human Sexuality (3-0) 3 crs.**

Introduces students to the familial, sociological, biological and emotional implications of human sexuality. Emphasis is on exploring attitudes regarding sexual issues, clarifications of personal beliefs and development of healthy sexual behavior.

**HED 203 Community Health (3-0)** 3 crs.  
Focuses on the functions of community health organizations and the way they relate to individual health needs. Helps students to analyze and evaluate health promotion practices at the community level.

**HED 204 Women's Health (3-0)** 3 crs.  
Focuses on health issues as they pertain to women and the barriers unique to women in gaining a higher status. Includes physical, mental and spiritual aspects of health; women's anatomy and physiology; pregnancy, childbirth and infertility; violence against women; body image and eating disorders; and societal, historical and political influences of the global woman. Discusses the detection, treatment and prevention of illnesses in women.

**HED 206 Health and the Public (3-0)** 3 crs.  
Examines the historical and contemporary public health stories to begin to understand the contexts, systems, professions, tools and skills associated with the public health enterprise. Students will learn basic public health principles and will recognize an array of factors that shape both the health of individuals and populations. Students will have the opportunity to see how many different agents and agencies approach public health challenges and interact in the public health arena. This course is intended to stimulate social conscience and to expand thinking about conditions and circumstances that affect the health of individuals, communities and populations.

**HED 250 Topics in Health Education (1-0 to 3-0)** 1-3 crs.  
Provides students with an opportunity to examine different topics that fall under the health education field. Content will change from semester to semester. A course outline will be available for the topic prior to registration. This course may be taken twice up to a maximum of 6 credit hours.

## HIT Health Information Technology

**HIT 196 Current Procedural Terminology (CPT) Coding (2-2)** 3 crs.  
Introduces the student to the Current Procedural Terminology (CPT) coding system used in ambulatory care and services rendered by physicians. Emphasizes the six sections of the CPT Coding Manual. Uses the CPT Coding Manual to assign individual code numbers for the procedures and services performed by physicians.

**Prerequisite:** BIO 135, BIO 136 and HSC 112 with grades of C or better, and prior or concurrent enrollment in HIT 197 with a grade of C or better.

**HIT 197 International Classification of Diseases (ICD) Coding (2-2)** 3 crs.  
Introduces the student to the current International Classification of Diseases (ICD). ICD coding is designed for the classification of patient morbidity (sickness) and mortality (death) information for statistical purposes and for the indexing of hospital records by disease and operation for data storage and retrieval. Includes elements of coding techniques and guidelines, structured learning exercises and computer applications.

**Prerequisite:** BIO 135, BIO 136 and HSC 112 with grades of C or better.

**HIT 200 Introduction to Health Information Systems (3-0)** 3 crs.  
Familiarizes students with health care information systems used to support health care clinical and administrative functions. Emphasizes the understanding of sources of health care information, assessment of data quality, and current and emerging clinical information systems. Includes system implementation and support as well as security requirements for health information systems

**Prerequisite:** BIO 135 and HSC 112 with grades of C or better, and prior or concurrent enrollment in BIO 136 with a grade of C or better.

**HIT 215 Health Care Reimbursement (3-0)** 3 crs.  
Introduces students to the complex processes involved in reimbursement of health care services. Provides a basic understanding of the history and function of health insurance and public funding programs, managed care contracts, and how services are paid throughout the health care industry. Emphasizes the importance of revenue cycle management on the financial viability of health care organizations.

**Prerequisite:** HIT 197 with a grade of C or better.

**HIT 220 Health Care Information Management (3-0)** 3 crs.  
Familiarizes students with health care information systems including an introduction to the organizational structure, function and issues related to the health care environment. Emphasizes the structure and use of health information, health record data collection tools, data sources, storage and retrieval.

**Prerequisite:** HIT 200 with a grade of C or better.

**HIT 225 Electronic Health Records (3-1)** 3 crs.  
Provides the student with a thorough knowledge of the terminology involved with Electronic Health Record systems, and their practical use in medical settings. Introduces the student to different types of software used in electronic medical records and how information flows through the health record. Describes code sets, privacy and security, and how EHRs improve patient care.

**Prerequisite:** HIT 200 and HSC 112 with grades of C or better.

**HIT 230 Health Care Information Analysis (3-0)** 3 crs.  
Introduces students to the analysis of data and information generated by health services and public health organizations that document health events and epidemiological phenomena. Analytical applications will be introduced to improve health services delivery, enhance productivity, support planning efforts, evaluate health outcomes, and to monitor public health surveillance programs. Emphasizes data selection, interpretation, and presentation so students will be able to compile data associated with neoplasms, vital events, morbidity, clinical diagnoses, medical procedures, and other health measures maintained in selected indices, databases and registries.

**Prerequisite:** MTH 101, MTH 103 or higher with a grade of C or better, and prior or concurrent enrollment in HIT 200 with a grade of C or better.

**HIT 240 Health Information Technology Externship (1-10)** 3 crs.  
Provides supervised experience in an inpatient or outpatient health care office/facility to enhance the student's familiarity with health information technology applications. Includes weekly one-hour meetings throughout the semester to discuss and process the externship experience. NOTE: All required HIT coursework for the AAS degree must be completed or enrolled in prior to registering for an externship.

**Prerequisite:** HIT 220 with a grade of C or better.

**HIT 250 Law for Health Information (3-0)** 3 crs.  
Introduces the student to the legal and ethical issues involved in protecting the privacy, confidentiality and security of health information. Introduces the terminology used in the US legal system, and laws that pertain specifically to health information. Emphasizes the importance of protecting health information in all forms, electronic and paper.

**Prerequisite:** HIT 200 with a grade of C or better.

## HMS Human Services

**HMS 101 Introduction to Human Services (3-0)** 3 crs.  
Covers history and philosophy of human services; function and orientation of human services agencies and institutions; career opportunities and qualifications at various entry levels of human services employment. Includes opportunities for volunteer and/or shadowing experiences to help students better understand the human services arena.

**HMS 102 Helping Skills in Human Services (3-0) 3 crs.**  
 Studies practical aspects of helping strategies and interpersonal skills. Focuses on the use of techniques to improve communication, facilitate change, better evaluate relationships and resolve conflicts. Designed for persons in helping roles, professional and paraprofessional, or volunteers in Human Services and health care settings.  
**Prerequisite:** Prior or concurrent enrollment in CHW 101 or HMS 101 with a grade of C or better.

**HMS 112 Group Work in Human Services (3-0) 3 crs.**  
 Investigates group work theories, different types of groups, group dynamics, stages of group process, group facilitation, participant role/influences, and group counseling techniques. Cooperative learning and role playing are incorporated into the learning experience.  
**Prerequisite:** HMS 101 with a grade of C or better.

**HMS 121 Multiculturalism in the Helping Professions (3-0) 3 crs.**  
 Explores a variety of issues related to multicultural competency in Human Services practice. Concepts of race, ethnicity, culture, class, religion, gender, sexual orientation, ethnocentrism, oppression, and power will be explored. Practical application of acquired awareness, knowledge and skills to human services and health care settings will be stressed.  
**Prerequisite:** Prior or concurrent enrollment in HMS 101 and HMS 102, or CHW 101 and HMS 102 with grades of C or better.

**HMS 211 Crisis Intervention (3-0) 3 crs.**  
 Introduces techniques for beginning crisis counseling, including recognition of crisis, assessment of crises, and referral to the appropriate crisis agency. Special attention will be given to the process of intervention and to the recording of information regarding problems with alcohol and other drugs. Participants will implement a variety of crisis skills through an experiential format.  
**Prerequisite:** HMS 102 with a grade of C or better.

**HMS 221 Introduction to Gerontology (3-0) 3 crs.**  
 Introduces the field of social gerontology, utilizing a multidisciplinary approach to examine the basic biological, psychological and social theories of aging. Emphasizes the special needs and problems impacting the aged population. Examines historical, social, and cross-cultural issues in aging.  
**Prerequisite:** HMS 102 and prior or concurrent enrollment in PSY 228 with grades of C or better.

**HMS 232 Law and Ethics in Human Services (3-0) 3 crs.**  
 Studies interpretation and practice of legal/ethical responsibilities and liabilities encountered in providing and utilizing human services with special focus on privileged relationships, counseling, and confidentiality.  
**Prerequisite:** HMS 102 and HMS 121 with grades of C or better.

**HMS 241 Disabilities and Human Service (3-0) 3 crs.**  
 Introduces students to developmental, physical, and mental disabilities by exploring behavioral management programs, record maintenance, and facility and/or home maintenance techniques. Covers treatment history and present methods. Introduces students to working with an interdisciplinary team to provide care to a varied population.  
**Prerequisite:** HMS 102 with a grade of C or better.

**HMS 251 Family Issues and Interventions (3-0) 3 crs.**  
 Studies family dynamics with an emphasis on family preservation. Introduces various family theories, approaches and intervention strategies. Explores concepts related to intergenerational patterns of behavior and family traits. Introduces signs and symptoms of behaviors associated with abuse, domestic violence and neglect. Introduces basic family legal issues, ethics and reporting policies and procedure. Introduces the system and services of the local Department of Children and Family Services. Develops human service skills to service families. Explores range of services and resources available to families. Students will develop assessment skills with emphasis on relationships, parenting, abuse and/or neglect.  
**Prerequisite:** HMS 102 and prior or concurrent enrollment in PSY 228 with grades of C or better.

**HMS 290 Field Experience and Seminar (1-10) 4 crs.**  
 Offers observation and participation in the operations of human services agencies. Students will document 125 hours of supervised field study per semester and will attend a one-hour lecture per week.  
**Prerequisite:** HMS 211 with a grade of C or better.

**HSC Health Science Core**

**HSC 104 Health Care Technology and Informatics (1-2) 2 crs.**  
 Introduces student to informatics and the use of technology in health care delivery systems. This includes a review of hardware and software, and an in-depth look at hospital/health care-based user interfaces, data bases, telecommunications and networks, and healthcare-based information systems. Also includes research methods and patient education via computers.

**HSC 105 Introduction to Health Care Today (2-0) 2 crs.**  
 Familiarizes student to the health care delivery system including an introduction to the organization, structure, function and issues related to the health care environment. Emphasis placed on the importance of effective communication skills for health care professionals, team building, professionalism and diversity in the health care center.

**HSC 106 Health Occupations Career Observation (0.5-2) 1.5 crs.**  
 Provides students an opportunity to observe selected occupations within a health care setting. The student will attend 13 two-hour sessions under the supervision of the instructor and departmental specific mentors.  
**Prerequisite:** Prior or concurrent enrollment in HSC 105 with a grade of C or better.

**HSC 107 Basic Health Care Skills (0.5-1) 1 cr.**  
 Provides the knowledge and techniques required to perform basic clinical skills including asepsis, health history, vital signs, positioning and transfer, and oxygen therapy. Emphasizes clinical skills needed by health care workers to effectively work in a variety of health care settings. Upon completion of the course, the student will demonstrate safe and effective basic clinical skills.

**HSC 112 Medical Terminology (1-2) 2 crs.**  
 Emphasizes the origin and the basic structure of medical words, including prefixes, suffixes, word roots, combining forms and plurals. Offers pronunciation, spelling, and definition of medical terms based on the body systems approach. Emphasis on rendering a professional vocabulary required for work in the health care field.



**HSC 165 Basic Pharmacology (1-0)** 1 cr.  
Examines the mechanism of action of the major medication groups as they relate to the physiology and pathology of disease. Identifies examples in each major pharmacological category in order to understand pharmacological activity within each group. Addresses areas of drug action, clinical application, and adverse events for each medication discussed. Intended for students in allied health majors.

**Prerequisite:** Prior or concurrent enrollment in BIO 135, BIO 160 or HSC 112 with a grade of C or better.

**HSC 201 Advanced Pharmacology (2-0)** 2 crs.  
Builds on pharmacology content begun in previous coursework (either NUR 111 or HSC 165). Discusses pharmacokinetics and pharmacodynamics of the major classifications of medications at an advanced level in order to understand the pharmacological activity within each classification. Incorporates the principles of safe drug administration. NOTE: This course is designed for nursing students.

**Prerequisite:** BIO 135 and HSC 165, or BIO 160 and NUR 111, or HSC 112 and HSC 165 with grades of C or better.

**HSC 213 Legal and Ethical Issues in Health Care (2-0)** 2 crs.  
Introduces the legal and ethical issues that pertain to various health care delivery settings. Discusses how these issues impact the health care practitioner in a diverse culture. Practices and standards are discussed as they relate to professional behavior and ethical decision-making.

**HSC 225 Language and Health (3-0)** 3 crs.  
Provides a comprehensive introduction into the study and application of concepts and theories from Healthcare, Linguistics and Communication. Focuses on practical applications of effective communication strategies across diverse patient populations by dissecting and discussing case studies from different healthcare departments, and by analyzing actual provider-patient interactions to understand how specific language choices contribute to constructing meaning in health communication.

### **HSE High School Equivalency**

**HSE 021 Foundations in Social Studies (1-0 to 6-0)** 1-6 crs.  
Develops reading/literacy skills as students become aware of Social Studies content. Introduces and reinforces word recognition using decoding skills and strategies that include high frequency sight words, phonics, syllabication, and sentence structure foundations. Uses vocabulary acquisition, fluency instruction, and reading strategies to comprehend text and to progress toward HSE completion, college and career readiness, and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 022 Foundations in Science (1-0 to 6-0)** 1-6 crs.  
Develops reading/literacy skills as students become aware of Science content. Introduces and reinforces word recognition using decoding skills and strategies that include high frequency sight words, phonics, syllabication, and sentence structure foundations. Uses vocabulary acquisition, fluency instruction, and reading strategies to comprehend text and to progress toward High School Equivalency completion, college and career readiness, and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 023 Pre-HSE Social Studies Skills (1-0 to 6-0)** 1-6 crs.  
Improves reading/literacy skills with an emphasis on Social Studies content. Reinforces and reviews word recognition using decoding skills and strategies that include high frequency sight words, phonics, syllabication, and sentence structure foundations. Uses vocabulary acquisition, fluency instruction, and reading strategies to comprehend text and to progress toward HSE completion, college and career readiness, and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 024 Pre-HSE Science Skills (1-0 to 6-0)** 1-6 crs.  
Improves reading/literacy skills with an emphasis on Science content. Reinforces and reviews word recognition using decoding skills and strategies that include high frequency sight words, phonics, syllabication, and sentence structure foundations. Uses vocabulary acquisition, fluency instruction, and reading strategies to comprehend text and to progress toward HSE completion, college and career readiness, and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 025 HSE Social Studies/Science Skills (1-0 to 6-0)** 1-6 crs.  
Reviews specific vocabulary and reading strategies that facilitate comprehension, application, analysis and evaluation levels of cognitive skills within Social Studies, United States/Illinois Constitution, and Science content. Prepares the student for the High School Equivalency Social Studies and Science exams along with the Illinois mandated U.S./Illinois Constitution test. College and career readiness along with functional life skills are also developed. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 026 HSE Social Studies/Science Topics (1-0 to 6-0)** 1-6 crs.  
Continues to review and develop specific vocabulary, reading strategies, and content area knowledge that facilitate comprehension, application, analysis and evaluation levels of cognition within Social Studies, United States/Illinois Constitution, and Science content. Prepares the student for the High School Equivalency Social Studies and Science exams along with the Illinois mandated U.S./Illinois Constitution test. College and career readiness along with functional life skills are also developed. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 031 Language Arts Foundations (1-0 to 6-0)** 1-6 crs.  
Presents basic English grammar and usage, capitalization, punctuation, spelling, vocabulary, and dictionary use. Develops skill in producing short, clear writing examples. Uses technology as a tool to learn, take exams and produce work. Develops reading, writing, and speaking skills to progress toward High School Equivalency completion, college and career readiness and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 032 Language Arts Essentials (1-0 to 6-0)** 1-6 crs.  
Develops skill in producing short, clear writing examples. Uses basic English grammar and usage, capitalization and punctuation. Uses technology as a tool to learn, take exams and produce work. Develops reading, writing, and speaking skills to progress toward High School Equivalency completion, college and career readiness and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 033 Pre-HSE Language Arts Skills (1-0 to 6-0) 1-6 crs.**  
 Develops reading, writing, and speaking skills, including literature and composition. Reinforces basic English grammar and usage, spelling rules, vocabulary/dictionary use, capitalization, punctuation, and sentence/paragraph development. Uses technology as a tool to learn, take exams and produce work. Prepares students to progress toward High School Equivalency completion, college and career readiness, and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 034 Pre-HSE Language Arts Topics (1-0 to 6-0) 1-6 crs.**  
 Introduces skills of application, analysis, and evaluation. Reinforces basic English grammar and usage, spelling rules, vocabulary/dictionary use, capitalization, punctuation, and sentence/paragraph development. Uses technology as a tool to learn, take exams and produce work. Prepares students to progress toward High School Equivalency completion, college and career readiness, and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 035 HSE Language Arts (1-0 to 6-0) 1-6 crs.**  
 Reviews grammar and usage, sentence structure and types, style, logic, punctuation, and spelling. Develops reading/writing/speaking skills, including literature and composition. Reviews literary types, terms, techniques, interpretation, and commentary. Uses technology as a tool to learn, take exams and produce work. Prepares students toward High School Equivalency completion and college and career readiness. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 036 HSE Language Arts Applications (1-0 to 6-0) 1-6 crs.**  
 Continue to develop reading/writing/speaking skills, including composition. Read multi-paragraph articles, identify argument and evidence used to support author's argument, and assess argument's validity. Produce writing samples that require the writer to take a position based on reading and defend it with appropriate evidence, detail and argumentative strategies. Use technology as a tool to learn, take exams and produce work. Prepares students toward High School Equivalency completion and college and career readiness. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 041 Math Foundations (1-0 to 6-0) 1-6 crs.**  
 Introduces basic arithmetic skills including the fundamental operations with whole numbers, decimals, fractions, and mixed numbers; verbal reasoning; ratio, percent and probability; data analysis; algebra; geometry; and measurement systems. Prepares the student for Pre-High School Equivalency Mathematical Skills along with career readiness and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 042 Math Essentials (1-0 to 6-0) 1-6 crs.**  
 Introduces basic arithmetic skills including the fundamental operations with whole numbers, decimals, fractions, and mixed numbers; verbal reasoning; ratio, percent and probability; data analysis; algebra; geometry; and measurement systems. Prepares the student for Pre-High School Equivalency Mathematical Skills along with career readiness and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 043 Pre-HSE Math Skills (1-0 to 6-0) 1-6 crs.**  
 Reinforces arithmetic skills including the all operations with decimals, fractions, mixed numbers; verbal reasoning; and measurement systems. Introduces probability, percent, ratio and proportion, algebra, geometry and data analysis. Introduces comprehension, application, analysis, and evaluation levels of cognitive skills along with using technology to learn and take exams. Prepares the student for Pre-High School Equivalency Mathematical Skills along with career readiness and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 044 Pre-HSE Math Topics (1-0 to 6-0) 1-6 crs.**  
 Reinforces arithmetic skills including all operations with decimals, fractions, mixed numbers; verbal reasoning; and measurement systems. Introduces probability, percent, ratio and proportion, algebra, geometry and data analysis. Introduces comprehension, application, analysis, and evaluation levels of cognitive skills along with using technology to learn and take exams. Prepares the student for Pre-High School Equivalency Mathematical Skills along with career readiness and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 045 HSE Math (1-0 to 6-0) 1-6 crs.**  
 Reviews arithmetic skills including decimals, fractions, verbal reasoning, measurement, probability, percent, ratio and proportion, and data analysis. Discusses algebra and geometry concepts, multi-step problem solving, using formulas and numeration statistics. Emphasizes review of comprehension, application, analysis, and evaluation of cognitive skills. Prepares the student for the High School Equivalency Mathematics Test, college and career readiness, and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HSE 046 HSE Math Applications (1-0 to 6-0) 1-6 crs.**  
 Reviews arithmetic skills including decimals, fractions, verbal reasoning, measurement, probability, percent, ratio and proportion, and data analysis. Discusses algebra and geometry concepts, multi-step problem solving, using formulas and numeration statistics. Emphasizes review of comprehension, application, analysis, and evaluation of cognitive skills. Prepares the student for the High School Equivalency Mathematics Test, college and career readiness, and functional life skills. Eligible Adult Education students must complete orientation and standardized testing requirements before enrolling. Carries no transfer credit.

**HST History**

**HST 105 Great Ideas of World Civilizations (3-0) 3 crs.**  
 Introduces students to a selection of formative historical and contemporary texts in a variety of disciplines, including philosophy, the social sciences, literature, gender/multicultural studies, and the history of science. (Also listed as HUM 105. Credit will be given for either HST 105 or HUM 105, but not both.) IAI H9 900

**HST 111 The American Experience to 1877 (3-0) 3 crs.**  
 Survey of the American experience through the pre-revolutionary period, the expansion westward and the Civil War. Special stress is placed upon the social, economic, cultural, political and constitutional development of the United States. IAI S2 900

**HST 112 The American Experience Since 1877 (3-0) 3 crs.**  
 Surveys the end of Reconstruction to the present, with primary stress on political and economic development. Also includes social, intellectual, and cultural phases, expanded role of government in national affairs and the participation of the United States in international relations. IAI S2 901

- HST 121 History of Latin America (3-0)** 3 crs.  
Surveys the political and constitutional history of the principal Latin American nations. The course will cover movements leading to independence and social and economic events which are pertinent to relationships with the United States. IAI S2 910N
- HST 141 History of Western Civilization to 1650 (4-0)** 4 crs.  
Stresses political, social, cultural, economic, and technological developments from prehistoric times and concludes with the last manifestation of essentially medieval ideology, i.e., the Protestant Reformation. IAI S2 902
- HST 142 History of Western Civilization Since 1650 (4-0)** 4 crs.  
Continues HST 141. Commences with the emergence of modern times, i.e., the development of royal absolutism and the beginnings of the modern nation state and concludes with the 20th century and the modern world. IAI S2 903
- HST 151 History of England Norman Conquest to 1600 (3-0)** 3 crs.  
Surveys the social, cultural, economic, political, and religious history of England from the Norman Conquest through the age of Elizabeth I.
- HST 152 History of England 1600 to Present (3-0)** 3 crs.  
Surveys the social, cultural, imperial, economic, and political history of England from the Stuart Dynasty through the present era.
- HST 153 British Culture and Society (3-0)** 3 crs.  
Surveys the culture and society of England from the Norman conquest to the present.
- HST 202 Topics in History (1-0 to 3-0)** 1-3 crs.  
Examines selected eras or topics in the various fields of history. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A syllabus and/or course outline containing additional information will be available with other pre-registration materials each time the course is offered. Experience or interest in history is recommended, but not required. This course may be taken from one to three credit hours, to a maximum of nine credit hours.
- HST 210 Women--the American Experience (3-0)** 3 crs.  
Studies history of the status, roles, and contributions of women in America, and a survey of the attitudes and movements that have affected the lives of women in America.
- HST 212 Recent American History, 1945-present (3-0)** 3 crs.  
Provides students with a comprehensive analysis of the critical period 1945 to the present in American history. Incorporates politics and culture of the Cold War, the revival of liberalism, the Civil Rights movement, the rise of the New Left in the 60s, the Vietnam War, the counterculture, Watergate, the personalization of political activism in the 70s, the women's movement, the resurgence of conservatism, the Reagan presidency, the Bush era, the Clinton years, return of the Republicans, 9/11, war in the Middle East, the economic downturn, Obama 2008, and the 2012 election. Emphasizes social history and cultural trends as well as political and economic history.
- HST 214 African-American History (3-0)** 3 crs.  
Studies African-Americans from African slave trade through slavery, reconstruction, years of neglect and civil rights revolution in the United States and their contributions to American culture.
- HST 219 Illinois and Local History (3-0)** 3 crs.  
Focuses upon Illinois from its prehistory to the present with special attention to the local setting. Explores the impact of the state's geography upon its history and investigates the contributions of different groups—African, American, European, Native American, male and female—in the economic, social, political, and literary development of Illinois. Considers the ways in which the history of this state illustrates, amplifies and explains the larger history of the United States.
- HST 231 History of the Middle East to 1453 (3-0)** 3 crs.  
Surveys the Ancient Near East and Middle East from its origins in Ancient Summer up to 1453. Emphasis will be placed on social, political, economic, religious and military institutions. The process of change and broad continuities will be examined in relationship to the historical evolution and growth of the region. IAI S2 918N
- HST 232 History of the Middle East 1453 to the Present (3-0)** 3 crs.  
Surveys the history of the Middle East from 1453 to the present. Emphasis is placed on social, political, economic, religious, and military institutions that shape the region. The establishment of colonial rule is highlighted along with the struggle for independence, modernization and development. IAI S2 919N
- HST 241 History of China: Earliest Time Through Ming Dynasty (3-0)** 3 crs.  
Surveys the history of China from prehistory to the end of the Ming Dynasty. Major emphasis is placed on the evolution and growth of the Imperial system and forces that shaped its continuation and growth. IAI S2 914N
- HST 242 History of China: From the Ching Dynasty to the Present (3-0)** 3 crs.  
Surveys the history of China from 1644, the Ching Dynasty, to the present. The content will stress the evolution of China from a period of strength and unity to one of disunity and change during the revolutionary times of 1911-1949. Special emphasis will be placed on the establishment of the Communist government in 1949 to the present. Economic modernization, role of foreigners and cultural advancements will also be highlighted. IAI S2 915N
- HST 243 The Far East in the Modern World (3-0)** 3 crs.  
Studies history of East Asia since 1800. The traditional cultures of China and Japan, the Western impact and the Asian response will be covered. IAI S2 909N
- HST 245 The World Since 1945 (3-0)** 3 crs.  
Surveys the history of the world from 1945 to the present with major emphasis on historical issues and events that have global impact. IAI S2 913N
- HST 261 American Civil War 1848-1865 (3-0)** 3 crs.  
Focuses on the causes, events and immediate outcomes of the American Civil War during the period of 1848-1865. Political, military and social history is presented so that students receive a comprehensive understanding of this seminal event in American history.
- HST 270 History of Rome (3-0)** 3 crs.  
Surveys Roman history from the time of the Roman monarchy through the reign of Constantine. Emphasizes the origins and history of the great Roman Legions. Includes references to works of Latin literature including, Tacitus, Suetonius, Sallust, Catullus, Ovid, Virgil and Horace. Covers Roman pre-history, the Roman Republic, the end of the Republic and the early and late Roman empire. Discusses prominent Roman citizens such as Marcus, Sulla, Pompey, Gracchi, Caesar and Augustus.
- HST 281 World War I (3-0)** 3 crs.  
Examines the causes, impact, outcomes and legacy of the Great War, the first modern war since the Industrial Revolution. Emphasizes current and past interpretations of this conflict. Highlights the experiences of the people, societies and countries/nation-states that participated in this first "total" war. Considers how this conflict changed the 20th century.

**HST 282 World War II (3-0)** 3 crs.  
Surveys the history of World War II, the most destructive conflict of the 20th century. Covers major military operations (strategy and tactics) with an emphasis on diplomacy, doctrine and conflicts over resources. Examines the origins of the war in Europe and the Pacific and details the time period, 1919-1939, Pearl Harbor, the homefront, American participation in Europe and the Pacific, new technologies, the Holocaust, the Atomic bomb, the end of the war, and the outcomes and impact of the war on the U.S. and the world beyond 1945.

## HUM Humanities

**HUM 101 Ancient Through the Medieval West (3-0)** 3 crs.  
Explores architecture, art, history, literature, music, philosophy and the theatre of the Western tradition from Prehistory through the Medieval era. May include a special focus; consult the course schedule for specific topics. NOTE: HUM 101 and HUM 102 need not be taken in sequence. IAI HF 902

**HUM 102 Renaissance Through the Modern West (3-0)** 3 crs.  
Explores architecture, art, history, literature, music, philosophy, and the theatre of the Western world from the Renaissance to the present. May include a special focus; consult the course schedule. IAI HF 903

**HUM 104 Introduction to Middle Eastern Civilizations (3-0)** 3 crs.  
Examines the cultural structures and the literary, visual, and performing arts of the various societies of the Middle East. Examines and compares the great contributions these cultures have made in the various arts as living artifacts to both the present day Middle East and to other cultures including those of the West. IAI HF 904N

**HUM 105 Great Ideas of World Civilizations (3-0)** 3 crs.  
Introduces students to a selection of formative historical and contemporary texts in a variety of disciplines, including philosophy, the social sciences, literature, gender/multicultural studies and the history of science. (Also listed as HST 105. Credit will be given for either HUM 105 or HST 105, but not both.) IAI H9 900

**HUM 106 The Cultures of Asia (3-0)** 3 crs.  
Examines the arts of Asian cultures from ancient times to the present. Studies examples of the visual arts, music, dance, literature, world views, and religious traditions from selected civilizations in Asia, south of Russia, excluding the countries of the Middle East. IAI HF 904N

**HUM 107 The Cultures of Africa (3-0)** 3 crs.  
Examines the arts of African cultures from ancient times to the present. Studies examples of the visual arts, music, dance, literature, world views, and religious traditions from selected civilizations in North Africa, the Sahel, South Africa, Central and East Africa, and West Africa, excluding countries associated with the Middle East. IAI HF 904N

**HUM 110 Women and Creativity (3-0)** 3 crs.  
Explores the nature of female creativeness, focusing on women in the traditionally male arenas of art and literature and on areas in which the female creative impulse manifests itself under other names such as the shaping of social attitudes, domestic arts and religious experiences. IAI HF 907D

**HUM 115 International & Regional Studies in Humanities (1-0 to 4-0)** 1-4 crs.

Students travel with faculty to international or regional locations which may vary from year to year to study the humanities. May emphasize the literature, language, philosophy, or humane arts of the locale visited. Presentation by onsite individualized study, lectures, field trips. Classes held on campus prior to and following the off-campus learning experience. Travel expenses are paid for by the student. One Credit: Students must attend all classes and field trips, submit a daily log covering one week of travel and write a personal essay of at least five typewritten pages. Two Credits: Students must attend all classes and field trips, submit a log covering one-two weeks of travel and write a research paper of at least eight typewritten pages, plus bibliography and footnotes. Three Credits: Students must attend all classes and field trips, submit a log covering three weeks of travel and write a research paper of at least 10 typewritten pages, plus bibliography and footnotes. Four Credits: Students must attend all classes and field trips, submit a log covering four weeks of travel and write a research paper of at least 12 typewritten pages, plus bibliography and footnotes.

**HUM 120 Classical Mythology (3-0)** 3 crs.  
Studies the myths of Greece and Rome. Focuses on the stories of gods and heroes in classical literature and art. Considers the influence of classical mythology on later Western culture. IAI H9 901

**HUM 125 World Mythology (3-0)** 3 crs.  
Studies world mythic themes and patterns, excluding those of Greece and Rome. Focuses on archetypal figures/situations, symbolism, and figurative language found in creation stories, heroic legends and/or other traditional narratives. May include a special focus; consult the schedule. IAI H9 901

## IDS Independent Study

**IDS 290 Independent Study (1-0 to 4-0)** 1-4 crs.  
Designed to permit the student to pursue a course of study not typically available under traditional course structure. The student will contract with the appropriate faculty member for the objectives to be accomplished in the course. May be repeated up to a maximum of four credit hours.  
**Prerequisite:** Sophomore standing, C average or consent of instructor.

## IND Interior Design

**IND 100 Theory and Fundamentals of Design (1-2)** 2 crs.  
Introduces students to theoretical principles and nomenclature of design. Studies theories pertaining to elements and principles of design, color theory, psychology and color phenomenology as it relates to interior design. Studies human environment, proxemics and spatial behaviors. Examines universal design, designing for specific cultures and genders as well as other topical subjects. Covers the interior design profession, professional organizations and career employment.  
**Recommended Corequisite:** IND 101.

**IND 101 Interior Design Studio I (2-2)** 3 crs.  
Studies interior design room arrangement and furniture selection. Investigates the elements and principles of design as they relate to interiors. Studies aesthetic aspects of interior design. Develops interior projects using space planning, furniture selection, the development of furniture elevations, and presentation techniques. (NOTE: Students will need to purchase drafting board and kit in addition to textbooks. Expense estimate may exceed \$300.)  
**Prerequisite:** Prior or concurrent enrollment in IND 100.

- IND 102 Interior Design Studio II (2-2)** 3 crs.  
Continues the study of interior space planning and furniture selection as it relates to a functional and aesthetic interior. Investigates the use of fabric, finishes, color, and texture to complement the interior. Explores aesthetic application of color in interior design.  
**Prerequisite:** IND 101 and IND 106 with grades of C or better.  
**Recommended Corequisite:** IND 103.
- IND 103 History of Furniture and Interior Architecture (3-0)** 3 crs.  
Surveys furniture, design motifs and structures from antiquity to the present. Studies authentic designs and their relationship to contemporary applications. Examines the basis for determining the taste level and quality of reproductions and adaptations to the market today.
- IND 106 Materials and Sources (3-0)** 3 crs.  
Studies the construction and finishing of materials other than those of a structural nature, including limitations, quality control, application, uses, installation methods, and quantity calculations. Examines sources available to the designer.
- IND 107 Interior Perspective and Rendering (2-2)** 3 crs.  
Studies drawing and sketching methods of furniture and interior spaces. Develops drawing techniques for interior perspective views of buildings. Explores the use of axonometric drawing and the use of various medias to present the three-dimensional delineation of interior design. Examines balance and proportions of interior items within a three-dimensional space. Uses drawing techniques and color to define light and shadow, textures, material characteristics.  
**Prerequisite:** ART 121, IND 100 and IND 101 with grades of C or better.
- IND 110 Problem Solving/Design Communication (1-2)** 2 crs.  
Introduces the process of visual communication for interior designers. Identifies interior and architectural challenges and examines the design process of problem-solving through space analysis and planning. Utilizes collaborative methods to develop appropriate design strategies and solutions. Applies research and the use of elements and principles of design to skillfully manipulate interior spaces. Utilizes conceptual sketching and oral presentation to communicate design solutions.  
**Prerequisite:** ARC 116, IND 100 and IND 101 with grades of C or better.
- IND 114 Codes for Interior Designers (1-2)** 2 crs.  
Examines how interior building codes, governmental standards and federal regulations affect and are applied to interior design. References BOCA, CABO and various accessibility requirements including the Americans with Disabilities Act.  
**Prerequisite:** IND 101 with a grade of C or better.
- IND 116 Interior Detail/Construction Drawing (2-2)** 3 crs.  
Studies the methods and materials of interior construction and the graphic methods of communicating this information. Practices fundamental drafting conventions and develops drawing skills necessary for the production of working drawings such as floor plans, elevations, sections, finish schedules, reflected ceiling plans, and details. Discusses methods of electrical, plumbing, and HVAC distribution.  
**Prerequisite:** ARC 116, IND 100 and IND 101 with grades of C or better.
- IND 203 3-D Design Studio (2-2)** 3 crs.  
Studies advanced problems in three-dimensional interior design which concentrate on the development of relationships of interior furnishings, walls, floors and ceilings into a unified design. Applies principles and elements of design theory within a three-dimensional volume of space.  
**Prerequisite:** IND 102, IND 107, IND 114 and IND 116 with grades of C or better.
- IND 206 Architectural Lighting (3-1)** 3 crs.  
Examines artificial and natural lighting in interior design. Considers environmental comfort, effects on colors and information required for selection of lamps and fixtures. Acquaints students with the basic calculation methods as they relate to the lighting design process.  
**Prerequisite:** IND 101 with a grade of C or better.
- IND 207 Interior Design Internship (1-10)** 3 crs.  
Provides an opportunity for selected students who meet the prerequisite requirements to work with professionals in approved residential and contract design firms, retail stores, wholesale stores and showrooms specializing in interior design and related products. Students are exposed to various aspects of the interior design field and must present a report about their experience. Recommended preparation: ENG 101 or ESL coursework, or testing equivalency.  
**Prerequisite:** IND 203, IND 206 and IND 230 with grades of C or better; or consent of program coordinator.
- IND 209 Contract Design Studio (2-2)** 3 crs.  
Applies interior design skills and disabled access to contract interior projects, including floor plans, elevations or perspectives, cabinet drawings, lighting plans, selection of contract furnishings and finishes. Projects may include office spaces, restaurants, and other public buildings.  
**Prerequisite:** ARC 116, IND 116, IND 203, IND 206, and IND 230 with grades of C or better.
- IND 211 Professional Practices for Interior Design (3-0)** 3 crs.  
Examines the business principles required for a successful interior design practice, including establishing an interior design practice, design project business issues, billing, writing client contracts, interviewing and job opportunities.  
**Prerequisite:** IND 101 with a grade of C or better.
- IND 215 Topics in Interior Design (0.5-0 to 3-0)** 0.5-3 crs.  
Studies selected problems or topics in interior design. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated two times to a maximum of three credit hours.
- IND 217 Advanced Sketching and Perspective Drawing (1-2)** 2 crs.  
Reviews the development of two-point, mechanical perspective drawing. Studies freehand drawing and sketching methods of interior and exterior spaces. Develops drawing techniques for interior perspective views of buildings. Explores the use of various media to define light, shadows, textures and material characteristics.  
**Prerequisite:** ART 121 and IND 107 with grades of C or better.
- IND 220 CAD Studio (2-2)** 3 crs.  
Covers advanced CAD techniques for two-dimensional space planning and interior elevations. Introduces 3-dimensional CAD and 3-D sketching to develop perspectives and walk-throughs of interior spaces. Emphasizes development of computer graphics to augment and represent interior spaces.  
**Prerequisite:** ARC 116 with a grade of C or better.
- IND 230 Kitchen Design Studio (2-2)** 3 crs.  
Examines the technical aspects and accessibility issues of designing kitchens. Practices fundamental drafting conventions including lettering, line work, dimensioning and symbol usage. Develops drawing for the kitchen including floor plans, electrical and lighting plans, elevations, and cabinet sections using NKBA guidelines and graphic presentation standards.  
**Prerequisite:** IND 102, IND 114 and IND 116 with grades of C or better.

**IND 232 Kitchen and Bath CAD Studio (2-2) 3 crs.**

Covers an introduction to kitchen and bath industry software techniques for two-dimensional space planning and interior elevations. Introduces 3-dimensional CAD to develop perspectives and walk-through of interior spaces. Emphasis is on the development of computer graphics to augment and represent kitchens, baths and other interior space.

**IND 233 Bathroom Design Studio (1-2) 2 crs.**

Examines the technical aspects and accessibility issues of designing bathrooms. Practices fundamental drafting conventions including lettering, line work, dimensioning and symbol usage. Develops drawing for the bathroom including floor plans, electrical and lighting plans, elevations and cabinet sections using NKBA guidelines and graphic presentation standards.

**Prerequisite:** IND 102, IND 114 and IND 116 with grades of C or better.

**IND 250 Portfolio Development (1-1) 1 cr.**

Prepares students to enter the job market when completing this capstone course. Develops a professional presentation portfolio utilizing printed and multimedia applications. Explores, examines and executes various presentation options. Discusses writing and designing a resume, cover letter and interviewing techniques. Emphasizes organizing a strong body of work focused on a specific area of expertise dictated by the students' individual career goals.

**Prerequisite:** ARC 116, IND 203, and IND 230 with grades of C or better OR ARC 116 AND ARC 110 or ARC 213 with grades of C or better, or consent of program coordinator.

**IND 281 Environmental Design Studio (2-2) 3 crs.**

Explores building systems and their impact on the environment. Indoor air quality, thermal control, lighting, acoustic and water systems will be studied including solar power, wind power and other sustainable design energy alternatives. Applies these systems to various sustainable design projects and practices. Investigates LEED certification and other legislative issues. Studies the physical and psychological implications of environmental stress, crowding and institutional living and applies them to projects.

**Prerequisite:** IND 101 with a grade of C or better.

**INS Insurance****INS 110 Insurance Fundamentals (3-0) 3 crs.**

Defines the insurance mechanism, identifies common types of property-casualty insurance, and explains how insurance benefits society. Introduces the core functions of insurance organizations: marketing, underwriting and claims. Discusses insurance policy structure, basic type of policy provisions and a simple method for analyzing policies. Reviews career options in the insurance industry.

**INS 120 Property and Liability Insurance Principles (3-0) 3 crs.**

Presents the basic principles of insurance, provides an introduction to insurance regulation, financial performance, marketing techniques, underwriting, claims, risk management, loss exposure and insurance policies. Satisfies the requirements for The Institutes AINS 21 examination within the Associate in General Insurance Path A Certification.

**INS 220 Personal Insurance (3-0) 3 crs.**

Offers an understanding of property and liability loss exposures faced by most individuals and families, and analyzes the types of insurance coverage that can be used for treating those exposures such as personal liability, inland marine, auto, life, health, and government programs. Satisfies the requirements for The Institutes AINS 22 examination within the Associate in General Insurance Path A Certification.

**Prerequisite:** INS 120 or AINS 21 Certification.

**INS 240 Commercial Insurance (3-0) 3 crs.**

Analyzes commercial coverage including property, business income, inland and ocean marine, crime, equipment breakdown, general liability, auto, workers compensation, and package policies. Satisfies the requirements for The Institutes AINS 23 examination within the Associate in General Insurance Path A Certification.

**Prerequisite:** INS 120 or AINS 21 Certification.

**ITP Sign Language Interpreting****ITP 101 Introduction to Interpreting (3-0) 3 crs.**

Provides an overview of the field of interpreting and highlights key historical developments within the profession. Introduces terminology, service models, and cognitive processes necessary for interpreting. Examines the communication process and select variables across cultures. Compares and contrasts values and ethics, and introduces the Registry of Interpreters for the Deaf Code of Professional Conduct. Addresses role and responsibilities of an interpreter, and presents demand-control theory with an emphasis on environmental demands.

**Prerequisite:** SGN 202 with a grade of C or better, or consent of program coordinator.

**ITP 105 Vocabulary Development for Interpreters: English (1-0) 1 cr.**

Focuses on increasing vocabulary and developing English language skills. Emphasizes one or more of the following: subject-specific terminology; idioms, metaphors and figures of speech; vocabulary pertaining to current local, national and world events. Students will also analyze meaning of lexical items in order to produce equivalents based on meaning versus form. This course is designed for interpreting students. May be repeated for a total of two credit hours.

**Prerequisite:** ITP 101 and SGN 205 with grades of B or better, or consent of program coordinator.

**ITP 106 Vocabulary Development for Interpreters: American Sign Language (1-0) 1 cr.**

Focuses on increasing vocabulary and improving language skills in American Sign Language. Emphasizes one or more of the following: subject-specific terminology; idioms, metaphors and figures of speech; vocabulary pertaining to current local, national and world events. This course is designed for interpreting students. May be repeated up to a maximum of two credit hours.

**Prerequisite:** ITP 101 and SGN 205 with grades of B or better, or consent of program coordinator.

**ITP 110 Consecutive Interpreting: English to ASL (3-0) 3 crs.**

Begins with analyzing English texts, translating them from English into American Sign Language, and culminates with interpreting consecutively. Introduces note-taking skills and completion of linguistic patterns. Emphasizes component skills necessary for interpreting including: listening, remembering, chunking and identifying main ideas. Identifies settings where consecutive interpreting may be used.

**Prerequisite:** ITP 101 and SGN 205 with grades of B or better, or consent of program coordinator.

**ITP 111 Consecutive Interpreting: ASL to English (3-0) 3 crs.**

Begins with analyzing texts in American Sign Language, translating them into English, and culminates with interpreting consecutively. Emphasizes comprehension and composition skills. Highlights component skills necessary for interpreting including: remembering, visualizing, paraphrasing and completing linguistic patterns. Introduces select cognitive process models.

Reviews demand-control theory and examines paralinguistic challenges encountered while interpreting from ASL to English.

**Prerequisite:** ITP 101 and SGN 205 with grades of B or better, or consent of program coordinator.

**ITP 120 Simultaneous Interpreting: English to ASL I (3-0) 3 crs.**  
 Moves from consecutive interpreting and introduces simultaneous interpreting from English to American Sign Language with less time between receiving the source message and delivering the target. Further develops skills addressed and practiced in ITP 110, including message reformulation and comparison of target message to source for equivalence. Introduces expansion techniques and focuses on vocabulary development. Further analyzes cognitive process models.

**Prerequisite:** ITP 110 with a grade of C or better, or consent of program coordinator.

**ITP 121 Simultaneous Interpreting: ASL to English I (3-0) 3 crs.**

Moves from consecutive interpreting and introduces simultaneous interpreting from American Sign Language to English with less time between receiving the source message and rendering the target. Further develops and refines skills introduced in ITP 111. Emphasizes register variation. Integrates error analysis and self-correction techniques. Introduces the teaming process and select partnering techniques. Provides an overview of select interpreting settings.

**Prerequisite:** ITP 111 with a grade of C or better, or consent of program coordinator.

**ITP 200 Transliterating and the Educational Setting (3-0) 3 crs.**

Focuses on the development of transliterating skills with monologic and dialogic texts. Students render rehearsed and spontaneous target messages, from spoken to signed English and from signed to spoken English. Emphasizes role and responsibilities of the practitioner in educational settings. Highlights soft skills necessary for this setting and further develops assignment preparation skills. Addresses demand-control theory and highlights demands encountered within the educational setting and possible controls.

**Prerequisite:** ITP 110 and ITP 111 with grades of C or better, or consent of program coordinator.

**ITP 201 Topics in Interpreting (1-0 to 4-0) 1-4 crs.**

Presents selected topics in interpreting. The exact content and instructional methodology will vary from semester to semester depending upon the material and topics to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated two times to a maximum of four credit hours.

**Prerequisite:** Consent of program coordinator.

**ITP 211 Simultaneous Interpreting: ASL to English II (3-0) 3 crs.**

Further develops and refines skills presented in ITP 121. Focuses on interpreting increasingly complex source texts. Emphasizes process management skills and analysis of target message accuracy and acceptability. Addresses cross-cultural equivalency and reviews demand-control theory and highlights paralinguistic challenges encountered while interpreting from American Sign Language to English. Examines select process models.

**Prerequisite:** ITP 121 with a grade of C or better, or consent of program coordinator.

**ITP 215 Interpreting: Dialogic Discourse (4-0) 4 crs.**

Provides instruction and practice in the development of dialogic interpreting and transliterating skills in live, unrehearsed situations. Examines turn-taking, cross-cultural behaviors and discourse management skills. Students apply professional ethics and standards of behavior to real-life situations. Students analyze work to determine success of message equivalency. Introduces setting-specific vocabulary, protocol and logistics. Further addresses demand-control theory and examines interpersonal demands and various controls.

**Prerequisite:** ITP 211 and ITP 216 with grades of C or better, or consent of program coordinator.

**ITP 216 Simultaneous Interpreting: English to ASL II (3-0) 3 crs.**

Reinforces and refines skills addressed in ITP 120, emphasizes developing English to American Sign Language interpreting skills in increasingly complex texts. Allows for practice and analysis of interpreting live presentations. Introduces assignment preparation strategies, public speaking skills, and addresses composure and demeanor. Emphasizes working with a partner and peer feedback. Further examines demand-control theory highlighting paralinguistic demands encountered while interpreting from English to ASL. Provides an overview of select interpreting settings.

**Prerequisite:** ITP 120 with a grade of C or better, or consent of program coordinator.

**ITP 220 Interpreting Practicum (3-10) 5 crs.**

Provides opportunities for students to apply their knowledge and skills in a variety of interpreting settings which may include business, education, performing arts, religious and community service. Classroom sessions allow for discussion of ethical issues and business practices. Students will also begin their preparation for state and national credentialing examinations.

**Prerequisite:** ITP 215 with a grade C or better, and consent of program coordinator.

## JPN Japanese

**JPN 101 Elementary Japanese I (4-0) 4 crs.**

Introduces the language skills of pronunciation and useful expressions, listening, speech patterns, syllabary reading and writing, basic vocabulary and grammar. Cultural and sociolinguistic orientation.

**JPN 102 Elementary Japanese II (4-0) 4 crs.**

Continues JPN 101. Skill developments in simple, everyday conversation and contemporary and idiomatic expressions; continued mastery of beginning grammar, reading and writing, and more vocabulary. Orientation in verbal and non-verbal skills and simple composition.

**Prerequisite:** JPN 101 with a grade of C or better, or consent of instructor.

**JPN 201 Intermediate Japanese I (4-0) 4 crs.**

Continues JPN 102. Emphasis on more complex conversation and advanced grammatical components; continued reading and writing. Emphasis on advanced composition.

**Prerequisite:** JPN 102 with a grade of C or better, or consent of instructor.

**JPN 202 Intermediate Japanese II (4-0) 4 crs.**

Continues JPN 201. Accuracy and ease in more complex conversation; advanced study of reading and writing. Study of more complex syntax and composition. IAI H1 900

**Prerequisite:** JPN 201 (Intermediate Japanese I) with a grade of C or better, or consent of instructor.

**JPN 205 Japanese Intensive Oral Practice (3-0) 3 crs.**

Develops oral facility with the Japanese language using specially designed exercises in pronunciation, stress, and rhythm. Discusses individual readings of modern Japanese works in class. Assigns written and oral compositions based on readings. Helps students to bridge the gap between the intermediate and advanced levels. Develops the ability to use the Japanese language with fluency and accuracy of expression that is achieved by extensive oral conversation in class.

**Prerequisite:** JPN 202 with a grade of C or better, or consent of instructor.

## KIN Kinesiology

### **KIN 100 Physical Fitness I (0-2)** 1 cr.

Provides a structured aerobic and strength training program designed for individuals free of heart, pulmonary and metabolic disorders. The course offers the student computer assisted fitness evaluations, guidance in developing an individualized exercise prescription and professional supervision. Prior to beginning the program, a physician supervised exercise stress test is required for men over 45 years or older and women over 55 years or older, and all individuals regardless of age who have multiple cardiovascular risk factors. The stress test will be waived, provided a written physician clearance can be obtained. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.

### **KIN 101 Physical Fitness II (0-2)** 1 cr.

Continues KIN 100. Introduces other wellness components as well, such as nutrition and stress management. This course may be taken twice for credit.

**Prerequisite:** KIN 100 with a grade of C or better.

### **KIN 102 Cardio Kickboxing (0-1)** 0.5 crs.

Emphasizes physical conditioning that is set to music that uses movements from boxing, kickboxing and martial arts. This course may be repeated twice for credit.

### **KIN 103 Exercise Cycling (0-1)** 0.5 crs.

Uses stationary bicycles to improve cardiorespiratory endurance, muscle strength and endurance for physical conditioning. Music is used to motivate and establish the pace and rhythm of the workout. This course may be repeated twice for credit. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.

### **KIN 104 Pilo Boxing (0-2)** 1 cr.

Teaches physical conditioning by combining techniques and movements used in cardio boxing and Pilates set to music. This course may be repeated twice for credit.

### **KIN 105 Aquacise (0-1)** 0.5 crs.

Provides an in-water exercise program which emphasizes the development of cardiopulmonary endurance, flexibility, muscle strength, muscle endurance and general movement efficiency. Music is used to help motivate the students. The fitness guidelines followed in this course are designed for the apparently healthy individual and are not designed for individuals with known cardiovascular, pulmonary or metabolic diseases. Students are encouraged to see a physician before embarking on any exercise program. Students need not be able to swim to participate. This course may be taken twice for credit.

### **KIN 106 Pilates (0-2)** 1 cr.

Employs a system of movements to increase range of motion, balance, strength and awareness of the mind/body connection. This course may be repeated twice for credit. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.

### **KIN 107 Yoga I (0-2)** 1 cr.

Provides students with the opportunity to develop a strong healthy body and an increased level of mental and physical relaxation through the use of yoga postures and breathing techniques. Students will learn to recognize the presence of tension and be able to consciously relieve it. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.

### **KIN 108 Yoga II (0-2)** 1 cr.

Provides students with the opportunity to build on the skills they have gained in KIN 107 (formerly PED 122). Special emphasis will be on learning and practicing more advanced yoga postures and breathing. This course is not designed for students who are pregnant or with known heart, pulmonary, metabolic disease or orthopedic problems. Students are encouraged to see a physician before embarking on any exercise program. This course may be taken twice for credit.

**Prerequisite:** KIN 107 with a grade of C or better, or consent of instructor.

### **KIN 109 Power Yoga (0-2)** 1 cr.

Provides students with an introductory course emphasizing the development, maintenance and improvement of concentration, strength and flexibility through yoga postures and breathing techniques. This course is for students who already have muscular strength and cardiovascular endurance. The fitness guidelines followed in this course are designed for apparently healthy individuals and not designed for individuals with known hearing, pulmonary, or metabolic disease. Students with known orthopedic problems such as back or knee pain should see a physician and receive medical clearance. This course may be taken twice for credit.

### **KIN 110 Hips, Abs and Thighs (0-1)** 0.5 crs.

Uses exercises set to music directed at the body's core to improve muscle strength and endurance. Participants are encouraged to exercise at their own pace in this physical conditioning course. This course may be repeated twice for credit.



- KIN 111 Basic Weight Training (0-2)** 1 cr.  
Provides the basic knowledge of the proper use of weight training equipment. Students will learn about the specific muscle groups used during weight training and the different methods of developing muscular strength and endurance. Students will also be able to apply the principles that they have learned and ultimately develop their own individualized program. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.
- KIN 112 Intermediate Weight Training (0-2)** 1 cr.  
Provides the advanced student with a more challenging strength training program. Students will review the muscles used in a personal strength training program, the safety issues regarding appropriate lifts and use of the equipment, contraindicated movements, stretching and spotting techniques, warm-up and cool down techniques. In addition, students will also learn about the use and misuse of ergogenic aids, steroids and nutritional supplements. Students will have the opportunity to develop and participate in their own individualized muscle strength and endurance training program.
- KIN 113 Advanced Weight Training (0-2)** 1 cr.  
Provides weight training instruction with an emphasis on Olympic and power lifts. Students will have the opportunity to develop advanced weight training skills as well as practice Olympic and power techniques. This course may be taken twice for credit.
- KIN 114 Sport Performance Fitness (0-2)** 1 cr.  
Provides physical conditioning theories and drills for improvement in speed, agility, quickness, strength and power (SAQSP). Applies sport-specific plyometric and high intensity fitness activity. This course may be taken twice for credit.
- KIN 115 Boot Camp (0-1)** 0.5 crs.  
Offers an intense, highly regimented, military style of physical conditioning. Disciplined forms of exercise include use of body weight, simple apparatus and calisthenics to develop all components of fitness. This course may be repeated twice for credit.
- KIN 116 Zumba (0-1)** 0.5 crs.  
Provides students with an aerobic workout that uses Latin and International music and dance moves. This is a dynamic and effective workout that combines interval training to maximize cardiovascular fitness. This course may be repeated twice for credit.
- KIN 120 Nutrition and Exercise (1-2)** 2 crs.  
Provides an individual assessment of physical fitness level and dietary habits of each student. Exercise programming and diet recommendations are outlined and encouraged through topical lectures and active participation in exercise.
- KIN 139 Physical Activity Topics (0-1 to 0-2)** 0.5-1 cr.  
Provides students with a variety of mind/body modalities to improve physical fitness. Fundamental skills, terminology, proper equipment and safety are emphasized. This course may be repeated twice for credit.
- KIN 140 Modern Dance (0-2)** 1 cr.  
Explores movement potential, increase technical proficiency and broaden rhythm background; skills in technique and composition stressed. This course may be taken twice for credit.
- KIN 142 Introduction to Ballet (0-2)** 1 cr.  
Provides instruction for students with little or no previous training in ballet. This course may be taken twice for credit.
- KIN 143 Jazz Dance (0-2)** 1 cr.  
Provides students with the elements of ballet, modern dance and Afro-Haitian to combine them into a dance form that can be idiomatic, syncopated and fast paced. This course may be taken twice for credit.
- KIN 144 Hip Hop Dance (0-2)** 1 cr.  
Provides students with the fundamentals of hip hop dance which includes basic and complex movemenets, musicality, rhythms and spatial awareness. Teaches students general patterns and basics for choreographing routines. This course may be taken twice for credit.
- KIN 161 Tae Kwon Do (0-2)** 1 cr.  
Provides a basic understanding, training and practical application of Tae Kwon Do techniques. Includes proper training methods, physical conditioning, techniques, and rules and regulations for contests. This course may be taken twice for credit.
- KIN 162 Judo and Self-Defense/Beginning (0-2)** 1 cr.  
Provides a basic understanding and practical application of judo and self-defense techniques. Includes proper training methods, physical conditioning, techniques and rules and regulations for contests. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.
- KIN 163 Judo and Self-Defense/Advanced (0-2)** 1 cr.  
Orientation and instruction in all aspects of judo and self-defense. Provides greater emphasis on Randori and preparation for competition. This course may be taken twice for credit. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.  
**Prerequisite:** KIN 162 with a grade of C or better, or consent of instructor.
- KIN 164 Ju-Jutsu I (0-2)** 1 cr.  
Introduces Ju-jutsu (Miyama Ryu), the art of the Japanese Samurai from which judo, aikido and karate were derived. Based on mechanical principles, ju-jutsu is designed for self-defense. This non-competitive art is suited for women and men regardless of size and physical condition, stressing technique and attitude. Benefits are improved fitness, coordination, awareness, and defense skills training.
- KIN 170 Basketball (0-2)** 1 cr.  
Provides instruction in the basic skills, rules, scoring and terminology for the sport of basketball. Students will have the opportunity to practice their skills in game situations. This course may be taken twice for credit. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.
- KIN 171 Volleyball (0-1)** 0.5 crs.  
Provides instruction in the basic skills, rules, scoring and terminology. This course may be taken twice for credit.

**KIN 172 Tennis (0-1) 0.5 crs.**

Provides instruction of the basic skills, rules and scoring. Students will have the opportunity to practice their skills in both singles and doubles game situations. This course may be taken twice for credit.

**KIN 173 Competitive Tennis (0-1) 0.5 crs.**

Provides rules, scoring, theory and practice of the skills of competitive tennis. Emphasizes game strategy in singles and doubles play. This course may be taken twice for credit.

**KIN 175 Swimming: Beginning (0-2) 1 cr.**

Provides students with an entry-level swimming class with emphasis on learning the basic skills of swimming and aquatic safety.

**KIN 176 Swimming Intermediate and Advanced (0-2) 1 cr.**

Provides instruction in intermediate and advanced swimming skills with emphasis on learning all the swimming strokes, springboard diving skills, competitive swimming techniques, safety techniques and aquatic fitness. May be repeated up to a maximum of two credit hours. You must be able to swim 50 yards. This course may be taken twice for credit.

**KIN 177 Lifeguard Training (0-2) 1 cr.**

Provides lifeguard candidates with the skills and knowledge needed to prevent and respond to aquatic emergencies. The course material and activities adhere to the American Red Cross program requirements. Students receive CPR/FPR (Cardio Pulmonary Rescue for the Professional Rescuer), First Aid and Lifeguard Training Certification upon successful completion of this course. (NOTE: Students must be at least 15 years of age to qualify for American Red Cross Lifeguard Training Certification.) This course may be taken twice for credit.

**KIN 179 Wrestling (0-2) 1 cr.**

Provides instruction in basic collegiate wrestling techniques. Emphasis is on offensive and defensive moves, strategy and physical conditioning. Students will have the opportunity to practice the skills that they have learned in a competitive situation. This course may be taken twice for credit. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.

**KIN 180 Fencing (0-2) 1 cr.**

Provides students with the beginning fundamentals of fencing with an emphasis in epee. Explains and demonstrates footwork and handwork specific to epee, followed by practice drills in pairs by students with the supervision of the instructor. The fitness guidelines followed in this course are designed for the apparently healthy individual and are not designed for individuals with known cardiovascular, pulmonary or metabolic diseases. Students are encouraged to see a physician before embarking on any exercise program. This course may be taken twice for credit. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.

**KIN 181 Boxing (0-2) 1 cr.**

Provides students with skills and techniques of boxing. Emphasizes proper stance, technique, footwork, offensive and defensive skills. This course may be repeated twice for credit.

**KIN 200 Introduction to the Field of Kinesiology (2-0) 2 crs.**

Provides orientation and history of the field of kinesiology in the United States. Explores specializations within the Kinesiology major.

**KIN 201 Physical Education in Elementary School (3-0) 3 crs.**

Provides instruction on the growth and development of elementary school children and the planning and organization of elementary physical education programs.

**KIN 202 Standard First Aid (3-0) 3 crs.**

Provides a comprehensive first aid course which is taught under the guidelines of the American Red Cross. This course includes the American Red Cross Responding to Emergencies component, which covers adult, child and infant Cardiopulmonary Resuscitation (CPR) and the use of the Automated External Defibrillator (AED). This course is designed to prepare students to respond to emergency situations with confidence in their ability to perform the necessary skills. Two certificates are issued--Community CPR and Responding to Emergencies certification--after successful completion of the skills and written tests.

**KIN 203 Wellness for Life (2-2) 3 crs.**

Provides students with the knowledge of how to become fit and well and the information and tools which will assist them in formulating a personal fitness/wellness program. The course will cover physical fitness, nutrition, weight management, addictive behaviors, diseases which are lifestyle related and stress management. Students are actively involved in their learning process through the use of computers and lab sessions and will be required to attend weekly workout sessions in the fitness center. This class is designed for students who are able to safely participate in cardiorespiratory and resistance activities and may include the use of equipment. This class is not designed for students who may have known heart, pulmonary, metabolic, physiological diseases and/ or orthopedic challenges. By registering for this class, you assume the full risk of any injuries, damages or loss which may be sustained and are responsible for any associated medical costs or individual damages.

**KIN 204 Teaching Methods: Track and Field (1-2) 2 crs.**

Provides an opportunity for students to learn the fundamental skills of Track and Field. Covers rules, training and conditioning, use of technology, coaching techniques, meet administration and the responsibilities of officials with basic officiating. Students are able to apply their knowledge by planning, participating, coaching and officiating their own track and field meet.

**KIN 205 Teaching Methods: Soccer (1-2) 2 crs.**

Provides the fundamental skills and organizational techniques of the game of soccer. Strategy, rules, terminology, practice drills, conditioning, safety standards, officiating techniques and technology applications are emphasized in the areas of instruction and coaching. Students will have the opportunity to use these skills and techniques in game, teaching and coaching situations.

**KIN 207 Teaching Methods: Volleyball (1-2) 2 crs.**

Provides the fundamental skills and organizational techniques of the game of volleyball. Strategy, rules, terminology, practice drills, conditioning, safety standards, officiating techniques, and technology applications are emphasized in the areas of instruction and coaching. Students will have the opportunity to use these skills and techniques in game, teaching and coaching situations.

**KIN 208 Teaching Methods: Basketball (1-2) 2 crs.**

Provides the fundamental skills and organizational techniques of the game of basketball. Offensive and defensive playing techniques, game strategy, safety standards, technology applications, officiating techniques coaching, and applications of the basic rules are covered. Students will have the opportunity to use these skills and techniques in game, teaching and coaching situations.

**KIN 209 Teaching Methods: Tennis (1-2) 2 crs.**

Provides the fundamental skills and organizational techniques of the game of tennis. Strategy, rules, terminology, practice drills, conditioning, safety standards, officiating techniques, and technology applications are emphasized for both singles and doubles play. Students will have the opportunity to use these skills and techniques in game, teaching and coaching situations.

**KIN 210 Teaching Methods: Baseball (1-2) 2 crs.**

Provides the fundamental skills and organizational techniques of the game of baseball. Strategy, rules, terminology, practice drills, conditioning, safety standards, officiating techniques, and technology applications are emphasized in the areas of instruction and coaching. Students will have the opportunity to use these skills and techniques in game, teaching and coaching situations.

**KIN 211 Teaching Methods: Aquatics (1-2) 2 crs.**

Provides students with instruction in the planning, development, organization and management of aquatic programs. Students will learn how to utilize technology to improve components of an aquatic program. This course discusses the history of aquatics and covers fundamental skills and techniques. Students will have the opportunity to practice their swimming and water safety skills and techniques. You must be able to swim 50 yards.

**KIN 212 Water Safety Instructor (1-2) 2 crs.**

Provides instruction in both the American Red Cross Fundamentals of Instructor Training (FIT) and Water Safety Instruction (WSI). The following qualifications apply: · Students must be 16 years of age or older on the last day of class. · Student must perform rescue techniques and demonstrate water safety skills. · Student must swim 50 yards of the following strokes with American Red Cross Level 4 skill accuracy: front crawl, back crawl, elementary backstroke, sidestroke and breaststroke. · Student must swim 15 yards of the butterfly stroke. · Student must maintain position on back for one minute in deep water while floating or sculling. · Student must tread water for one minute.

**KIN 220 Introduction to Coaching (3-0) 3 crs.**

Provides students with the knowledge of the critical components involved in the profession of coaching. Helps students develop their coaching philosophy, learn methods of motivating athletes, learn to teach sort techniques and tactics, develop training/fitness conditioning programs, plan season workouts, understand team management, and understand coaching ethics, law and liability. Upon completion of this course, students will be able to take the American Sport Education Program (ASEP) Coaching Principles Certification exam. (NOTE: Passing the certification exam is part of the requirement for obtaining the Bronze Level ASEP Coaching Certification.)

**KIN 221 Care and Prevention of Athletic Injuries (2-2) 3 crs.**

Provides students with the basic principles in the prevention and care of injuries related to sport activities. This course teaches students who plan to coach how to make the correct decisions during athletic play and provides them with the latest first aid protocols. The course meets the requirements for the American Sport Education Program (ASEP) Sport First Aid course. Students have the opportunity to take the ASEP test upon successful completion of the course. The course includes sports first aid, taping and padding techniques, the fitting of protective equipment and the role of coaches, parents, administrators, health care workers, fitness specialists and athletes in injury prevention and care. An introduction to the athletic training profession will also be covered.

**KIN 222 Sports Officiating (2-0) 2 crs.**

Provides comprehensive instruction on rules and officiating techniques in interscholastic sports. Students will also have the necessary preparation for the Illinois High School Athletic Association certification exam as well as other certifying agencies. Officiating opportunities are provided in college intramural and intercollegiate athletic programs. Some sports covered--but not limited to--are basketball, baseball and volleyball.

**KIN 223 Sports Psychology (3-0) 3 crs.**

Provides an overview of sport and exercise psychology by focusing on human behavior in certain types of situations in sport and exercise settings. Examines what motivates people, how they regulate their thoughts, feelings and emotions and how their behaviors can become more effective. Also teaches students how to apply these psychological concepts.

**KIN 224 Sociology of Sport (3-0) 3 crs.**

Provides students with a global and issue-oriented approach to the study of how sport has evolved and influenced us in our society. Examines topics which include--but are not limited to--the effects of sport involvement on socialization; sports and children; violence in sports; gender and sports; race, religion and ethnicity and sports; and sports and the media.

**KIN 225 Sports Nutrition (3-0) 3 crs.**

Provides in-depth study of the physiological principles behind sports nutrition as it relates to the influence of nutrition on exercise performance, exercise training and recovery. (Also listed as DIT 225. Credit will be given for either DIT 225 or KIN 225, but not both.)

**KIN 230 Personal Training I/Exercise Science (3-0) 3 crs.**

Provides an analysis of basic human movement skills as they relate to exercise and physical fitness. Emphasizes human anatomy and exercise physiology as well as cardiorespiratory development, muscular strength and endurance. Especially designed for students who plan on becoming a personal trainer, physical education teacher or for those who are entering the fitness field.

**KIN 231 Personal Training II/Fitness Assessment Procedures (2-2) 3 crs.**

Provides students with a study of the basic scientific components of physical fitness. Includes the measurement of different indices of physical fitness common to corporate, clinical and lab settings. Especially designed for students who plan on becoming a personal trainer, physical education teacher or those who are entering the fitness field.

**Prerequisite:** KIN 230 with a grade of C or better, or consent of instructor.

**KIN 234 Personal Training Internship (0-5) 1 cr.**

Provides students who plan on becoming a personal trainer, physical education teacher or for those entering the fitness field the opportunity to utilize the knowledge and skills provided in KIN 230 and KIN 231. Students will be assigned to lab settings (fitness centers, clubs) in order to practice their skills and will be under the supervision of both the Harper College physical education instructor and the supervisor of the assigned setting.

**Prerequisite:** KIN 230 and KIN 231 with grades of C or better, or consent of instructor.

**KIN 250 Topics in Kinesiology (1-0 to 3-0) 1-3 crs.**

Provides students with an opportunity to examine different topics that fall under the kinesiology field. Content will change from semester to semester. This course may be taken twice up to a maximum of 6 credit hours.

## LEJ Law Enforcement and Justice Administration

### LEJ 101 Introduction to Criminal Justice (3-0) 3 crs.

Studies the history, role, development, and constitutional aspects of law enforcement and public safety. Review of agencies and functions involved in processes of administration of criminal justice. IAI CRJ 901

### LEJ 104 Corrections (3-0) 3 crs.

Provides the student with an integrated knowledge about the system through which the criminal offender is processed. Emphasis will be placed upon the philosophical bases of punishment and treatment techniques in institutional and community-based programs plus parole programs. IAI CRJ 911

### LEJ 107 Vice and Drug Control (3-0) 3 crs.

Studies historical and sociological development of problems in drug addiction and vice control; fundamental understanding of narcotic addiction and effects of hypnotic drugs; the operation of lotteries, bookmaking and other types of gambling and prostitution as these factors are involved in the daily routine of police work.

### LEJ 116 Forensics I (3-0) 3 crs.

Introduces student to the use of scientific disciplines in crime investigation. Identifies the variety of sources of evidence and the means by which comparative analysis can be made. Introduces student to probability theory. Develops skills in crime scene technology, fingerprinting, photography and recording.

### LEJ 135 Patrol Procedures (3-2) 4 crs.

Introduces techniques and procedures used by police in job-related activities. Includes discussion and practice in areas such as vehicle stops, initiating investigations, responding to calls, building checks, emergency situations, crowd control and report preparation.

**Prerequisite:** LEJ 101 with a grade of C or better.

### LEJ 138 Defensive Techniques (2-2) 3 crs.

Introduces principles of self-defense and weaponless control for police and security personnel. Includes psychology, physical and mental preparation, practice in defense and control techniques.

**Prerequisite:** Signed waiver of liability required.

### LEJ 140 Introduction to Private Security (3-0) 3 crs.

Enables the student to examine the history, nature, and scope of private security in modern society. Investigates the basic principles of physical security, internal loss prevention, risk management, physical and environmental controls, and the security function(s) in a corporate structure. Exposes students to operations and career opportunities exemplified in areas such as retail, hospital, cartage, IT, and proprietary security services.

### LEJ 200 Leadership and Ethics for Law Enforcement (3-0) 3 crs.

Prepares students to successfully resolve critical ethical and leadership issues they will encounter in their law enforcement careers. Includes developing and maintaining professional integrity, the proper exercise of discretion and authority, morale and motivation, and responsibility for ethical conduct.

**Prerequisite:** LEJ 101 and LEJ 210 with grades of C or better.

### LEJ 201 Criminal Law (3-0) 3 crs.

Examines local, state and federal criminal law. Topics include a definition of the crimes, their elements, and attendant circumstances and related defenses.

**Prerequisite:** LEJ 101 with a grade of C or better.

### LEJ 202 Criminal Procedures (3-0) 3 crs.

Examines and analyzes federal and state law relating to arrest, search and seizure, First Amendment activities, interrogation, civil liability of police, and trial procedures.

**Prerequisite:** LEJ 101 with a grade of C or better.

### LEJ 205 Juvenile Justice (3-0) 3 crs.

Examines organization, jurisdiction and functions of juvenile agencies. Juvenile court movement, juvenile detention, processing and treatment. Statutes and court procedures for juveniles. Problems of juvenile delinquency, theories of causation and prevention programs. Police responsibilities and contacts, current community, state and federal prevention programs. IAI CRJ 914

**Prerequisite:** LEJ 101 with a grade of C or better.

### LEJ 210 Criminology (3-0) 3 crs.

Examines the nature and extent of crime in American society, theories of crime causation and control of criminal behavior. IAI CRJ 912

### LEJ 214 Community Policing (3-0) 3 crs.

Examines issues in community policing with emphasis on the concept of public and community relations as well as police involvement in community problems. Stresses the role of the police in maintaining public order and safety as a member of the community and in partnership with other community constituencies.

**Prerequisite:** LEJ 101 with a grade of C or better.

### LEJ 216 Investigative Process (3-0) 3 crs.

Studies the art of investigation to reconstruct facts and circumstances of any event. Prepares students to plan and execute investigations commonly performed in civil and criminal work with concentration on obtaining direct evidence through interviewing, interrogation, observation and the use of documents and records.

**Prerequisite:** LEJ 101 with a grade of C or better.

### LEJ 217 Forensics II (3-2) 4 crs.

Provides an expanded understanding of the procedures for collection and analysis of physical evidence, concentrating on the evidentiary significance of items commonly found at crime scenes. Includes detailed methods of processing a crime scene; documentation, location and proper collection of evidence; proper handling of evidence; and analytical techniques of interpreting evidence.

**Prerequisite:** LEJ 116 with a grade of C or better.

### LEJ 218 Forensics III (2-4) 4 crs.

Focuses on specialized evidence and reconstruction of crime scenes with the use of hands-on training in advanced techniques of identifying, collecting and preserving physical evidence with the use of luminal, biological presumptive tests, trace evidence, arson and explosive evidence.

**Prerequisite:** LEJ 217 with a grade of C or better.

### LEJ 230 Organized Crime (3-0) 3 crs.

Studies the phenomenon of Organized Crime in America and throughout the world. Focuses on the changing nature of Organized Crime from its traditional underpinnings of the Tammany Hall politics of the east coast to the new wave of Organized Crime concerns in street gangs and newly-arrived ethnic gangs from Eastern Europe, South America and Asia.

### LEJ 240 Investigating Terrorism (3-0) 3 crs.

Studies the way terrorism has changed the landscape of modern day policing. Provides a general definition and overview of terrorism, and discusses the challenges police officers face when dealing with terrorism and terrorist acts. Introduces variety of investigative techniques used to combat terrorism as terrorism investigations can be long-term and complex.

**LEJ 281 Topics in Law Enforcement and Justice Administration (1-0 to 6-0) 1-6 crs.**

Examines selected problems or topics in Law Enforcement and Justice Administration. The specific course content and instructional methodology will vary from semester to semester depending on the material presented. A syllabus containing specific topics will be available with pre-registration materials each time the course is offered. This course may be repeated to a maximum of 6 credit hours.

**Prerequisite:** LEJ 101 with a grade of C or better.

**LEJ 295 Forensics IV (1-4) 3 crs.**

Provides a unique course in crime scene investigation incorporating a combination of lecture and hands-on training utilizing advanced techniques of crime scene analysis and reconstruction. Students will process a crime scene from its initial discovery to the testimony in court.

**Prerequisite:** LEJ 218 with a grade of C or better.

**LEJ 299 Law Enforcement Internship (1-10) 3 crs.**

Provides student with a broad educational experience through appropriate observation and directed experience in operating segments of law enforcement. Conducted under joint partnership agreements between Harper College and host law enforcement agencies. Students will be assigned to the agency in addition to participation in regularly conducted review sessions to assess the student's progress, problem areas and the work environment to which they are assigned. (Students in last semester will receive priority in assignments.) Permissible duties and activities will be determined based upon the student's qualifications and the agencies needs and restrictions. The students must complete 8 hours of service a week for 14 weeks during the semester to earn 3 semester hours credit.

**Prerequisite:** Sophomore standing and consent of program coordinator.

**LIT Literature****LIT 105 Poetry (3-0) 3 crs.**

Facilitates the understanding, appreciation and enjoyment of poetry. Presents poetry of American, European and other literary philosophies and movements. Challenges students to develop skills in responding personally to poetry and in developing literary analyses. Reveals the link between the whole poem and particular literary qualities such as imagery, figurative language, allusion, connotation, and the music of poetry--sound and rhythm. Offers a forum for exchanging ideas about poetry in guided conversation and writing. IAI H3 903

**LIT 110 Drama (3-0) 3 crs.**

Presents a survey of drama from various countries and eras. The course will include representative selections from such modes as tragedy, comedy, melodrama, romance, satire and social commentary as well as absurdist drama. The selections could include such authors as Ibsen, Miller, Moliere and Shakespeare, among others. (See THE 111 [Introduction to the Theatre] for theatrical study of drama.) IAI H3 902

**LIT 112 Literature and Film (3-0) 3 crs.**

Introduces methods of reading, interpreting and analyzing literary works as well as examining methods used in translating those works to the medium of film. Presents the short story, novel and the drama in conjunction with their cinematic counterparts. Relates the development of film to such schools as German expressionism, film verity, etc. Focuses on analysis of each form both on its own and in relation to the others through reading, viewing and writing. IAI HF 908

**LIT 115 Fiction (3-0) 3 crs.**

Presents short stories and novels of high interest level. The selections typify authors and styles representative of major American and European literary movements and philosophies. Challenges the student to develop skills in literary analysis. Students will study characterization, narration, dialogue, plot and various other techniques of fiction. Individual sections may concentrate on particular periods, authors or topics. IAI H3 901

**LIT 206 World Literature to 1800 (3-0) 3 crs.**

Presents selected works of universal significance contributed by people and civilizations from ancient times to 1800. IAI H3 906

**LIT 207 World Literature Since 1800 (3-0) 3 crs.**

Continues LIT 206. Selected works of universal significance contributed by people and civilizations from 1800 to the present. IAI H3 907

**LIT 208 Non-Western Literature (3-0) 3 crs.**

Studies selected works from non-western civilizations, such as Africa, China, India, Japan and the Middle East. Fiction, poetry and drama will be included. IAI H3 908N

**LIT 210 Introduction to Shakespeare (3-0) 3 crs.**

Introduces Shakespeare's acting company, theater and audience. Discusses his techniques in building scenes, developing characters, handling dialogue. Readings and interpretations will consist of representative comedies, tragedies, histories, and problem plays. IAI H3 905

**LIT 215 Eastern European Prose Since 1800 (3-0) 3 crs.**

Presents a survey of prose, predominantly fiction, starting with the creative outpouring in the early nineteenth century (Lermontov, Gogol) and moving through Soviet and post-Soviet writing from socialist realism to glasnost and beyond (Sholokhov, Solzhenitsyn, Klima, Kundera, Pavic). Other writers may include Tolstoy, Dostoevsky, Turgenev, Chekhov, Babel, Bely, Bulgakov, Mandelstam, Nabokov and Pasternak. Not limited to Russian literature, this course encompasses a wide range of Eastern European writers that may include Albanians, Bosnians, Bulgarians, Croats, Czechs, Hungarians, Poles, Serbs, Slovenes, Ukrainians, Roma, and others. Political, cultural, and historical background will help to illuminate crucial differences between these groups as reflected through literature. All texts taught in English translation.

**LIT 216 Science Fiction (3-0) 3 crs.**

Surveys science fiction short stories and novels. Considers science fiction as popular literature and assesses its unique contribution to the history of ideas.

**LIT 217 Crime Literature (3-0) 3 crs.**

Examines various subgenres of crime literature of various length, either thematically or historically. Analyzes the literary predecessors of these works and crime literature's influence upon other genres of literature.

**LIT 219 Children's Literature (3-0) 3 crs.**

Introduces the various types of children's literature. Includes the history of children's literature, as well as the classic and current authors and illustrators. Covers such areas as picture and concept books, myths, poetry, fantasy and realism.

**LIT 220 Japanese Literature in Translation (3-0) 3 crs.**

Surveys English-language translations of Japanese poetry, fiction, and nonfiction. Reviews Noh and Kabuki drama and selections from Japanese cinema. Works will be studied in the context of Japanese history, but each work will be studied also as the product of its author's creative self-expression. No speaking or reading knowledge of Japanese is required; no background knowledge of Japan is required. IAI H3 909

**LIT 221 American Literature-Colonial Days to Civil War (3-0) 3 crs.**

Presents American literature as an expression of American life through early social and political documents, novels, short stories and poems. IAI H3 914

**LIT 222 American Literature--the Civil War to Present (3-0) 3 crs.**

Explores American prose, drama, and poetry, Civil War to present, including minority literature, regional literature, literary journalism, criticism, and social and historical novels in their historical, social and cultural context to reflect current controversies and social changes. IAI H3 915

**LIT 223 Minority Literature in America (3-0) 3 crs.**

Investigates what it means to be a minority in the United States. Examines the ways in which minority writers, through fiction, nonfiction, poetry, and drama, question the quality of American life and the authenticity of American democracy, thus helping students appreciate more fully the range of American cultures and subcultures. May include such writers as Olaudah Equiano, Frederick Douglass, Amiri Baraka, Rudolfo Anaya, Leslie Marmon Silko, Toni Morrison, Rita Dove, Leslea Newman, Li-Young Lee, Vassar Miller, Vivienne Finch. IAI H3 910D

**LIT 224 Women in Literature (3-0) 3 crs.**

Examines the evolving portrayal of women--the many images, impressions and stereotypes in literature. Includes literature written about women and by women. Selections reflect a diversity of cultures, eras, authors and genres. The student will read selections from such authors as Bronte, Chekhov, Chopin, Hardy, Morrison and Woolf. IAI H3 911D

**LIT 231 English Literature to 1800 (3-0) 3 crs.**

Surveys English writers from beginning English literature to 1800. Reading and interpretation of writers such as Boswell, Chaucer, Congreve, Donne, Dryden, Johnson, Jonson, Malory, Milton, Pope and Swift. IAI H3 912

**LIT 232 English Literature 1800-1914 (3-0) 3 crs.**

Survey of English writers from Romantic Period to World War I. Reading and interpretation of writers such as Austen, Browning, Byron, Conrad, Dickens, Hardy, Keats, Shaw, Tennyson and Wordsworth. IAI H3 913

**LIT 241 20th Century British and American Literature (3-0) 3 crs.**

Surveys important writers and writings of British and American literature since World War I.

**LIT 250 Topics in Literature (1-0 to 3-0) 1-3 crs.**

Examines selected eras or topics in the various fields of literature and literary theory. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A topic-specific syllabus containing additional information will be available in the Liberal Arts Division Office with other pre-registration materials each time the course is offered. This course may be repeated to a maximum of 12 credit hours.

**LNG Linguistics**

**LNG 105 Introduction to Language and Linguistics (3-0) 3 crs.**

Explores language--its origins, properties, use, structure, and meaning. Studies sound systems, word-information systems, syntactic systems, and derivation of meaning from spoken and written forms. Includes first and second language acquisition and properties of visual languages.

**LNG 205 Language and Culture (3-0) 3 crs.**

Explores the relationship between language and culture. Includes the language socialization of children, gender differences in language, standard varieties and dialects of language, and the effect of language on thought. Examines the nature of language in power relationships.

**LNG 220 Methods of Teaching English as a Second Language (3-0) 3 crs.**

Introduces the teaching of English to speakers of other languages. Intended for those who contemplate a career working with non-native speakers of English. Through a program of lectures, readings, discussions, observations and practical teaching exercises, students will explore the educational contexts in which English is taught and learned. In addition, the course will offer practical techniques for teaching and assessing the skill areas of listening and speaking, reading, writing, and grammar. The foundation of the methods explored will be based on theories in applied linguistics.

**LNG 225 Language and Health (3-0) 3 crs.**

Provides a comprehensive introduction into the study and application of concepts and theories from Healthcare, Linguistics and Communication. Focuses on practical applications of effective communication strategies across diverse patient populations by dissecting and discussing case studies from different healthcare departments, and by analyzing actual provider-patient interactions to understand how specific language choices contribute to constructing meaning in health communication.

**MCM Mass Communication**

**MCM 120 Introduction to Mass Communication (3-0) 3 crs.**

Examines the history, technical development and cultural impact of the media, including books, newspapers, magazines, radio, sound recording, movies, television, and the Internet; as well as the related areas of public relations and advertising. Focuses on media convergence, trends and issues. Analyzes the impact and effects of the media on our consumer culture and democratic system. Encourages critical evaluation of the media. IAI MC 911

**MCM 130 Introduction to Journalism (3-0) 3 crs.**

Introduces basics of writing for the media and Associated Press (AP) style, focusing on print journalism. Explores the history, legal and ethical concerns, and culture of journalism. Develops fundamental skills in writing, interviewing, and conducting research using traditional and Internet sources. Emphasizes accuracy, conciseness, grammar and spelling skills. Explores career opportunities in journalism. Some beginning reporting and writing in computer lab. IAI MC 919

**MCM 156 Audio Production 1 (3-0) 3 crs.**

Introduces students to the equipment, facilities and terminology of the audio media industry. Students will work on individual field and studio projects including radio show production, public service announcements, audio documentaries and sound design. Students will be introduced to the technical aspects of sound recording and non-linear, multi track audio editing. IAI MC 915

**MCM 200 Film History (3-0) 3 crs.**

Surveys the historical development of film, emphasizing a study of films and innovations in film production that have had a significant influence on film as art form. Explores the history of film through the eyes of the filmmaker. Students will analyze film movements from multiple countries and recognize their effect on each other and the Hollywood film model. IAI F2 909

**MCM 205 Multi-Platform Photojournalism (3-0) 3 crs.**

Introduces students to the principles and techniques of photojournalism for use in a variety of platforms including print, broadcast, web and social media. Students will use still photography and mobile video production techniques to create products for web journalism, public relations and marketing. IAI MC921

**MCM 233 Introduction to Public Relations (3-0) 3 crs.**

Explores the history, theory, practice and role of public relations in government, corporate, non-profit, and private organizations. Introduces students to the business and creative aspects of public relations, as well as the complexities of issue management. Students will prepare original public relations campaigns for print, broadcast and electronic media. Familiarizes the student with computer software for desktop publishing. Recommended preparation: computer design experience. IAI MC 913

**MCM 240 Topics in Mass Communications (1-0 to 6-0) 1-6 crs.**

Studies selected problems or topics in mass communication. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information with pre-registration materials will be available each time the course is offered. This course may be repeated up to a maximum of six credit hours.

<b>MFT Manufacturing Technology</b>
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**MFT 102 Introduction to Manufacturing and Safety (3-2) 4 crs.**

Provides the student with an introduction to the manufacturing world and provides specific instruction to facilitate safe work practices in industrial environments. Introduces manufacturing specializations such as mechatronics, precision machining and welding. Covers fire safety, pressurized gases, electrical hazards, and safe machine usage. Students will also become acquainted with OSHA policy. Students will have the opportunity to earn the Safety Certification through Manufacturing Skill Standards Council (MSSC).

**MFT 104 Quality and Measurement (1-2) 2 crs.**

Provides an introduction to controlling and improving quality in a manufacturing setting. Explores ways that manufacturers use data and analysis to improve quality. Students will have the opportunity to earn the Quality and Measurement Certifications through the Manufacturing Skills Standards Council (MSSC).

**Prerequisite:** Prior or concurrent enrollment in MFT 102 with a grade of C or better.

**MFT 105 Machining Processes I (2-4) 4 crs.**

Covers fundamentals of machine shop theory and safe practice. Provides familiarization with tools, equipment, and practices of tool, die, and precision metal working industries. Includes introduction to mills, drill press, lathes, and surface grinders. Students are provided classroom and laboratory learning experiences while making a working tool. Students may earn NIMS credentials in Lathe, Drill Press, Benchwork and Layout.

**MFT 108 Manufacturing Processes (2-2) 3 crs.**

Provides the basics of how manufacturing transforms materials into products. Students will learn about the varying types of production and will learn about the materials that are used in production and the types of processes used in manufacturing including machining, casting and assembly.

**Prerequisite:** MFT 102 with a grade of C or better.

**MFT 109 Introduction to Manufacturing Maintenance (1-2) 2 crs.**

Provides a basic understanding of tools and equipment used in manufacturing and knowledge of how to improve productivity through predictive and preventive maintenance.

**Prerequisite:** MFT 102 with a grade of C or better.

**MFT 119 Manufacturing Internship (1-10) 2 crs.**

Applies and expands manufacturing skills and knowledge in the workplace environment. Students will have an on-site supervisor who will assign duties in the workplace. Regularly scheduled face-to-face on-campus sessions will be conducted to assess the student's progress, problem areas and to review appropriateness of work involvement. Actual permissible duties and activities will be determined based upon the student's knowledge and skills. The student must complete a minimum of 100 hours at the work site. NOTE: Students must also have NCRC Exam Level Silver and four MSSC Certificates prior to enrolling in this course.

**Prerequisite:** MFT 102, MFT 104, MFT 108 and MFT 109 with grades of C or better.

**MFT 120 Machining Processes II (1-4) 3 crs.**

Covers advanced machine shop theory with emphasis on safe practices and applications. Includes lathes, grinders (I.D., O.D. and surface), milling machines and tool grinders. Studies production machining, feed and speed applications and quality control techniques applied to precision machining. Introduces gage blocks, height gages, magnetic sine plate and modern indexable tooling. Students may earn NIMS credentials Mill 2, Lathe 2, and Grinding 1.

**Prerequisite:** MFT 105 and (MTH 097, MTH 101, MTH 103 or higher) with grades of C or better.

**MFT 123 Introduction to CNC Machining (3-2) 3 crs.**

Introduces setup and operation of CNC machining and turning centers. Teaches CNC machine tool controls through laboratory experiences and the manufacture of pre-programmed parts including part holding techniques, alignment, process planning, tooling for CNC machine tools, and inspection of machined products. Students may earn NIMS Level 1 CNC Operator credential.

**Prerequisite:** Prior or concurrent enrollment in MFT 120 with a grade of C or better.

**MFT 125 CNC Lathe Operation and Programming (1-4) 3 crs.**

Covers the principles and operation of CNC (Computer Numerical Control) machine tools with an emphasis on the set up and operation of lathes. Includes safety, turning, grooving, drilling, boring, threading, cutting tools, and introduction to CNC programming on common industry controls including Haas, Fanuc and Siemens. Students may earn the NIMS Level I CNC Lathe Programming, Setup and Operator credential.

**Prerequisite:** MFT 123 with a grade of C or better.

**MFT 128 CNC Mill Operation and Programming (1-4) 3 crs.**

Covers the principles and operation of CNC (Computer Numerical Control) machine tools with an emphasis on the set up and operation of vertical and horizontal mills. Includes safety, turning, drilling, boring, threading, cutting tools, to CNC mill programming, practices and setups on common industry controls including Haas, Fanuc and Siemens. Students may earn the NIMS Level I CNC Mill Programming, Setup, and Operator credential.

**Prerequisite:** MFT 123 with a grade of C or better.

**MFT 130 Machining Blueprints (1-1) 1 cr.**

Provides students in the machine trades to develop the basic skills required for visualizing and interpreting industrial prints, geometric dimensioning and the impact of computer drafting as related to the machine trades.

**Prerequisite:** MFT 105 and MNT 111 with grades of C or better.

**MFT 132 Dimensional Metrology (3-1) 3 crs.**

Develops dimensional measurement ability for skilled workers, inspectors, technicians, and for personnel entering a technical occupation. Measuring equipment and instruments used include: scales, micrometers, calipers, gage blocks, indicators and production gages. Basic statistics, probability, and acceptance sampling are also covered.

**MFT 140 Quality Assurance (1-4) 3 crs.**

Provides the student with the knowledge necessary for different types of part inspections. Utilizes the Coordinate Measuring Machine (CMM), surface plate, height gages, optical comparator and other quality inspection equipment to set up and lay out parts for the final inspection process. Compares all measurements and layouts to precision part blueprints.

**Prerequisite:** MFT 132 with a grade of C or better.

**MFT 201 Advanced CNC (2-6) 5 crs.**

Studies CNC (Computer Numerically Controlled) lathe and mill processes, advanced programming on Haas, Fanuc, and Siemens controls, with an emphasis on additional thread form turning, turning eccentrics, precision boring, ring grooving, and form tool cutting. Also includes an introduction to CAD-CAM programming. Students may earn the NIMS Level II Lathe and Mill Setup, Operator and Programmer Credential.

**Prerequisite:** MFT 125 and MFT 128 with grades of C or better.

**MFT 210 Computer Integrated Manufacturing (2-4) 4 crs.**

Provides students with a thorough understanding of the integration of computers used in the industry, and of Computer Aided Drafting (CAD) software used in precision machining. Teaches how to create, modify, manipulate and import geometry. Students will create a Computer Aided Drafting (CAD) drawing of a part for precision machining.

**Prerequisite:** MFT 201 with a grade of C or better.

**MFT 220 Computer Aided Manufacturing (2-4) 4 crs.**

Provides students with knowledge of different types of programming processes using the aid of Computer Aided Manufacturing (CAM) software combined with Computer Aided Drafting (CAD) software used in precision machining. Students will perform tooling selection, simulate Computer Numerical Control (CNC) machining toolpaths, and generate CNC code to machine an actual part.

**Prerequisite:** MFT 210 with a grade of C or better.

**MFT 265 Properties of Materials (1-2) 2 crs.**

Introduces the basic concepts of materials including composition, properties and usage in manufacturing processes. Provides an overview of the properties of materials as modified by heat treatment, welding and machining processes with an emphasis on metals.

**Prerequisite:** MFT 105 or WLD 110 with a grade of C or better.

<b>MGT Management</b>
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**MGT 111 Introduction to Business Organization (3-0) 3 crs.**

Introduces the nature of business and the environment in which it operates. Forms of business ownership, introduction to operative and facilitating facets of business operation, management, marketing, accounting, statistics, business law, finance, investments, insurance and labor-management relations.

**MGT 150 Business Math (3-0) 3 crs.**

Introduces arithmetic as a tool of business. Topics include fractions, decimals and percentages, computations of interest, bank discounts, depreciation, commissions, compound interest, payrolls and taxes and graph and chart design. Students must score satisfactorily on a mathematics placement test prior to registering for this course.

**Prerequisite:** MTH 054 or MTH 055 with a grade of C or better, or placement test.

**MGT 154 Entrepreneurship (3-0) 3 crs.**

Investigates positives and negatives of entrepreneurship and the process of concept to new venture. Analyzes typical venture errors and focuses on strategic management. Evaluates business ownership and franchising, pricing strategies, financing, location selection and human capital management. Discovers personal leadership traits. Assesses the personal entrepreneurial mindset.

**MGT 160 Principles of Supervision (3-0) 3 crs.**

Introduces the responsibilities of the first or second echelon supervisor in either the industrial or administrative environment. Leadership qualities, human relations skills, motivation, communications, training techniques and problems of the work group are discussed.

**MGT 165 Global Business (3-0) 3 crs.**

Provides concepts, principles and practices of the international business environment. Includes the nature of international business; international organizations and monetary systems; comparative management techniques, and environmental business factors. Focuses on international organizational functioning to help the student gain a diversity of views.

**Prerequisite:** MGT 111.

**MGT 170 Principles of Individual Financial Planning (3-0) 3 crs.**

Introduces the student to the fundamentals of equity and fixed income investing. The course will also explore other investment management subjects such as mutual funds, international investing and retirement planning as well as tax-advantaged investments. Basic derivatives such as futures and options will also be discussed. (Credit will be given for either BFC 200 or MGT 170, but not both.)

**MGT 204 Training and Development (3-0) 3 crs.**

Introduces the student to the principles of training practices with emphasis on the concerns of human learning: acquisition, retention and transfer of skills. Includes supervisory and management skills, designing performance goals, MBO (Management by Objectives), forming lesson plans, mechanics of training, experiential instruction, role playing, case studies and technologies available.

**MGT 205 Leadership (3-0) 3 crs.**

Investigates leadership styles and the influences of leadership styles within organizations from start-ups to global corporations. Explores the empirical science and evidence of leadership styles, motivation, communication, conflict resolution, negotiations, creativity and innovation. Examines leadership styles as they relate to culture, diversity and globalization. Evaluates the performance of successful leaders.

**MGT 211 Internship in Small Business (1-15) 3 crs.**

Provides cooperative work experience working in a small business. Credit is given for participation in a supervised work experience. The work must take place in a College-approved workstation.

**Prerequisite:** MGT 154 and 3 credit hours in MGT or MKT course work, or consent of program coordinator.

**MGT 218 Introduction to Finance (3-0) 3 crs.**

Methods of financing business enterprises and their relationships to personal and company investment policies.

**Prerequisite:** ACC 101 and MGT 111.

**MGT 225 Applied General Statistics (4-0) 4 crs.**

Introduces both descriptive and inductive statistics. Collection of data; frequency distributions and measures of data; frequency distributions and measures of location (mean, median, mode); measures of variation; probability, theoretical distributions including sampling distributions, estimation, tests of hypotheses; correlation, regression analysis, and index numbers; and time series. Computer applications using Microsoft Excel are included. (Credit will be given for either MGT 225 or MTH 165 or MTH 162, but not all.) IAI M1 902, IAI BUS 901

**Prerequisite:** MTH 070 (or equivalent) with a grade of C or better or Geometry placement test AND MTH 080 with a grade of C or better or placement test. An ACT Math score of 22 or more will satisfy all the previous prerequisites mentioned for this course.



**MGT 254 Applied Entrepreneurship (3-0) 3 crs.**

Investigates the importance of promoting and managing innovation and creativity in start-ups and existing firms. Explores successful frameworks, strategies, risks, profit-making and barriers when introducing break-through products and services. Masters the techniques for improving creativity, intellectual flexibility and leadership approaches used by managers and organizations to create and sustain innovation. Evaluates innovations and ideas for profit-making possibilities.

**MGT 255 Entrepreneurial Financing (3-0) 3 crs.**

Investigates a variety of available resources for new venture and growth funding. Examines opportunities for capital including options of debt, equity, crowdsourcing, angel investors, friends, family plans, and grants. Designs the start-up pitch for funding. Creates the financial statements for a business canvas or plan.

**MGT 265 Human Resources Management (3-0) 3 crs.**

Examines the various aspects of the field of Human Resource Management (HRM) and the manner in which HRM professionals play a critical role in the success of an organization. Discusses and evaluates a wide range of contemporary HRM topics including human resource planning, employee recruitment and retention, employee benefits, talent development, performance management, laws and regulations, technology, changing workforce demographics, and the value of diversity.

**Prerequisite:** MGT 111.

**MGT 266 Wage Analysis and Administration (3-0) 3 crs.**

Studies the compensation and process: wage, salaries, wage theory and legal considerations. Examines various fringe benefits, profit sharing, job analysis, and its evaluations.

**Prerequisite:** MGT 265.

**MGT 270 Principles of Management (3-0) 3 crs.**

Presents the theory and major functions of management and describes the role of the manager. Major concepts in organization are developed along with an understanding of the decision-making process and consideration of the human factor in management.

**Prerequisite:** MGT 111.

**MGT 274 Operations Management (3-0) 3 crs.**

Introduces the student to operations management stressing operational problems. The characteristics of industrial enterprise, the problems of materials procurement, plant organization and layout, labor relations and personnel policies, efficiency techniques, automation and production development are considered. Related problems of inventory control, quality control, production control and budgetary control are included.

**Prerequisite:** MGT 111.

**MGT 275 Labor-Management Relations (3-0) 3 crs.**

Deals with the processes and the framework that influences the relationship between management and labor. The history of the labor movement, collective bargaining process, labor contract dispute resolution, labor and employment law, and the characteristics of both the public and private sector are discussed.

**MGT 276 Collective Bargaining (3-0) 3 crs.**

Studies the collective bargaining method preparations and patterns; strategies and tactics of negotiations; and the use of mediators and arbitrators.

**Prerequisite:** MGT 265.

**MGT 280 Organizational Behavior (3-0) 3 crs.**

Emphasizes a managerial and interpersonal relations process approach to problem solving, communication and group dynamics. Specific treatment is given to managing change, appraisal and reward, solving communication problems, status needs of the work force, understanding individuals, group dynamics and reducing conflict.

**Prerequisite:** MGT 111.

**MGT 291 Problems in Management and Supervision (3-0) 3 crs.**

Provides the student with a logical integration of management principles with representative supervisory problems found in business firms. Emphasizes decision-making through the use of case problems, simulation and directed reading.

**Prerequisite:** MGT 111, MGT 270 and 3 credit hours in MGT or MKT course work, or consent of program coordinator.

**MKT Marketing****MKT 105 Sports Marketing (3-0) 3 crs.**

Focuses on the strategic marketing process as it is applied to the sports industry. Topics to be investigated include sponsorships, understanding spectators as consumers, and the application of the marketing mix in a sports environment.

**MKT 106 Retail Merchandising (3-0) 3 crs.**

Focuses upon the merchandising activities related to hardlines, apparel, and other softline merchandise. Examines the role and qualifications of the buyer and the influence of consumer preference. Includes budgeting by dollars and assortment, pricing strategy, managing assortments, the selection and promotion of merchandise, and the coordinator of merchandising functions and processes.

**MKT 140 Principles of Professional Selling (3-0) 3 crs.**

Focuses upon the principal factors of successful selling of goods or ideas. Examines buying motives, sales psychology, customer approach and sales techniques.

**MKT 141 Sales Management (3-0) 3 crs.**

Focuses on the responsibilities of the sales executive in planning and evaluating sales activities as well as supervision of a sales force. Attention is given to the administrative activities of sales managers at all levels with emphasis directed to the management of sales forces of manufacturers, service marketers and wholesaling middlemen.

**Prerequisite:** MKT 140 or consent of program coordinator.

**MKT 180 Strategic Writing for a Digital World (3-0) 3 crs.**

Introduces the fundamental skills needed to develop Web-appropriate written content that can be leveraged for strategic marketing purposes on multiple digital platforms. Evaluates platform requirements and explains the nuances of multimedia writing. Presents techniques to identify success metrics, assess and report content performance and make data-driven recommendations. Recommended preparation: ENG 101 or placement equivalency.

**MKT 217 Advertising (3-0) 3 crs.**

Purposes of advertising, how advertisements are prepared and delivered in media, and how effectiveness of advertising is measured and evaluated in relation to the selling and marketing process. IAI MC 912

**Prerequisite:** MKT 245 or consent of instructor.

**MKT 240 Advanced Sales Strategies (3-0) 3 crs.**

Develops and refines sales techniques established in previous course work and/or on-the-job sales experience. Opportunities will be available to apply specific selling skills to various sales situations and product categories through presentations and term projects.

**Prerequisite:** MKT 140 or consent of instructor.

**MKT 245 Principles of Marketing (3-0) 3 crs.**

Focuses on marketing activities that will cover product planning, pricing strategies and promotional efforts including advertising, selling and sales promotions and distribution channel effectiveness.

**Prerequisite:** GRA 120 with a grade of C or better, or MGT 111.

**MKT 247 Consumer Buying Behavior (3-0)** **3 crs.**  
Reviews and analyzes areas of consumer and organizational buying behavior that guide marketing management decisions. The focus of the course will be directed toward the application of concepts on buying behavior to specific functional areas of marketing management in both the industrial and consumer markets.

**MKT 251 Retail Merchandise Management (3-0)** **3 crs.**  
Emphasizes the nature and importance of retail merchandise management in relation to the success of the retail firm. The student will demonstrate knowledge and decision making skills of retail management by using case study and problem solving activities to interpret and analyze information faced by merchandise department managers, buyers and independent retailers. The focus will be on strategic merchandise planning; advanced purchasing and pricing strategies; inventory valuation and analysis of profit and productivity performance.  
**Prerequisite:** MKT 106

**MKT 252 Internet Marketing (3-0)** **3 crs.**  
Presents techniques on how to design, maintain, and market effective digital storefronts. Focuses on communicating, selling, and providing content to Web-based stores and other Internet businesses.

**MKT 255 Marketing Research (3-0)** **3 crs.**  
Provides students with a basic overview of marketing research. Includes an understanding of how and why marketing research is conducted and how it interacts with marketing decision making.  
**Prerequisite:** MKT 245 or consent of program coordinator.

**MKT 281 Internship in Marketing (1-15)** **3 crs.**  
Provides work experience in a marketing-related field. Credit is given for participation in a supervised work experience wherein an organized training plan will be followed at a College-approved training station. One lecture hour per week for a seminar devoted to issues dealing with preparation for success in a marketing career.  
**Prerequisite:** MKT 245 and 3 credit hours in MGT or MKT course work, or consent of program coordinator.

**MKT 285 Topics in Marketing (0.5-0 to 3-0)** **0.5-3 crs.**  
Studies selected problems or topics in marketing. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated two times to a maximum of three credit hours.

**MNT Maintenance**

**MNT 111 Prints and Schematics (1-2)** **2 crs.**  
Develops understanding and skills necessary to read and interpret building blueprints including engineering site drawings. Emphasizes plan, elevation and section projection techniques. Provides experience using commercial product sketches, schematics and electrical ladder diagrams.

**MNT 115 Basic Carpentry (1-2)** **2 crs.**  
Covers basic knowledge of wood materials, products for construction, framing and safety. Techniques for using measuring, layout and hand tools are covered. Principles of stationary and portable power tools including pneumatic nailers will be demonstrated.

**MNT 125 Basic Plumbing (1-2)** **2 crs.**  
Covers working knowledge and basic plumbing skills for installations and maintenance. Provides experience in pipe material selection, assembly, and tools commonly used by plumbers in their daily work.

**MNT 215 Commercial Carpentry (1-2)** **2 crs.**  
Covers advanced framing with floor and roof trusses, structural steel beams and columns, BCI-Joists and GlueLam girders. Metal stud framing techniques for commercial codes are developed for both field cut and shop fabrication of building walls and roofs.  
**Prerequisite:** MNT 115 with a grade of "C" or better.

**MNT 225 Commercial Plumbing (1-2)** **2 crs.**  
Covers methods for removing, installing, supporting safely, reconnecting and testing drain, vent and waste systems. Provides techniques for controlling supply. Includes valve, faucet and fixture removal, repair and replacement in commercial properties.  
**Prerequisite:** MNT 125 with a grade of C or better.

**MNT 228 Small Equipment Maintenance (1-2)** **2 crs.**  
Trains students in small engine and equipment repair. Students will demonstrate the ability to repair small engines such as those found in lawn, garden, and construction equipment. Emphasis is placed on overhaul, repair, adjustment, and troubleshooting.

**MNT 235 Maintenance Troubleshooting Skills (2-2)** **3 crs.**  
Covers methods of system analysis using schematics, circuit diagrams and installation drawings. Develops troubleshooting diagnostics for control, electrical and mechanical systems based on problem reduction through fault tree analysis.  
**Prerequisite:** MNT 111 with a grade of C or better.

**MNT 255 Belts/Bearings and Mechanical Drives (1-2)** **2 crs.**  
Covers a practical knowledge of machine elements and power transmission with emphasis on belts, bearings and mechanical drive systems. Provides knowledge in system maintenance, lubrication and power efficiencies.  
**Prerequisite:** MNT 235 with a grade of "C" or better.

**MNT 281 Topics in Maintenance Technology (1-0 to 6-3)** **1-6 crs.**  
Examines selected problems or topics in Maintenance Technology. The specific course content and instructional methodology will vary each semester offered depending on the material presented. A syllabus containing specific topic information will be available in the division office with pre-registration materials each time the course is offered. This course may be repeated up to a maximum of 6 credit hours.  
**Prerequisite:** Consent of instructor.

**MOA Medical Office Administration**

**MOA 145 Health Care Records Management (1-2)** **2 crs.**  
Introduces types of patient-care records prepared and maintained by health care personnel. Includes elements of records, record keeping, medical records ethics and confidentiality, correction techniques and use of health care references, with transcription and computer applications. Electronic Medical Records (EMR) is introduced. Beginning transcription techniques including grammar, punctuation and proof-reading skills are emphasized. Basic keyboarding skills and knowledge of Microsoft Word are necessary for this course.  
**Prerequisite:** Prior or concurrent enrollment in ENG 101, and HSC 112 with a grade of C or better.

**MOA 150 Math Applications in Health Care (1-0)** **1 cr.**  
Develops skill necessary to calculate medication dosages and solutions using the metric system. A basic math ability, including decimals, fractions and percentages, is necessary to be successful in this course.

**MOA 195 Principles of Health Insurance Billing (2-2)** 3 crs.  
Explores and compares major types of health insurance contracts and describes benefits and limitations. Provides practice in processing insurance claim forms (CMS-1500). Current Procedural Terminology (CPT) and International Classification of Disease (ICD) coding techniques are introduced. Emphasis is on insurance rules and regulations including Medicare and Medicaid, claim submission, reimbursement and collections.  
**Prerequisite:** BIO 135 and HSC 112 with grades of C or better.

**MOA 196 Current Procedural Terminology (CPT) Coding (2-2)** 3 crs.  
Introduces the student to the Current Procedural Terminology (CPT) coding system for procedures used in ambulatory care and services rendered by physicians. Emphasis is on the six sections of the CPT Coding Manual, elements of coding techniques and guidelines. The CPT Coding Manual is used to code the procedures and services performed by physicians. Individual code numbers are assigned to identify all procedures and services. (Credit will be given for either HIT 196 or MOA 196, but not both.)  
**Prerequisite:** BIO 135, BIO 136 and HSC 112 with grades of C or better. Prior or concurrent enrollment in MOA 195.

**MOA 198 Principles of ICD-10-cm Coding (2-2)** 3 crs.  
Prepares the student who is currently enrolled in the Health Insurance Billing Specialist Certificate or for the student who has already completed the certificate before ICD-9-CM was changed to ICD-10-CM. Incorporates the changes that have necessitated the move from ICD-9-CM to ICD-10-CM. Teaches how more precise documentation and an increased number of codes will help ensure more accuracy when reporting CPT services and procedures.  
**Prerequisite:** Prior or concurrent enrollment in MOA 195 with a grade of C or better.

**MOA 215 Clinical Procedures (4-8)** 8 crs.  
Offers basic and advanced clinical techniques in the physician's office or clinic. Includes diagnostic and laboratory testing techniques, principles of medications, and assisting the physician in specialty examinations and minor surgical procedures. Demonstration of clinical skills in outpatient care is emphasized, with maintenance of proper patient and technician protection guidelines. NOTE: The program's health requirements and American Heart Association Cardiopulmonary Resuscitation (CPR) certificate must be completed prior to the end of this course.  
**Prerequisite:** HSC 165, MOA 145 and MOA 150 with grades of C or better.

**MOA 235 Health Care Office Procedures (2-2)** 3 crs.  
Offers development of skills in medical front office procedures used in a health care facility. Emphasizes patient relations in health care by using office simulations including computer programs with introduction to electronic medical records. Strong emphasis on cultural diversity issues and application in the health care field.  
**Prerequisite:** HSC 112 and MOA 145 with grades of C or better.

**MOA 245 Health Care Office Management (3-0)** 3 crs.  
Introduces the qualities of a health care office supervisor necessary to effectively manage the physician's office, clinic or other health care facility. Includes human relations skills, personnel recruitment, coordinating and supervising office personnel, office facilities, the office policy manual, records management, patient education and time management. Class focuses on teaching the student how to be a supervisor but also how to work with and interact with their own supervisor(s).  
**Prerequisite:** MOA 215 or MOA 235 with grades of C or better.

**MOA 265 Medical Receptionist Externship (1-10)** 3 crs.  
Provides 160 hours during the semester of supervised experience in a health care office/facility to enhance the student's administrative technical skills. NOTE: The program's health requirements must be completed prior to placement in on-site externship.  
**Prerequisite:** MOA 235 with a grade of C or better.

**MOA 275 Health Insurance Specialist Externship (1-10)** 3 crs.  
Provides 160 hours during the semester of supervised experience in a health care office/facility to enhance the student's technical skills. NOTE: The program's health requirements must be completed prior to placement in on-site externship.  
**Prerequisite:** MOA 196, MOA 198 and MOA 235 with grades of C or better.

**MOA 280 Medical Assistant Externship (1-10)** 3 crs.  
Provides 160 hours during the semester of supervised experience in a health care facility to enhance the student's administrative technical skills. One-hour seminars throughout the semester devoted to externship issues. NOTE: The program's health requirements and American Heart Association Cardiopulmonary Resuscitation (CPR) certificate must be completed prior to placement in externship.  
**Prerequisite:** MOA 215 and MOA 235 with grades of C or better.

**MOA 291 Certified Medical Assistant Review (1-0)** 1 cr.  
Prepares students with study skills and tips necessary to successfully pass the Certified Medical Assistant (CMA) exam. Provides assistance and guidelines for submitting the CMA exam application, reviews content on the CMA exam, develops resume writing and interviewing skills.  
**Prerequisite:** Prior or concurrent enrollment in MOA 280 with a grade of C or better.

**MOA 299 Medical Office Capstone (3-0)** 3 crs.  
Guides the development of a capstone project and integrates theory and skills from MOA coursework. Discusses medical office management issues and methodologies and puts them into practice. Preparation of practice management file including policies and procedures and personnel files.  
**Prerequisite:** MGT 111, MGT 270 and MOA 235 with grades of C or better.

## MTH Mathematics

**MTH 051 Arithmetic of Whole Numbers (0-2)** 1 cr.  
Covers reading and writing whole number and whole number operations. Students will learn whole number operations of addition, subtraction, multiplication and division without the use of a calculator. Estimation is introduced as an aid to computation as well as place value and problem solving techniques with applications. Course material will be individualized. Carries no transfer credit.  
**Prerequisite:** Math placement test.

**MTH 052 Arithmetic of Fractions and Decimals (0-2)** 1 cr.  
Covers the operations associated with addition, subtraction, multiplication, and division of common fractions, mixed numbers and decimals. Includes work with word problem applications. Course material will be individualized. Carries no transfer credit.  
**Prerequisite:** MTH 051 with a grade of C or better or required math placement test score.

**MTH 053 Arithmetic of Ratio, Proportion, Percent and Measurement (0-2)** 1 cr.  
Covers operations of ratio and proportion, percent, and measurement, including both English and metric systems and conversions between them. Includes estimation and word problem applications. Course material will be individualized. Carries no transfer credit.  
**Prerequisite:** MTH 052 with a grade of C or better or required math placement test score.

**MTH 054 Graphs, Geometry and Signed Numbers (0-2) 1 cr.**

Covers graph interpretation, geometric measurement, and introduction to the arithmetic of signed and rational numbers. Rational numbers includes work with word problem applications. Course materials will be individualized. Carries no transfer credit.  
**Prerequisite:** MTH 053 with a grade of C or better or required math placement test score.

**MTH 055 Basic Mathematics (1-0 to 3-0) 1-3 crs.**

Consists of three modules. Module A: The Whole Numbers; Module B: Fractions and Decimals; Module C: Ratios and Change. Module A includes an understanding of whole numbers; addition, subtraction, multiplication, and division of whole numbers; estimation; exponents and square roots; factors and multiples; prime numbers. Module B includes the definition of fractions; equivalent fractions; decimal fractions and decimal notation; mixed numbers; addition, subtraction, multiplication, and division of fractions, mixed numbers, and decimals. Module C includes ratios and rates; proportions; percents; percent change; signed numbers; addition, subtraction, multiplication, and division of signed numbers. Carries no transfer credit.

**Prerequisite:** Placement test score(s).

**MTH 060 Beginning Algebra (4-0) 4 crs.**

Introduces basic concepts of algebra including real numbers, variables and algebraic expressions, equations, inequalities, ratios and proportions, Cartesian coordinate system and graphs of relations. Emphasizes mathematical reasoning and problem solving utilizing multiple approaches (algebraic, geometric, and numeric techniques) with focus on mathematical definitions, theorems, symbols, and notation. Carries no transfer credit.  
**Prerequisite:** MTH 054 with a grade of C or better, or MTH 055 with a grade of C or better or a grade of P, or required math placement test scores.

**MTH 061 Elementary Algebra I (1-0) 1 cr.**

Introduces basic algebraic vocabulary, operations with signed numbers, linear equations, word problems, ratios and proportions. Course is individualized and is offered in the Math Lab. Carries no transfer credit.  
**Prerequisite:** MTH 054 or MTH 055 with a grade of C or better or required math placement test score.

**MTH 062 Elementary Algebra II (1-0) 1 cr.**

Continues MTH 061 and covers linear inequalities, rectangular coordinates, linear equations in two variables, graphing equations, word problems, exponents and scientific notation, adding, subtracting and multiplying polynomials. Course is individualized and offered in the Math Lab. Calculator may be used. Carries no transfer credit.

**Prerequisite:** MTH 061 with a grade of C or better.

**MTH 063 Elementary Algebra III (1-0) 1 cr.**

Continues MTH 062 and covers multiplying, dividing and factoring polynomials, quadratic equations and word problems involving quadratic equations, multiplication, division, addition and subtraction of rational expressions. A calculator may be used. Course is individualized and offered in the Math Lab. Carries no transfer credit.

**Prerequisite:** MTH 062 with a grade of C or better.

**MTH 065 Algebraic Modeling (4-0) 4 crs.**

Develops conceptual understanding of number systems, algebraic expressions, equations, inequalities and graphs of equations. Develops algebra skills with an emphasis on data modeling throughout the course. Carries no transfer credit.

**Prerequisite:** MTH 055 (Basic Mathematics) with a grade of C or better or P, or other placement options.

**MTH 067 Foundations of Mathematics 1A (1-2) 2 crs.**

Introduces basic concepts of algebra including real numbers, variables and algebraic expressions, equations, ratios and proportions, Cartesian coordinate system and graphs of lines. Emphasizes mathematical reasoning and problem solving utilizing multiple approaches (algebraic, geometric, and numeric techniques) with focus on mathematical definitions, theorems, symbols, and notation. Carries no transfer credit.

**Prerequisite:** MTH 054 or MTH 055 with a grade of C or better, or required math placement test score.

**MTH 068 Foundations of Mathematics 1B (1-2) 2 crs.**

Continues the basic concepts of algebra including real numbers, variables, algebraic expressions, equations, Cartesian coordinate system and graphs of relations and introduces inequalities and solving inequalities. Emphasizes mathematical reasoning and problem solving utilizing multiple approaches (algebraic, geometric, and numeric techniques) with focus on mathematical definitions, theorems, symbols, and notation. Carries no transfer credit.

**Prerequisite:** MTH 067 with a grade of C or better.

**MTH 070 Plane Geometry (3-0) 3 crs.**

Introduces concepts of Euclidean plane geometry, including lines, angles, polygons and circles. Carries no transfer credit.

**Prerequisite:** MTH 060 or MTH 068 or MTH 082 with a grade of C or better, or required math placement test score.

**MTH 075 Review of Developmental Algebra and Geometry (0-2) 1 cr.**

Reviews the topics of elementary and intermediate algebra and geometry as needed with the goal of improving the student's mathematics placement scores. Carries no transfer credit.

**Prerequisite:** Required math placement test score or consent of the department chair.

**MTH 080 Intermediate Algebra (4-0) 4 crs.**

Introduces fundamental concepts of algebra including polynomial and rational expressions; radical expressions; complex numbers; and functions that are linear, quadratic, exponential, and logarithmic. Credits earned in this course cannot be applied toward an Associate in Arts or Associate in Science degree. Carries no transfer credit.

**Prerequisite:** MTH 060 (Beginning Algebra) or MTH 065 (Algebraic Modeling) with a grade of C or better, or ALEKS exam score of 30-45, or other placement options (see Testing Center placement policy).

**MTH 081 Supplemental Math/Quantitative Literacy (1-0) 1 cr.**

Provides mathematical support for students in MTH 101 who place at the Intermediate Algebra level. Carries no transfer credit.

**Prerequisite:** MTH 065 with a grade of C or better, or other placement options.

**Corequisite:** MTH 101.

**MTH 082 Data Modeling With Algebra (5-0) 5 crs.**

Develops beginning and intermediate algebra skills with an emphasis on data modeling and statistical concepts throughout the course. Introduces basic algebraic concepts such as number sets, arithmetic operations, algebraic expressions, equations and inequalities, ratios and proportions, the Cartesian coordinate system, graphs of relations, functions and their graphs including polynomial, exponential, and logarithmic functions. Credits earned in this course cannot be applied toward an Associate in Arts or Associate in Science degree. Carries no transfer credit.

**Prerequisite:** MTH 054 with a grade of C or better, or MTH 055 with a grade of C or better or a grade of P, or required math placement test score.

**MTH 085 Supplemental Math/Elementary Statistics (1-0) 1 cr.**

Provides mathematical support for students in MTH 165 (Elementary Statistics) who place at the Intermediate Algebra level.

**Prerequisite:** MTH 065 with a grade of C or better, or other placement options.

**Corequisite:** MTH 165.

**MTH 097 Basic Technical Mathematics (3-0) 3 crs.**

Reviews arithmetic, introduces basic algebraic and right triangle trigonometric techniques. Includes arithmetic, elementary algebra, geometry, ratio and proportions, measurements, right triangle trigonometry and their application to solve a variety of career and technical problems. Draws practical problems the student's career area, including emergency services, graphic communications, building trades, culinary arts and information technology. Intended for students pursuing Harper degrees and certificates in career program fields. This course: is not transferable, does not satisfy the prerequisite for any other mathematics course, and does not satisfy any general education requirements.

**MTH 101 Quantitative Literacy (4-0) 4 crs.**

Develops conceptual understanding, problem-solving, decision-making and analytic skills dealing with quantities and their magnitudes and interrelationships, using calculators and personal computers as tools. Includes: computing statistical measures such as central tendency and dispersion; computing correlation coefficients and regression equations; using normal distributions to test hypotheses; using logical statements and arguments in a real-world context; solving systems of equations and inequalities and modeling data; solving mathematical finance problems; and selecting and using appropriate approaches and tools in formulating and solving real-world problems. IAI M1 901

**Prerequisite:** MTH 080 (Intermediate Algebra) or MTH 082 (Data Modeling with Algebra) with a grade of C or better; an ACT Math score of 22 or higher; an ALEKS exam score of 46; or other placement options (see Testing Center placement policy). MTH 060 (Beginning Algebra) or MTH 065 (Algebraic Modeling) with a grade of C or better is an acceptable prerequisite if MTH 081 is taken concurrently with MTH 101.

**MTH 103 College Algebra (3-0) 3 crs.**

Emphasizes algebraic and graphical approaches. Topics include but are not limited to polynomial functions, rational functions, exponential functions, logarithmic functions and systems of equations. NOTE: This course does not fulfill the math requirement for the AA or AS degrees.

**Prerequisite:** MTH 070 (Plane Geometry) with a grade of C or better or other Geometry placement options (see Testing Center placement policy) AND MTH 080 (Intermediate Algebra) with a grade of C or better; or an ACT Math score of 22 or higher; or an ALEKS exam score of 46 or higher; or other placement options (see Testing Center placement policy).

**MTH 124 Finite Mathematics (3-0) 3 crs.**

Develops the mathematics of simple models in behavioral, social and management sciences. Studies applications of set theory, vectors and matrices, linear programming, probability rules, and Markov chains with computer assistance. IAI M1 906

**Prerequisite:** MTH 070 (or equivalent) with a grade of C or better or Geometry placement test score AND MTH 103 with a grade of C or better, or required math placement test score. An ACT Math score of 28 or more will satisfy all previous prerequisites mentioned for this course.

**MTH 130 Mathematics for Elementary Teaching I (3-2) 4 crs.**

Focuses on mathematical reasoning and problem solving and is designed to meet the requirements of the state certification of elementary teachers when taken in conjunction with MTH 131. The course examines the underlying conceptual framework of the topics of sets, functions, whole numbers, number theory, integers, rational numbers, irrational numbers and the real number system. Students are expected to be active participants in the learning process. They will apply mathematical reasoning in a variety of problem-solving situations using estimation, models, tables, graphs and symbolic representations. The use of appropriate techniques and tools, such as calculators and computers, are a focus of investigations and discussion throughout the course. A weekly lab component is required.

**Prerequisite:** MTH 070 (or equivalent) with a grade of C or better or Geometry placement test and MTH 080 with a grade of C or better, or math placement test. An ACT Math score of 22 or more will satisfy all the previous prerequisites mentioned for this course.

**MTH 131 Mathematics for Elementary Teaching II (3-2) 4 crs.**

Completes the two course sequence that begins with MTH 130 and focuses on mathematical reasoning and the solving of real-life problems, rather than on routine skills. The following topics will be studied in depth: geometry, counting techniques and probability, logic and statistics. Students are expected to be active participants in the learning process. Calculators and computers will be used throughout the course. A weekly lab component is required. IAI M1 903

**Prerequisite:** MTH 130 with a grade of C or better.

**MTH 134 Calculus for Social Scientists (4-0) 4 crs.**

Develops an intuitive approach to concepts of differential and integral calculus. Applies these concepts to problems in social, behavioral and management sciences. Not for physical science or mathematics majors. IAI M1 900-B

**Prerequisite:** MTH 070 (or equivalent) with a grade of C or better or Geometry placement test score AND MTH 103 with a grade of C or better, or required math placement test score. An ACT Math score of 28 or more will satisfy all the previous prerequisites mentioned for this course.

**MTH 140 Precalculus (5-0) 5 crs.**

Builds on MTH 103 (College Algebra) to provide the foundation for calculus and analytic geometry. Topics include but are not limited to radical and rational equations; equations quadratic in form; polynomial and rational functions; polynomial and rational inequalities; sequences and series; mathematical induction; the binomial theorem; trigonometric functions; inverse trigonometric functions; applications of trigonometric functions; polar coordinates and vectors; and the complex plane.

**Prerequisite:** MTH 070 (Plane Geometry) with a grade of C or better or other Geometry placement options (see Testing Center placement policy) AND MTH 103 (College Algebra) with a grade of C or better; or an ACT Math score of 28; or an ALEKS exam score of 61.

**MTH 162 General Education Statistics (4-0) 4 crs.**

Extends the concepts of descriptive statistics presented in MTH 082. Investigates basic probability theory (sample spaces, mutually exclusive and independent events, conditional probability), probability distributions (normal distributions, binomial distributions, sampling distributions), inferential methods (point and interval estimation, hypothesis testing, t-tests, chi-square tests, ANOVA). Focuses on mathematical reasoning and the solving of real-life problems, rather than on routine skills and formulas. Emphasizes the interpretation and communication of results. Credit will be given for MTH 162 or MGT 225 or MTH 165, but not for any two of these courses. IAI M1 902

**Prerequisite:** MTH 070 (or equivalent) with a grade of C or better or Geometry placement test AND MTH 082 with a grade of C or better.

**MTH 165 Elementary Statistics (4-0) 4 crs.**

Focuses on mathematical reasoning and the solving of real-life problems in statistics, rather than on routine skills. Includes analysis of data using sample statistics, basic probability theory, probability distributions (normal and binomial), sampling distributions of means and proportions, statistical inference (estimation, hypothesis testing, t-test and chi-square test, and errors), correlation and regression, F-test and analysis of variance. Computer labs using statistical software packages are incorporated throughout course. (Credit will be given for either MTH 162 or MTH 165 or MGT 225, but not all.) IAI M1 902

**Prerequisite:** MTH 080 (Intermediate Algebra) or MTH 082 (Data Modeling with Algebra) with a grade of C or better; an ACT Math score of 22 or higher; an ALEKS exam score of 46; or other placement options (see Testing Center placement policy). MTH 060 (Beginning Algebra) or MTH 065 (Algebraic Modeling) with a grade of C or better is an acceptable prerequisite if MTH 085 is taken concurrently with MTH 165.

**MTH 200 Calculus With Analytic Geometry I (5-0) 5 crs.**

Studies limits, continuity, derivatives, antiderivatives, and definite integrals as they relate to algebraic, trigonometric, inverse trigonometric, logarithmic and exponential functions. Includes applications to geometry, science, and engineering. IAI M1 900-1, IAI MTH 901

**Prerequisite:** MTH 070 Plane Geometry (or equivalent) with a grade of C or better or Geometry placement test score AND MTH 140 Precalculus with a grade of C or better, or required math placement test score, or consent of mathematics department chair. An ACT Math score of 28 or more and a trigonometry course with a grade of C or better will satisfy all the previous prerequisites mentioned for this course.

**MTH 201 Calculus With Analytic Geometry II (5-0) 5 crs.**

Continues MTH 200. Studies differentiation of transcendental functions, techniques of integration, series, conics, polar coordinates and parametric equations with applications to science and engineering. IAI M1 900-2, IAI MTH 902

**Prerequisite:** MTH 200 (Calculus with Analytic Geometry I) with a grade of C or better.

**MTH 202 Calculus With Analytic Geometry III (5-0) 5 crs.**

Continues MTH 201. Studies three-dimensional vectors, solid analytic geometry, vector-valued functions, partial derivatives, multiple integrals, Green's theorem, surface integrals, divergence theorem and Stoke's theorem. IAI M1 900-3, IAI MTH 903

**Prerequisite:** MTH 201 (Calculus with Analytic Geometry II) with a grade of C or better.

**MTH 203 Linear Algebra (4-0) 4 crs.**

Introduces matrices, vector spaces and linear transformations. Serves as a first exposure to abstract mathematical structures. Include matrices and their operations, determinants, solutions of systems of linear equations, Euclidean and general vector spaces, bases and dimension, linear transformations and their associated subspaces, eigenvalues and eigenvectors. Discusses applications to mathematics, computer graphics, and physical sciences. IAI MTH 911

**Prerequisite:** MTH 201 with a grade of C or better.

**MTH 212 Differential Equations (3-0) 3 crs.**

Continues MTH 202. Emphasizes solutions of first order differential equations, linear differential equations, special second order equations and series solutions. Studies selections from these topics: LaPlace transforms, Fourier series, numerical methods and applications of matrix algebra. IAI MTH 912

**Prerequisite:** MTH 202 with a grade of C or better.

**MTH 220 Discrete Mathematics (3-0) 3 crs.**

Introduces analysis of finite collections and mathematical foundations of sequential machines, computer system design, data structures and algorithms. Includes sets and logic, subscripts, arrays, number systems, counting, recursion, graph theory, trees, networks and Boolean algebra. IAI M1 905, IAI CS 915

**Prerequisite:** MTH 070 (or equivalent) with a grade of C or better or Geometry placement test score AND MTH 103 with a grade of C or better, or required math placement test score. An ACT Math score of 28 or more will satisfy all the previous prerequisites mentioned for this course.

**MTP Massage Therapy****MTP 100 Introduction to Massage Therapy (1-0) 1 cr.**

Provides a general program overview and historical development of massage therapy. Introduces students to the benefits of massage therapy and its relationship to our current health care system, alternative health care systems and healing practices from other cultures. Introduces the systems of the body, basic effects of stress on the body and different types of massage modalities. Introduces students to basic anatomical terms, regions of the body, and an anatomy palpation demonstration and practice.

**Prerequisite:** You must be 18 years old to register for this course.

**MTP 110 Massage Practice Fundamentals (1-2) 2 crs.**

Covers the requirements for the practice of therapeutic massage including sanitary and safety issues. Introduces students to ethics and standards of practice for massage practitioners. Teaches intake processes and communication skills. Discusses the effects of stress on the body and the importance of self-care. Introduces the benefits of breathwork, meditation and mindful movements. Creates a foundation of healthy body mechanics for the massage therapist.

**Prerequisite:** MTP 100 with a grade of C or better.

**MTP 112 Massage Structure/Function I (3-0) 3 crs.**

Begins an overview of the structure and function of integumentary, fascial, skeletal, muscular and nervous systems. Examines the indications for and benefits of massage therapy on these systems. Discusses the different types of massage modalities and manual therapies appropriate for each body system covered. Includes medical terminology for professional record keeping.

**Prerequisite:** MTP 100 with a grade of C or better.

**MTP 115 Foundations of Massage Therapy I (2-4) 4 crs.**

Covers effects, indications, contraindications, proper body mechanics, and the practice of Swedish massage, joint mobilization and friction techniques. Energetic approaches to healing are demonstrated. Provides training in myofascial therapies. Covers a general sequence for a full body treatment and proper draping techniques.

**Prerequisite:** MTP 100 with a grade of C or better.

**MTP 118 Hydrotherapy and Intro to Clinic (1-2) 2 crs.**

Covers the stages of injury and inflammation from acute, early to late subacute, and chronic. Discusses effects, indications and contraindications of massage therapy techniques on compromised tissue. Discusses different hydrotherapy techniques, effects, indications and contraindications. Introduces assessment procedures including intake and documentation. Ethical topics and decision-making processes are discussed. Includes theory and practice of clinic treatments and procedures.

**Prerequisite:** MTP 100 with a grade of C or better.

**MTP 122 Massage Structure/Function 2 (3-0) 3 crs.**

Provides an overview of the structure and function of the cardiovascular, lymphatic, immune, respiratory, digestive, endocrine, urinary and reproductive systems. Examines the indications for and benefits of massage therapy on these systems. Discusses the different types of massage modalities and manual therapies appropriate for each body system covered.

**Prerequisite:** MTP 112 with a grade of C or better.

**MTP 123 Integrative Palpation I (2-2) 3 crs.**

Covers musculoskeletal system more specifically in this hands-on class for massage practitioners. Focuses on bony landmarks, muscle location and soft tissue structures of the regions: shoulder, upper arm, trunk, spine, abdomen, pelvis and thigh. Regional treatments incorporating specific anatomy are introduced.

**Prerequisite:** MTP 100 with a grade of C or better.

**MTP 125 Foundations of Massage Therapy II (2-4) 4 crs.**

Provides in-depth adaptation of MTP 115 (Foundations of Massage Therapy I) techniques along with body mechanic theory to apply treatments to regions. Integrates anatomy palpation with specific treatments. General to specific treatment progressions discussed with focus on safe and effective body mechanics for therapist. Introduces trigger point therapy, specific myofascial therapies and cross-fiber friction. Introduces theory of specific conditions related to dysfunctions associated with the myofascial system, including trigger points.

**Prerequisite:** MTP 115 with a grade of C or better.

**MTP 128 Massage Therapy Clinical I (0-3) 1 cr.**

Provides the students with the opportunity to perform massage therapy in a clinical setting under the supervision of licensed massage therapists. Allows the student opportunities to perform management tasks associated with clinic operation such as booking appointments, taking payments and filing clinic charts. Students complete 45 clinical hours in the on-site clinic.

**Prerequisite:** MTP 115 and MTP 118 with grades of C or better.

**MTP 133 Integrative Palpation II (1-2) 2 crs.**

Continues musculoskeletal system more specifically in this advanced hands-on class for massage practitioners. Focuses on bony landmarks, muscle location and soft tissue textures of the regions: head, neck, face, forearm, hand, lower leg, foot. Regional treatments incorporating specific anatomy are introduced.

**Prerequisite:** MTP 123 with a grade of C or better.

**MTP 134 Pathology for Massage Therapists (2-0) 2 crs.**

Covers pathology of the body systems as it relates to massage therapy. Covers mechanisms of health and disease as well as working with special needs populations. Provides research-based lectures and case studies for common dysfunctions and disorders. Discusses scope of practice for massage therapists in relation to assessment and diagnosis.

**Prerequisite:** MTP 112 with a grade of C or better.

**MTP 135 Foundations of Massage Therapy III (1-2) 2 crs.**

Introduces clinical massage theory for specific conditions and special populations. Assessment procedures, advanced modalities and plans of care appropriate for specific conditions are discussed. Discusses the benefits of growing research in the field of clinical massage therapy and incorporates research into treatment planning.

**Prerequisite:** MTP 125 with a grade of C or better.

**MTP 136 Movement Analysis/Applied Therapies (2-2) 3 crs.**

Covers the laws of movement and contractions principles as related to massage therapy. Applies advanced neuromuscular therapies and techniques into treatment plans for musculoskeletal and movement related conditions. Integrates joint mobilization with neuromuscular therapy. Introduces sports massage.

**Prerequisite:** MTP 112, MTP 122, MTP 123 and MTP 133 with grades of C or better.

**MTP 137 Massage Practice Development (1-0) 1 cr.**

Discusses career options, marketing strategies and resume development for an entry-level massage therapist. Ethics are discussed with a focus on business practices, basic tax requirements and legal obligations. National Board (MBLEX) review and practice tests are implemented with test-taking strategies discussed. Continuing education and specialties for massage therapists are discussed.

**Prerequisite:** MTP 128 with a grade of C or better.

**MTP 138 Massage Therapy Clinical II (0-3) 1 cr.**

Allows students to continue practice of massage therapy techniques in a clinical setting under the supervision of licensed massage therapists. Includes participation in community massage events. Allows students the opportunity to participate in tasks associated with clinic operation such as booking appointments, taking payments and filing clinic charts. Students complete 45 clinical hours in the on-site clinic.

**Prerequisite:** MTP 128 with a grade of C or better.

**MUS Music****MUS 100 Introduction to Music Careers (1-0) 1 cr.**

Explores issues relating to the successful pursuit of a career in music. Recommended for anyone pursuing a professional music career.

**MUS 101 Fundamentals of Music Theory (3-0) 3 crs.**

Provides the background to interpret and understand the language of music through the study of notation, rhythm, scales, intervals, triads, cadences, basic forms and musical terms. Students are prepared for the study of harmony and for practical musical activity. Suitable for pre-teachers and non-music majors.

**MUS 102 Introduction to Electronic/Computer Music (3-1) 3 crs.**

Introduces basic computer applications in music. Explores electronic music technology, MIDI instruments, sequencing, music notation and educational software.

**MUS 103 Music Appreciation (3-0) 3 crs.**

Introduces standard concert repertory through intensive guided listening. Representative works by major composers from each period are chosen to illustrate the principal styles, forms and techniques of vocal and instrumental music. IAI F1 900

**MUS 104 Introduction to American Music (3-0) 3 crs.**

Develops a stylistic frame of reference for judging popular music. Surveys characteristic elements of jazz, rhythm and blues, popular music and their relation to western classical music. For non-music majors. IAI F1 904

**MUS 106 Introduction to Jazz (3-0) 3 crs.**

Examines the evolution and development of jazz, America's only native musical art form. The study begins in 1851 with the blending of African, European, Haitian, and Creole music and culture in New Orleans, which results in the creation of blues and improvisation. The study continues with further development in Chicago, Kansas City, New York, and Los Angeles. The course introduces blues, Dixieland, big band, cool, hard bop, funk, free, and fusion.

**MUS 107 Introduction to Music in Theatre (3-0) 3 crs.**

Surveys characteristic elements of music in the theatre. Includes opera, operetta and Broadway musicals. Examines them as media for communicating the philosophic, aesthetic and psychological perspectives of composers and their eras. Music experience not required. IAI F1 910

## COURSE DESCRIPTIONS

**MUS 111 Theory of Music I (3-1) 3 crs.**

Begins an intensive study of the structure of music of the Common Practice period. Examines, through analysis and composition, the musical practice of the late 17th and early 18th centuries.

**Corequisite:** MUS 115.

**MUS 112 Theory of Music II (3-1) 3 crs.**

Continues the study of the structure of music of the Common Practice period. Examines, through analysis and composition, the musical practice of the middle to late 18th and early 19th centuries, paying particular attention to harmonic language and its effect upon musical form.

**Prerequisite:** MUS 111 with a grade of C or better.

**Corequisite:** MUS 116.

**MUS 115 Aural Skills I (0-2) 1 cr.**

Develops skills in melodic, harmonic and rhythmic dictation and sight singing.

**Corequisite:** MUS 111.

**MUS 116 Aural Skills II (0-2) 1 cr.**

Develops skills in melodic, harmonic and rhythmic dictation and sight singing.

**Corequisite:** MUS 112.

**MUS 120 Introduction to Music Literature (3-0) 3 crs.**

Surveys the styles, periods, literature and personalities in each of the commonly accepted music periods, with primary emphasis on hearing music of each style. IAI F1 901

**MUS 130 Choir (0-3) 1 cr.**

Provides mixed voice choral experience for singers of average or above average ability. Stresses fundamentals of good choral diction and tone through choral works of various styles and types. May be repeated up to a maximum of four credit hours.

**Prerequisite:** Consent of instructor.

**MUS 136 Community Chorus (0-3) 1 cr.**

Provides a variety of choral experiences including larger choral works such as oratorios and cantatas, and selections from grand opera, comic opera and musical comedy. May be repeated up to a maximum of four credit hours.

**MUS 140 Band (0-3) 1 cr.**

Provides students proficient in playing band instruments the opportunity to perform music of various styles and types. Stresses sight reading and musicianship. Develops skills, musical understanding and enjoyment. May be repeated up to a maximum of four credit hours.

**Prerequisite:** Consent of instructor.

**MUS 145 Ensembles (0-3) 1 cr.**

Provides students with proficiency on an instrument or in voice the opportunity to perform in various vocal and instrumental chamber music ensembles. Stresses sight reading and musicianship. Develops skills, musical understanding and enjoyment. May be repeated up to a maximum of four credit hours.

**Prerequisite:** Consent of instructor.

**MUS 150 Orchestra (0-3) 1 cr.**

Provides students proficient in playing orchestral instruments the opportunity to perform music of various styles and types. Stresses sight reading and musicianship. Develops skills, musical understanding and enjoyment. May be repeated up to a maximum of four credit hours.

**Prerequisite:** Consent of instructor.

**MUS 165 Class Piano I (1-2) 2 crs.**

Develops a rudimentary knowledge of the keyboard and playing skills sufficient to cope with simple, practical situations. Emphasis on tonal notation, harmonization, transposition, sight reading, improvisation, ensemble playing and basic piano literature.

**MUS 166 Class Piano II (1-2) 2 crs.**

Continues MUS 165.

**Prerequisite:** MUS 165 with a grade of C or better or proficiency examination.

**MUS 167 Class Guitar (1-2) 2 crs.**

Provides instruction for students who wish to play the guitar. Designed for the student with little or no traditional music background, the course relates basic music theory concepts to guitar styles. Develops basic performance skills.

**MUS 169 Class Voice (1-2) 2 crs.**

Introduces correct use of the singing voice. Emphasizes proper breathing and tone production, accurate intonation and diction and the fundamentals of music reading.

**MUS 180 Flute and Piccolo (0.5-6) 1 cr.**

Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.

**MUS 181 Oboe and English Horn (0.5-6) 1 cr.**

Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.

**MUS 182 Clarinets (0.5-6) 1 cr.**

Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.

**MUS 183 Bassoons and Contra Basso (0.5-6) 1 cr.**

Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.

**MUS 184 Saxophones (0.5-6) 1 cr.**

Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.

**MUS 185 French Horn (0.5-6) 1 cr.**

Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.



- MUS 186 Trumpet (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 187 Trombone (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 188 Baritone (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 189 Tuba (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 190 Percussion (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 191 Violin (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 192 Viola (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 193 Cello (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 194 String Bass (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 195 Harp (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 196 Piano (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 197 Organ (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 198 Voice (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 199 Classical Guitar (0.5-6)** 1 cr.  
Provides instruction for those desiring to improve their skills on a particular instrument. One half-hour lesson per week. Minimum of six hours of practice per week. Jury examination required. Students are urged to participate in repertoire classes and music convocations. May be repeated up to a maximum of four credit hours. Does not meet the requirements of the Associate of Fine Arts degree.
- MUS 211 Theory of Music III (3-1)** 3 crs.  
Completes the study of the structure of music of the Common Practice period and begins the study of subsequent periods. Examines, through analysis and composition, the musical practice of the 19th and early 20th centuries.  
**Prerequisite:** MUS 112 with a grade of C or better.  
**Corequisite:** MUS 215.
- MUS 212 Theory of Music IV (3-1)** 3 crs.  
Completes the study of the structure of classical and avant-garde music in the 20th century. Explores the structure of tonal music from a linear perspective.  
**Prerequisite:** MUS 211 with a grade of C or better.  
**Corequisite:** MUS 216.
- MUS 215 Aural Skills III (0-2)** 1 cr.  
Develops skills in melodic, harmonic and rhythmic dictation and sight singing.  
**Corequisite:** MUS 211.

## COURSE DESCRIPTIONS

**MUS 216 Aural Skills IV (0-2) 1 cr.**

Develops skills in melodic, harmonic and rhythmic dictation and sight singing.

**Corequisite:** MUS 212.

**MUS 223 Instrumental Literature (3-0) 3 crs.**

Surveys the music literature available for performance by musical instruments, excluding keyboard instruments and voice.

**MUS 224 Keyboard and Vocal Literature (3-0) 3 crs.**

Surveys music literature available for performance by keyboard and voice, including opera.

**MUS 261 Phonetics and Diction: Italian (2-0) 2 crs.**

Covers the use of Italian language diction for singers. Includes study of correct pronunciation of Italian musical works; translations only to aid in understanding; and historical survey of song literature in Italian.

**MUS 262 Phonetics and Diction: German (2-0) 2 crs.**

Covers the use of German language diction for singers. Includes study of the International Phonetic Alphabet and correct pronunciation of German musical works; translations only to aid in understanding; and historical survey of song literature in German.

**MUS 263 Phonetics and Diction: French (2-0) 2 crs.**

Covers the use of French language diction for singers. Includes study of the International Phonetic Alphabet and correct pronunciation of French musical works; and historical survey of song literature in French.

**MUS 265 Class Piano III (1-2) 2 crs.**

Continues MUS 166. Greater emphasis on keyboard harmony, ensemble playing and jazz improvisation.

**Prerequisite:** MUS 166 with a grade of C or better or proficiency examination.

**MUS 266 Class Piano IV (1-2) 2 crs.**

Continues MUS 265.

**Prerequisite:** MUS 265 with a grade of C or better or proficiency examination.

**MUS 280 Flute and Piccolo (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 281 Oboe and English Horn (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 282 Clarinets (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 283 Bassoons and Contra Basso (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 284 Saxophones (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 285 French Horn (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 286 Trumpet (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 287 Trombone (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 288 Baritone (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 289 Tuba (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 290 Percussion (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 291 Violin (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 292 Viola (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 293 Cello (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 294 String Bass (1-12) 2 crs.**

Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.

**Prerequisite:** Successful audition.

**MUS 295 Harp (1-12)** 2 crs.  
Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.  
**Prerequisite:** Successful audition.

**MUS 296 Piano (1-12)** 2 crs.  
Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.  
**Prerequisite:** Successful audition.

**MUS 297 Organ (1-12)** 2 crs.  
Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.  
**Prerequisite:** Successful audition.

**MUS 298 Voice (1-12)** 2 crs.  
Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.  
**Prerequisite:** Successful audition.

**MUS 299 Classical Guitar (1-12)** 2 crs.  
Provides instruction for music majors. One hour lesson per week. Minimum of 12 hours of practice per week. Jury examination and performance at repertoire classes and music convocations required. May be repeated up to a maximum of eight credit hours.  
**Prerequisite:** Successful audition.

## NET Networking

**NET 105 IT Fundamentals (2-2)** 3 crs.  
Provides students with a hands-on introduction to operating systems and related concepts. Includes hardware, software, file systems, directory structures, files and attributes, text editors, applications, and maintenance. Compares and contrasts GUI and command line interfaces in a variety of current operating systems.

**NET 111 A+ Hardware (2-2)** 3 crs.  
Provides students with experience installing, configuring, maintaining, upgrading, diagnosing, troubleshooting, and networking recent and current personal computer hardware.  
**Prerequisite:** NET 105 with a grade of C or better or concurrent enrollment.

**NET 112 A+ Operating Systems Technologies (2-2)** 3 crs.  
Provides students with experience installing, configuring, upgrading, diagnosing, troubleshooting, and networking recent and current personal computer operating systems.  
**Prerequisite:** NET 105 with a grade of C or better or concurrent enrollment.

**NET 121 Introduction to Networking (2-2)** 3 crs.  
Provides students with a comprehensive introduction to local area networks. Includes the OSI model, media, topologies, protocols, network maintenance, upgrades, troubleshooting, and current network operating systems.  
**Prerequisite:** NET 105 with a grade of C or better.

**NET 122 Internet Protocols (2-2)** 3 crs.  
Provides students with a detailed examination of Internet addressing and protocols. Includes IP addressing, routing, IP, ICMP, ARP, TCP, UDP, DHCP, DNS, HTTP, FTP, and SMTP. Uses protocol analyzers to monitor and examine network traffic.  
**Prerequisite:** NET 121 with a grade of C or better or concurrent enrollment.

**NET 201 Service Desk and Service Management (2-2)** 3 crs.  
Provides a comprehensive introduction to service desk and IT service management concepts. Includes service desk operations, roles and responsibilities, processes and procedures, service strategy, service design, service transition, service operation and continual service improvement. Emphasizes communication and teamwork skills through collaborative hands-on assignments and activities.  
**Prerequisite:** NET 105 with a grade of C or better.

**NET 231 Windows Scripting (2-2)** 3 crs.  
Provides students with hands-on experience scripting the Windows environment. Include Windows PowerShell, variables, conditions, loops, arrays and hash tables, functions, and errors. Emphasizes system management and monitoring.  
**Prerequisite:** NET 105 with a grade of C or better.

**NET 236 Linux Shell Scripting (2-2)** 3 crs.  
Provides students with hands-on experience scripting the Linux Shell. Includes variables, conditions, loops, arrays, functions and errors. Emphasizes system management and monitoring.  
**Prerequisite:** NET 105 with a grade of C or better.

**NET 240 Linux Fundamentals (2-2)** 3 crs.  
Provides students with a comprehensive introduction to Linux administration. Includes architecture, installation, commands, file systems, data management, user interfaces, administrative tasks, system services, networking, and security.  
**Prerequisite:** NET 111, NET 112, NET 121 and NET 122 with grades of C or better.

**NET 260 Windows Server Administration (2-2)** 3 crs.  
Provides students with a comprehensive introduction to Windows Server administration. Includes installation, server roles, Active Directory, storage, performance, and maintenance.  
**Prerequisite:** NET 111, NET 112, NET 121 and NET 122 with grades of C or better.

**NET 270 Cisco Networking (CCNET) (2-2)** 3 crs.  
Provides students with experience configuring Cisco routers and switches for a variety of tasks, including IOS basics, router configuration, routing protocols, NAT, access lists, WAN settings, switching and VLANs.  
**Prerequisite:** NET 111, NET 112, NET 121 and NET 122 with grades of C or better.

**NET 280 Network Security Fundamentals (2-2)** 3 crs.  
Provides students with a comprehensive hands-on overview of network security, including authentication, encryption, digital certificates, perimeter topologies, remote access, cryptography, and operational security.  
**Prerequisite:** NET 111, NET 112, NET 121 and NET 122 with grades of C or better.

**NET 299 Networking Capstone (1-4)** 3 crs.  
Provides experience in network design, implementation, and troubleshooting. Based upon real-world conditions, students will design and build a corporate networking environment to support given scenarios. Emphasizes network documentation, proposal specifications, and system configuration and testing to meet customer/client needs.  
**Prerequisite:** NET 231 or NET 236 AND NET 270 and NET 280 with grades of C or better or concurrent enrollment.

## NUR Nursing

### **NUR 101 PN Fundamentals (4-9) 7 crs.**

Introduces concepts as related to the practical nurse's role as a member of the discipline of nursing and a provider of care. Emphasizes the Neuman Systems Model, the nursing process, essential components of therapeutic communication, basic skills, and legal and ethical professional issues for the delivery of safe and competent care for diverse patients through lifespan. Provides theory and practice in assisting clients to meet basic needs.

**Prerequisite:** Admission into the Practical Nursing certificate program and BIO 160 and PSY 101 with grades of C or better.

**Corequisite:** NUR 105.

### **NUR 102 Medical Surgical Nursing for the PN (2-6) 4 crs.**

Focuses on the use of the nursing process to meet the needs of young adults and older adults by utilizing concepts from the Neuman Systems Model. Emphasis on the normal physiologic and psychosocial aspects of basic care needs as well as the common diseases specific to each client population. Selected clinical experiences in the acute care and clinic settings, where practical nurses can be employed.

**Prerequisite:** BIO 161, NUR 101 and NUR 105 with grades of C or better.

**Corequisite:** NUR 108.

### **NUR 104 PN Field Experience (1-6) 3 crs.**

Utilizes the nursing process and the Neuman Systems Model to provide care for clients with commonly occurring problems causing health interferences. Provides opportunity for supervised experience as a member of the nursing care team in health care settings, assuming the role and responsibilities of the practical nurse.

**Prerequisite:** NUR 102, NUR 105, NUR 108 and NUR 109 with grades of C or better.

### **NUR 105 PN Pharmacology (0.5-1.5) 1 cr.**

Introduces pharmacology as needed for safe medication administration for the practical nurse. Discusses the mechanism of action of the major medication groups and the pharmacological activity within each group. Addresses areas of drug action, clinical application, adverse events and nursing implications for safe medication administration and assessment of medication effects. Lab will address safe medication administration.

**Prerequisite:** Admission into the Practical Nursing certificate program and BIO 160 and PSY 101 with grades of C or better.

**Corequisite:** NUR 101.

### **NUR 108 PN Mental Health Nursing (1-0) 1 cr.**

Utilizes the Neuman Systems Model and the nursing process to provide client-centered nursing care for clients experiencing psychosocial issues/mental health disorders. Emphasizes health promotion concepts in the care of clients across the life cycle and the continuum of mental health care. Addresses various treatment modalities and interventions including those applicable to community based care and long term care.

**Prerequisite:** NUR 101 and NUR 105 with grades of C or better.

**Corequisite:** NUR 102.

### **NUR 109 PN Maternity and Pediatrics (2-6) 4 crs.**

Focuses on the use of the nursing process to meet the needs of childbearing and childrearing families including infants and children, by utilizing concepts from the Neuman Systems Model. Emphasis on the normal physiologic and psychosocial aspects of basic care needs as well as the common diseases specific to each client population. Selected clinical experiences in the areas where practical nurses can be employed.

**Prerequisite:** BIO 161, NUR 101 and NUR 105 with grades of C or better.

### **NUR 110 Nursing Concepts and Practice (2-0) 2 crs.**

Establishes a firm basis on which to build subsequent nursing courses. Examines the essential concepts and core values of the nursing profession including health and wellness, safety, caring, critical thinking, ethics, the nursing process, and standards of practice. The Neuman Systems Model is the framework for the study of client care.

**Prerequisite:** Admission into the Nursing degree program and BIO 161, ENG 101 and PSY 101 with grades of C or better.

**Corequisite:** NUR 180.

### **NUR 111 Introduction to Nursing Roles (2-0) 2 crs.**

Introduces the student to the professional roles and relationships of the registered nurse utilizing the Neuman Systems Model, the nursing process, and essential components of professional communication for the delivery of safe and competent care for the adult and aging client.

**Prerequisite:** NUR 110 with a grade of C or better.

**Corequisite:** NUR 180.

### **NUR 112 Nursing Roles Clinical (0-6) 2 crs.**

Provides the student with the opportunity to practice and apply basic knowledge and skills to the provision of client care in the laboratory and clinical setting. Students will apply critical thinking, professional communication and the Neuman Systems Model when providing care to clients in the acute care setting.

**Prerequisite:** NUR 110 with a grade of C or better.

**Corequisite:** NUR 111 and NUR 180.

### **NUR 140 Adult Health Concepts I (2-0) 2 crs.**

Develops essential medical and surgical knowledge and skills needed to provide nursing care to clients with respiratory, cardiac, gastrointestinal, metabolic and endocrine dysfunctions throughout the adult life cycle. Utilization of critical thinking, therapeutic communication and the Neuman Systems Model are used through implementation of the nursing process. Health promotion and disease prevention will be addressed.

**Prerequisite:** NUR 112 with a grade of C or better.

### **NUR 141 Adult Health Clinical I (0-6) 3 crs.**

Provides the student with the opportunity to apply essential respiratory, cardiac, metabolic, gastrointestinal and endocrine systems' dysfunctions knowledge and skills to the provision of client care in the clinical setting. Students will utilize critical thinking, therapeutic communication and the Neuman Systems Model when providing care to clients. Nursing care will be provided in a variety of settings including acute care, ambulatory care and the community.

**Prerequisite:** NUR 112 with a grade of C or better.

**Corequisite:** NUR 140.

### **NUR 150 Psychosocial Concepts (2-0) 2 crs.**

Utilizes the Neuman Systems Model and the nursing process to provide client-centered nursing care for clients experiencing psychosocial issues/mental health disorders. Emphasizes health promotion concepts in the care of clients across the life cycle and the continuum of mental health care. Addresses various treatment modalities and interventions including those applicable to community-based care.

**Prerequisite:** NUR 112 with a grade of C or better.

### **NUR 151 Psychosocial Concepts Clinical (0-4) 2 crs.**

Provides experience in caring for clients with psychological issues/mental health disorders in a variety of acute care and community-based health care settings. Students will utilize critical thinking, therapeutic communication and the Neuman Systems Model in providing care to clients across the life cycle in the continuum of mental health care.

**Prerequisite:** NUR 112 with a grade of C or better.

**Corequisite:** NUR 150.

- NUR 180 Pathophysiology (3-0)** 3 crs.  
Presents the pathophysiological basis of illness for the beginning professional nurse. Focuses on major diseases and illnesses that affect the health of the individual throughout the life cycle. Theories relating etiology, pathogenesis and clinical manifestations are used to study common disease processes that compromise the client's health.  
**Prerequisite:** BIO 161 with a grade of C or better.
- NUR 198 Medical Corpsman to Practical Nurse (2-12)** 6 crs.  
Addresses differences in competencies between the Medical Education and Training Campus (METC) Basic Medical Technician Corpsman Program and those of a practical nursing program as delineated in the Illinois Nurse Practice Act. Upon successful course completion, students will be awarded a Medical Corpsman to Practical Nurse Certificate and be eligible to sit for the practical nurse licensing exam (NCLEX-PN).  
**Prerequisite:** Successful completion of the METC Basic Medical Technician Corpsman Program\* within the last five years. If more than five years, at least one year of experience using corpsman skills within the last five years. \*Navy B-300-0010 Hospital Corpsman (HM-0000), Air Force Phase 1 L8AQJ4N031 01AA, Aerospace Medical Service Apprentice Course (4N031)
- NUR 199 Bridge to Advanced Nursing (2.5-1.5)** 3 crs.  
Focuses on the transition of the Licensed Practical Nurse (LPN) into the Harper College associate degree nursing program. Examines the philosophy of the Associate Degree Nursing Program and major concepts of the role of the Registered Professional Nurse. Includes an emphasis on application of the nursing process of selected health problems. Learning experiences are provided in the laboratory and clinical to evaluate the student's knowledge of nursing concepts and performance of selected nursing skills.  
**Prerequisite:** Licensure as a Licensed Practical Nurse (LPN) and meet Nursing Program admission criteria as stated in the Associate Degree Nursing Handbook. Completion of BIO 130, NUR 104, NUR 180 and NUR 210 with grades of C or better.
- NUR 201 Child Bearing Concepts (2-0)** 2 crs.  
Utilizes the Neuman Systems Model and the nursing process to provide client-centered nursing care for childbearing women, infants and clients with problems related to the reproductive system. Addresses health promotion and common alterations in body systems.  
**Prerequisite:** NUR 141 and NUR 151 with grades of C or better.
- NUR 202 Adult Health Concepts II (2-0)** 2 crs.  
Develops essential nursing medical and surgical knowledge and skills needed to provide nursing to clients with musculoskeletal, sensory, neurological and renal dysfunction throughout the adult life cycle with emphasis on the older adult. Utilization of critical thinking, therapeutic communication and the Neuman Systems Model are used through implementation of the nursing process. Health promotion and disease prevention will be addressed.  
**Prerequisite:** NUR 141 and NUR 151 with grades of C or better.
- NUR 205 Pediatric Health Concepts (2-0)** 2 crs.  
Expands on utilization of the nursing process and application of the Neuman Systems Model in exploring the nurse's role as provider of care, educator and advocate for infants, children, and adolescents. Addresses topics of health promotion and maintenance for children and families. Considers acute, chronic and terminal conditions experienced by children.  
**Prerequisite:** NUR 141 and NUR 151 with grades of C or better.
- NUR 210 Physical Assessment (1-2)** 2 crs.  
Provides theory and demonstration of skills required for a basic, systematic physical assessment. Includes content and practical experience in interviewing and obtaining a health history and the skills of inspection, palpation, percussion and auscultation as they are utilized in the routine client assessment performed by the registered nurse. Focuses on the assessment of normal findings and the description of deviations from normal. Discusses cultural considerations and expected findings of individuals across the life cycle, i.e. infant/child, adolescent, young/middle adult, and older adult. Requires the synthesis of previously learned knowledge of anatomy, physiology, nursing concepts and nursing process.  
**Prerequisite:** BIO 160 and EMS 216, or NUR 112 with grades of C or better.
- NUR 216 Adult Health Concepts III (2-0)** 2 crs.  
Focuses on application of advanced nursing medical and surgical knowledge and skills needed to provide nursing care to clients with hematologic, immunologic, and oncology disorders. Concepts regarding critical care will also be presented and discussed. Utilization of critical thinking, therapeutic communication, and the Neuman Systems Model is used through implementation of the nursing process. Health promotion and disease prevention will be addressed.  
**Prerequisite:** NUR 220, NUR 240 and NUR 250 with grades of C or better.
- NUR 218 Role Transition Seminar (1-0)** 1 cr.  
Facilitates the transition from nursing student to entry-level registered nurse. Addresses the challenges and responsibilities associated with management and leadership within an organization, assuming a professional role, career management, nursing research and continuing education.  
**Prerequisite:** Prior or concurrent enrollment in NUR 216 and NUR 260 with grades of C or better.
- NUR 220 Child Bearing Clinical (0-4)** 2 crs.  
Provides experiences in caring for childbearing families and clients with reproductive problems in acute and community-based settings. Students will utilize the Neuman Systems Model and the nursing process to address common alterations in body systems.  
**Prerequisite:** NUR 141 and NUR 151 with grades of C or better.  
**Corequisite:** NUR 201.
- NUR 240 Adult Health Clinical II (0-4)** 2 crs.  
Provides the student with the opportunity to apply knowledge learned about musculoskeletal, sensory, neurological and renal dysfunction to the provision of client care in the clinical setting. Students will utilize critical thinking, therapeutic communication and the Neuman Systems Model when providing care to clients in this area. Nursing care will be provided in a variety of settings including acute care, ambulatory care and the community.  
**Prerequisite:** NUR 141 and NUR 151 with grades of C or better.  
**Corequisite:** NUR 202.
- NUR 250 Pediatric Health Clinical (0-4)** 2 crs.  
Applies principles of the Neuman Systems Model to the nursing care of infants, children and adolescents in hospital and community-based settings. Experience is provided in caring for children and families with a variety of specific system disorders. Emphasis will be on utilizing critical thinking and the nursing process to provide safe care in various health care settings.  
**Prerequisite:** NUR 141 and NUR 151 with grades of C or better.  
**Corequisite:** NUR 205.

**NUR 260 Adult Health Clinical III (0-6) 3 crs.**

Provides the student with the opportunity to apply advanced concepts to patients with complex multisystem disorders. Areas of concentration include but are not limited to hematological dysfunction, oncology, multisystem organ failure, shock, and burns. Students will utilize critical thinking, therapeutic communication and the Neuman Systems Model when providing care to clients in this clinical rotation. Nursing care will be provided in a variety of settings including acute care and the community.

**Prerequisite:** NUR 220, NUR 240, and NUR 250 with grades of C or better.

**Corequisite:** NUR 216.

**NUR 280 Role Transition Practicum (0-15) 5 crs.**

Provides experiences to begin the transition from nursing student to registered nurse. Emphasis will be on the collaborative care and management of groups of clients with selected system disorders. The clinical experiences will enable students to assume the role of the registered nurse in the management and delegation of nursing care of clients with system disorders and will be under the direction of a registered nurse preceptor. Students will utilize critical thinking, teaching-learning principles, therapeutic communication and the Neuman Systems Model when providing care to multiple clients in the clinical setting.

**Prerequisite:** NUR 216 and NUR 260 with grades of C or better.

**Corequisite:** NUR 218.

**PHB Phlebotomy****PHB 101 Phlebotomy Principles and Practice (3-2) 4 crs.**

Includes the role of the phlebotomist, infection control and safety in the workplace, venipuncture-collection equipment and supplies, skin puncture collection procedures, specimen handling, basic laboratory tests, quality assurance, communication skills and professionalism. Includes 40 successful micro and macro blood draws.

**Prerequisite:** Prior or concurrent enrollment in HSC 112 with a grade of C or better.

**PHB 102 Phlebotomy Internship (1-8) 2 crs.**

Consists of 120 clinical hours of supervised phlebotomy practice at a local health care facility. The internship rotation schedule is arranged on an individual basis. Special registration permit for registering for the internship is required. NOTE: Possession of a current Cardiopulmonary Resuscitation (CPR) for the Health Care Provider certification card and completion of State of Illinois criminal background check, drug screen, and the program's health requirements are required prior to placement in the internship. All students wishing to sit for the national certification exam must have earned a high school diploma or equivalency. Proof of high school graduation or GED is required before registering for PHB102.

**Prerequisite:** HSC 112 and PHB 101 with grades of C or better.

**PHI Philosophy****PHI 101 Critical Thinking (3-0) 3 crs.**

Introduces the student to reasoning in a language-centered context. Students will learn how to identify arguments and distinguish them from other types of discourse. Some topics covered include evaluating claims, recognizing informal fallacies, problem solving and evaluating media. Students will also learn how to cast issues in a neutral manner, to recognize and appreciate a variety of perspectives, and to argue for and against more than one perspective on an issue. The focus of this course is on everyday practical reasoning. IAI H4 906

**PHI 102 Symbolic Logic (3-0) 3 crs.**

Introduces the student to formal symbolic logic. After an introduction to the concept of argument, students will learn both Aristotelian and modern symbolic logic. Applications to the real world may include contracts, legal arguments, and computer languages.

**PHI 105 Introduction to Philosophy (3-0) 3 crs.**

Principles and problems of philosophy as seen in different schools of thought. Topics: validity of human knowledge; nature of reality; mind and body; free will and determinism; moral and aesthetic values; and religious belief. IAI H4 900

**PHI 115 Ethics (3-0) 3 crs.**

Consideration of problems of value and conduct, including the question of the "good life" or happiness; and contemporary moral issues such as war, violence, drugs, racism, crime and punishment. IAI H4 904

**PHI 120 Social and Political Philosophy (3-0) 3 crs.**

Focuses on the ideas of justice, liberty, equality, law and order, rights and privileges. This includes discussion of such issues as democracy, communism, nuclear war, capital punishment, sexual equality, hunger and drugs.

**PHI 150 Business Ethics (3-0) 3 crs.**

Introduces philosophical ethical theory and its application to business decisions. Consider theories of economic justice, social responsibility, hiring practices and rights of employees and employers.

**PHI 160 Non-Western Philosophy (3-0) 3 crs.**

Introduces selected philosophical concepts and value systems of several non-Western cultures. Gives attention to the Bhagavad Gita, Vedanta and other Hindu texts, Confucius, the Tao Te Ching and other Chinese classics and key texts from at least two other traditions. IAI H4 903N

**PHI 170 Environmental Ethics (3-0) 3 crs.**

Introduces philosophical ethical theory and its application to environmental issues. Explores the roots of Western ideas about nature (Greek, Biblical, early Modern), the American environmental discussion and current positions including development, conservation, preservation and restoration. Considers issues including human-centered vs. life-centered views, whether species or habitats have value, appreciation vs. cost/benefit approaches, and bioregionalism.

**PHI 180 Biomedical Ethics (3-0) 3 crs.**

Considers the ethics of the professional-patient relationship (confidentiality, informed consent, paternalism, truth-telling), the ethics of life and death (abortion, euthanasia, suicide), and the ethics of medicine on a social scale (the right to health care, the distribution of medical resources).

**PHI 190 Philosophy and Gender (3-0) 3 crs.**

Introduces philosophical thinking and its application to issues concerning women. Explores a variety of theories by and about women. Considers a number of issues including images of women, biological vs. social conditioning, the relation to gender to class and race, women's spirituality, education, family work, violence and pornography. Men are welcome to take the course.

**PHI 205 Religions of the World (3-0) 3 crs.**

Introduces the teachings, practices, social structures and histories of the religions of India (mainly Buddhism and Hinduism), and China and Japan (mainly Confucianism, Shinto and Taoism), and of the Middle East (mainly Christianity, Islam and Judaism). IAI H5 904N

**PHI 210 Death and Dying (3-0) 3 crs.**

Presents an interdisciplinary approach to the meaning of death. Focuses on biological, psychological, legal, philosophical and religious aspects of the phenomena of death and dying.

**PHI 215 Religion in America (3-0)** 3 crs.  
Surveys the contribution of religion to American culture including the differences between rural and urban society, the development of religious freedom and the rise of a "secular religion." Examines the emergence of new forms of belief and practice and the variety of religious issues confronting American society today. IAI H5 905

**PHI 220 Philosophy of Religion (3-0)** 3 crs.  
Examines the nature and presuppositions of Western religions, especially the reasons which can be given for and against the existence of God. Selected further topics: the problem of evil, life after death, the nature of religious experience, language, knowledge and authority, religion and science, and major philosophical theories on the nature of religion. IAI H4 905

**PHI 225 Introduction to the New Testament (3-0)** 3 crs.  
Offers an overview of the New Testament and selected Early Christian writings. Introduces students to various methods of critical study, analysis, interpretation and application of these writings. IAI H5 901

**PHI 231 History of Philosophy: Ancient and Medieval (3-0)** 3 crs.  
Surveys the major figures and schools in Western philosophical tradition from the pre-Socratic Greeks through the 14th century. Emphasis on interpreting philosophical reflection in light of the social, political, religious and cultural context from which it arises. IAI H4 901

**PHI 232 History of Philosophy: Modern (3-0)** 3 crs.  
Surveys the major figures and schools in Western philosophical tradition from the 15th to the 20th century. Emphasizes interpreting philosophical reflection in light of the social, political, religious and cultural context from which it arises. IAI H4 902

## PHS Physical Science

**PHS 101 Physical Science Survey (3-0)** 3 crs.  
Designed to give the non-science major an understanding and appreciation of motion and energy applications, geology, atmospheric science and astronomy. Knowledge of high school algebra is assumed. IAI P9 900  
**Prerequisite:** MTH 080 or MTH 082 with a grade of C or better, or placement into MTH 101.

**PHS 105 Energy and Society (3-2)** 4 crs.  
Introduces non-science majors to topics from various sciences as they relate to energy resources and energy consumption. Connects the theory of energy to its practical applications. Examines the connection between science and economics, politics and other social issues, using energy as a focus. (Meets laboratory science requirements for non-science majors.) IAI P1 901L  
**Prerequisite:** MTH 080 or MTH 082 with a grade of C or better, or placement into MTH 101.

**PHS 111 Introduction to Physical Science (3-2)** 4 crs.  
Examines topics from physics including motion, structure of matter, electricity and magnetism, waves and particles, and atomic structure and basic chemical principles. Course is for non-science majors fulfilling laboratory science requirements. Knowledge of high school algebra is assumed. IAI P1 900L  
**Prerequisite:** MTH 080 or MTH 082 with a grade of C or better, or placement into MTH 101.

**PHS 112 Exploring the Earth and Universe (3-2)** 4 crs.  
Examines topics in rocks and minerals, earth forms and history, weather, the solar system, stars and the universe. Course is for non-science majors fulfilling laboratory science requirements. Knowledge of high school algebra is assumed. IAI P1 905L  
**Prerequisite:** MTH 080 or MTH 082 with a grade of C or better, or placement into MTH 101.

**PHS 115 Introduction to Meteorology (3-2)** 4 crs.  
Gives the non-science major an understanding and appreciation of the composition and structure of the atmosphere, thermodynamic processes, forces and related small- and large-scale motions, air masses, fronts, tropical cyclones, solar and terrestrial radiation, severe weather, basic weather forecasting techniques, and general circulations that affect the atmosphere. Knowledge of high-school algebra is assumed. IAI P1 905L  
**Prerequisite:** MTH 080 or MTH 082 with a grade of C or better, or placement into MTH 101.

**PHS 170 Fundamentals of Nanoscience (2-2)** 3 crs.  
Studies the field of nanotechnology, the capability to observe and manipulate systems at the molecular or atomic scale that is affecting all traditional sciences. Provides an introduction to the history, tools, materials, and current and emerging applications of nanotechnology. IAI P9 900L  
**Prerequisite:** MTH 080 or higher with a grade of C or better, or required MTH 103 placement test score.

## PHY Physics

**PHY 100 Basic Concepts in Physics (3-0)** 3 crs.  
Examines basic topics in physics including motion, force, energy, electricity and magnetism, waves and particles, and atomic structure. Course is for non-science majors fulfilling non-laboratory science requirements. IAI P1 900  
**Prerequisite:** MTH 080 with a grade of C or better, or placement into MTH 101.

**PHY 121 Introductory Physics I (4-3)** 5 crs.  
Covers mechanics, heat, fluids, and sound. Intended for students in life science, architecture and technology. Students pursuing degrees in engineering, physics, or chemistry should enroll in PHY 201. Knowledge of high school trigonometry assumed. IAI P1 900L  
**Prerequisite:** MTH 140 with a grade of C or better, or required math placement test score into MTH 200.

**PHY 122 Introductory Physics II (4-3)** 5 crs.  
Continues PHY 121. Topics in electricity, magnetism, light and modern physics.  
**Prerequisite:** PHY 121 with a grade of C or better.

**PHY 201 General Physics I: Mechanics (4-2)** 5 crs.  
Introduces mechanics using calculus. Topics include force and motion; work and energy; rotation; oscillations; and fluids. For students in chemistry, engineering, mathematics and physics. IAI P2 900L, IAI PHY 911  
**Prerequisite:** MTH 200 with a grade of C or better. Recommend concurrent enrollment in MTH 201.

**PHY 202 General Physics II Electricity and Magnetism (4-2)** 5 crs.  
Introduces electricity and magnetism using calculus. Topics include charge; electric field and potential; resistance, capacitance, and inductance; DC and AC circuits; magnetic fields; laws of Gauss, Ampere, and Faraday; Maxwell's equations and electromagnetic waves; geometric optics, lenses and mirrors, interference and diffraction, and polarization. Intended for students in chemistry, engineering, mathematics and physics. IAI P HY 912  
**Prerequisite:** MTH 202 with a grade of C or better or concurrent enrollment, and PHY 201 with a grade of C or better.

**PHY 203 General Physics III Thermal and Quantum Physics (4-2)** 5 crs.  
Introduces thermodynamics and quantum physics. Topics include temperature and heat; ideal gas law; first and second law of thermodynamics; kinetic theory of gases; entropy; relativity; quantization; the atom; solid state physics and conduction; nuclear and elementary particle physics. Intended for students in chemistry, engineering, mathematics and physics. IAI PHY 913  
**Prerequisite:** MTH 201 and PHY 201 with grades of C or better.

## PLS Paralegal Studies

**PLS 101 Introduction to Paralegal Studies (3-0)** 3 crs.  
Surveys the functions of law; courts and lawyers in modern society; analysis of the origin, training and role of the paralegal; professional responsibilities of the lawyer; outline of the fields and specializations within the practice of law; and instruction in legal research and writing upon a review of the sources and works of law. Students must take the Paralegal Studies entrance examination.

**PLS 102 Fundamentals of Legal Research (3-0)** 3 crs.  
Orients students to law library and various legal publications, treatises and other legal writings encountered in day-to-day practice of law. Emphasizes developing student capability to analyze, interpret and communicate facts, ideas and law through comprehension of legal research techniques.  
**Prerequisite:** PLS 101 with a grade of C or better, or consent of program coordinator.

**PLS 103 Litigation (3-0)** 3 crs.  
Emphasizes the role of the paralegal in litigation. Analyzes civil procedure and instruction in preparation of documents used in lawsuits, covering pre- and post-trial matters, evidentiary problems and assistance during trials.  
**Prerequisite:** PLS 101 with a grade of C or better, or consent of program coordinator.

**PLS 105 Family Law (3-0)** 3 crs.  
Emphasizes the role of the paralegal in family law. Examines domestic relations law with emphasis on marriage, divorce, annulment, separation agreements, adoption and other legal matters involving the family.  
**Prerequisite:** PLS 101 with a grade of C or better, or consent of program coordinator.

**PLS 123 Real Property Law (3-0)** 3 crs.  
Provides historical study of common law estates and interests and statutes. Emphasizes the role of and relationship between the attorney and the paralegal in preparing the more common types of real property transactions and conveyances such as deeds, contracts and leases; drafting problems involving these various instruments; special research projects related to the subject matter; and a study of the system of recording and search of public documents. Students must take the Paralegal Studies entrance examination or have the coordinator's consent prior to registration.

**PLS 200 Probate (3-0)** 3 crs.  
Emphasizes the role of the paralegal in probate matters. Surveys the principles, history and sources of probate law; examines probate court forms and tax returns; and details instruction in gathering information and preparing documents for the paralegal's supervising attorney.

**PLS 201 Tort and Insurance Law (3-0)** 3 crs.  
Emphasizes the role of the paralegal in tort and insurance law. Studies basic tort and insurance principles; examines insurance claim procedures and pleading forms used in litigation of various actions.

**PLS 202 Estate Planning (3-0)** 3 crs.  
Emphasizes the role of the paralegal in estate planning. Examines common forms of wills and trusts; survey of legal principles applicable thereto; and instruction in draftsmanship of documents by the paralegal for the supervising attorney.

**PLS 205 Contract Law (3-0)** 3 crs.  
Surveys the principles, history, and sources of contract law. Examines the elements of a valid, enforceable contract. Provides instruction regarding the drafting of contracts. Examines Article 2 of the Uniform Commercial Code regarding the sale of goods. Emphasizes the role of the paralegal in contract law.

**PLS 206 Environmental Law (3-0)** 3 crs.  
Studies American environmental law. Students will learn about the Clean Air Act, the Clean Water Act, the Comprehensive Environmental Response, Compensation and Liability Act, the Endangered Species Act, wetlands, asbestos, and environmental racism. Emphasis is placed on the role of the paralegal in an environmental law issue. Ethical issues dealing with environmental law are also presented and discussed.

**PLS 208 Internship in Paralegal Studies (1-10)** 3 crs.  
Provides supervised experience in a legal setting to enhance students' technical paralegal skills. One-hour seminar each week devoted to paralegal issues.  
**Prerequisite:** PLS 101, PLS 102, PLS 103, and a PLS elective with grades of C or better.

**PLS 210 Corporate and Securities Law (3-0)** 3 crs.  
Prepares paralegal students to aid in incorporation, corporate record keeping and compliance with administrative regulations. This includes the understanding of statutes, rules, forms and releases pertaining to the principal acts administered by the Securities and Exchange Commission.

**PLS 212 Law Office Management (3-0)** 3 crs.  
Studies law office management relying on the system analysis approach to examine design, methods and develop processes necessary for integrating the paralegal into the hierarchy of the organization of a law office with emphasis on defining functions of the lawyer, paralegal and legal secretary.

**PLS 215 Today's Law Office (3-0)** 3 crs.  
Provides the paralegal student with exposure to and training in working within a law office. The Law Office is online and virtual, yet it still is a working law firm. Reviews the intricacies of medium-sized law firm with a strong emphasis on litigation and contract work as well. Upon the completion of this course, the student should retain an understanding of working through legal analysis to solve the problems of clients coming into a law firm. The course shall emphasize the need of the written project as well, including, but not limited to, client letters, motions, memorandums, briefs, deposition summaries and other legal documents produced by paralegals. The student will be familiar with information relevant to law practices including case law, statutes, news sources, administrative law and public records.  
**Prerequisite:** PLS 101, PLS 102, PLS 103 and a PLS elective with grades of C or better.

**PLS 220 Community Law (3-0)** 3 crs.  
Develops skills and competencies needed to recognize legal problems and comply with the procedures relating to various government agencies. Emphasis will be on federal housing and landlord-tenant law; mental and civil commitments; welfare laws; labor law; social security law; and consumer protection law. The paralegal's role in community law is stressed.



**PLS 221 Bankruptcy Law (3-0) 3 crs.**

Surveys the principles, history and sources of bankruptcy law in the United States. Examines the law relating to Chapters 7, 9, 11, 12 and 13 of the United States Bankruptcy Code. Provides instruction in the drafting of the schedules needed for Chapter 7, 9, 11, 12 and 13 filings. Examines the jurisdiction of the federal bankruptcy courts. Stresses the role of the paralegal in bankruptcy law.

**PLS 222 Intellectual Property (3-0) 3 crs.**

Provides historical study of the development of intellectual property law in the United States. Emphasizes the role of the paralegal in preparing applications for patent, copyright, and trademark protections with federal and state governments. Provides an overview of the role of the paralegal in preparing for litigation involving intellectual property law issues. Reviews ethical issues that arise in the intellectual property arena.

**PLS 223 Computer-Assisted Legal Research (3-0) 3 crs.**

Provides the paralegal student with exposure to and training in the use of the computer to perform legal research. Emphasizes Westlaw, LEXIS, and Internet research. Introduces the student to the latest forms of computer-assisted legal research as they become available.

**Prerequisite:** PLS 102 with a grade of C or better, or consent of program coordinator.

**PLS 224 Commercial Real Estate Law (3-0) 3 crs.**

Studies American commercial real estate law. Students will learn the anatomy of a commercial real estate transaction; the role of a paralegal in a commercial real estate transaction; the importance of title searches and surveys; and the role of leases, easements, and licenses. Students will also review the process utilized to obtain commercial real estate mortgages and the role of a paralegal in preparing for a commercial real estate closing. Emphasis is placed on the role of the paralegal in commercial real estate transactions. Ethical issues dealing with commercial real estate are also presented and discussed.

**PLS 230 Topics in Paralegal Studies (1-0 to 6-0) 1-6 crs.**

Studies selected problems or topics in paralegal studies. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated two times to a maximum of six credit hours.

**PSC Political Science****PSC 101 American Politics and Government (3-0) 3 crs.**

Focuses on political involvement, elections, campaigns, interest groups, Congress, courts, the presidency, and the constitution. Discusses how our government runs, as well as current political controversies. Utilizes political figures as guest speakers and offers opportunities for political participation, especially in election years. IAI S5 900

**PSC 210 Topics in Political Science (1-0 to 6-0) 1-6 crs.**

Studies selected problems or topics in political science. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be taken from one to six credit hours.

**PSC 220 State and Local Government in the United States (3-0) 3 crs.**

Examines state and local governments including their powers, organization, functions, development, politics and contemporary issues/problems. IAI S5 902

**PSC 250 Comparative Politics (3-0) 3 crs.**

Explores the politics of selected countries in Africa, Asia, Europe, Latin America and/or the Middle East. Examines economic, social and political patterns and problems in different nations. IAI S5 905

**PSC 260 Middle Eastern Politics (3-0) 3 crs.**

Examines political, social, economic, military, religious and terrorist forces in the Middle East. Investigates the politics of specific countries in the area.

**PSC 270 Global Politics (3-0) 3 crs.**

Uses role playing to study how foreign policy is made. Explores human problems such as populations, food and energy on a global dimension. Examines international bodies, including the United Nations, and explores how nations interact. IAI S5 904

**PSC 280 Non-Western Comparative Politics (3-0) 3 crs.**

Examines the political systems of selected non-Western countries, including common governmental problems, causes of political instability and revolution and techniques of political analysis. IAI S5 906N

**PSY Psychology****PSY 101 Introduction to Psychology (3-0) 3 crs.**

Investigates human and animal behavior with emphasis on the scientific nature of contemporary and classic psychological investigation. Emphasizes psychological theories, principles, and research applications. Introduces the divisions of the American Psychological Association. References biological processes, sensation, perception, learning, memory, thinking, emotional life, mental disorders, intelligence, aptitude, personality, development, daily life and everyday problems. IAI S6 900

**PSY 106 Practical Psychology (1-0 to 3-0) 1-3 crs.**

Presents a practical application of the psychological principles that lead to efficiency of learning, adjustment, motivation, communication and attitudes in everyday life and classroom situations. This course does not meet Social Science requirements; it is a Group 6 elective for the AA and AS degree programs.

**PSY 107 Humanistic Psychology (2-0) 2 crs.**

Focuses on various aspects of human behavior and personality. Several theories of psychosocial adjustment are presented and discussed. Through class discussion and structured activities in this workshop-style course, students will examine their values, attitudes, experiences, strengths, weaknesses and interpersonal skills and how these affect themselves and others.

**PSY 108 Topics in Psychology (2-0 to 3-0) 2-3 crs.**

Provides specific topic seminars which allow each student the opportunity to examine current issues, such as career development, developing self-esteem, happiness or personal development. The focus is on the analysis and organization of experiences for personal and positive growth. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated two times to a maximum of six credit hours.

**PSY 210 Introduction to Research in Psychology (3-0) 3 crs.**

Investigates the basics of scientific inquiry, corresponding methods and the various statistical and mathematical analyses used by psychologists. Explores ethical issues, data collection procedures, empirically-based literature as well as observational, correlational, experimental, quasi-experimental methods and introduces Structural Equation Modeling. Introduces SPSS and delineates the differences between basic and applied research.

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 216 Child Psychology (3-0) 3 crs.**

Investigates the psychological development of the child from conception through pubescence. Emphasizes the theories, principles and empirically derived findings of Child Psychology. Explores cultural and/or international contexts as well as normative and non-normative patterns of development. Discusses mortality during childhood. Integrates the various child psychopathologies. IAI S6 903

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 217 Adolescent Psychology (3-0) 3 crs.**

Investigates the psychological development of humans from late childhood through adolescence and young adulthood. Emphasizes the theories, principles and empirically derived findings of Adolescence Psychology. Explores cultural and/or international contexts as well as normative and non-normative patterns of development. Discusses mortality during adolescence. Integrates the study of adolescent psychopathologies. IAI S6 904

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 218 Adult Psychology (3-0) 3 crs.**

Investigates the biological, physical, social and psychological development of humans from young adulthood to death and through grief and bereavement. Emphasizes theories, principles and empirically derived findings of Adult Psychology. Addresses cultural and/or international contexts as well as normative and non-normative patterns of development. Discusses mortality throughout adulthood and adult psychopathologies. IAI S6 905

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 220 Biological Basis of Behavior (3-0) 3 crs.**

Investigates the biological, psychological and clinical approaches to understanding the nervous system as the basis of behavior. Explores perception, memory, motivation, learning and emotion from a biological perspective. Emphasizes the theories, principles and empirically derived findings of Biological Psychology.

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 225 Theories of Personality (3-0) 3 crs.**

Investigates the determining factors and dynamics of human personality including major historical and contemporary perspectives of personality. Emphasizes the theories, principles and empirically derived findings of personality. Evaluates assessment measures, their construction and appropriate use. Explores cultural and/or international contexts of personality. IAI PSY 907

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 228 Psychology of Human Development (3-0) 3 crs.**

Investigates the psychological development of humans from conception to death, through grief and bereavement. Investigates the theories, empirically derived science and principles of developmental researchers and developmental psychologists. Emphasizes cultural and/or international contexts as well as normative and non-normative patterns of development. Discusses mortality throughout the life-span. Integrates developmental psychopathologies. IAI S6 902

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 230 Abnormal Psychology (3-0) 3 crs.**

Investigates the classification, diagnosis, assessment, etiology and treatment of the mental disorders. Evaluates the theories, principles and empirically derived findings concerning the biological, psychological, social and cultural influences of abnormal behaviors. Introduces the Diagnostic and Statistical Manual of Mental Disorders (DSM) and its coding criteria, as well as the World Health Organization's statistical classifications (ICD). Explores the principles and practices of clinical psychologists and clinical researchers. IAI PSY 905

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 235 Learning Theory and Human Behavior (3-0) 3 crs.**

Investigates the historical and contemporary principles of learning theories as applied to human and animal behaviors. Evaluates the application of learning theories and principles in a variety of settings and treatment modalities. Discusses the empirically derived findings of behaviorism and behavioral researchers.

**Prerequisite:** PSY 101 or consent of instructor.

**PSY 245 Industrial/Organizational Psychology (3-0) 3 crs.**

Investigates organizational behavior. Explores theories, principles, applications and empirically derived findings of Industrial/Organizational Psychology. Emphasizes classic and contemporary leadership and motivation theories. Discusses structure and management practices; individual and work group behavior; employee culture and employer culture; and organizational conflict and resolution. Addresses international perspectives.

**Prerequisite:** PSY 101 or consent of instructor.

**PTA Physical Therapy Assistant**

**PTA 101 Introduction to Physical Therapist Assistant (2-0) 2 crs.**

Introduces student to Physical Therapist Assistant (PTA) as a career. Defines the role of a PTA in the health care system. Provides students with opportunities to observe physical therapy evaluations and treatments for patients with various diagnoses. Introduces techniques for documentation and review of medical records. Discusses billing procedures and third-party payers. Reviews HIPAA, Patient Bill of Rights, APTA Code of Conduct, Code of Ethics.

**Prerequisite:** Admission into the Physical Therapist Assistant program.

**PTA 105 Orthopedics for Physical Therapy Assistant (3-4) 5 crs.**

Prepares students to address the needs of patients with orthopedic conditions and injuries. Introduces students to manual muscle testing, strengthening interventions, gait training, and wheelchair mobility. Addresses interventions for compression wrapping and therapeutic taping. Examines the use of prosthetics and orthotics for rehabilitation intervention. Applies clinical problem solving skills and develops ability to modify treatment techniques for optimal outcomes.

**Prerequisite:** Admission into the Physical Therapist Assistant program.

**PTA 108 Neurology for Physical Therapist Assistant (3-4) 5 crs.**

Introduces students to neurologic dysfunction and to provision of interventions including therapeutic exercises, neuromuscular re-education, developmental training, and postural awareness. Focuses on maintaining static and dynamic balance, correct body mechanics for therapist and patient during exercises and transitional movements. Applies clinical problem solving skills and develops ability to modify treatment techniques for optimal outcomes.

**Prerequisite:** KIN 230, NUR 180, PTA 101 and PTA 105 with grades of C or better.

**PTA 111 Kinesiology for the Physical Therapist Assistant (2-0) 2 crs.**

Continues application of biomechanical principles and movement analysis that was introduced in KIN 230. Focuses on appendicular skeleton, upper extremity, and lower extremity osteokinematics and arthrokinematics. Instructs in assessment of gait and gait deviations.)

**Prerequisite:** KIN 230, NUR 180, PTA 101 and PTA 105 with grades of C or better.

**PTA 115 Manual Techniques for the Physical Therapy Assistant (0-4)** 2 crs.

Instructs in application and documentation of manual techniques for palpation, joint mobilization and stretching. Demonstrates techniques for correctly documenting manual techniques.

**Prerequisite:** KIN 230, NUR 180, PTA 101 and PTA 105 with grades of C or better.

**PTA 130 Pta Clinical Experience I (0-9)** 3 crs.

Provides students with full-time clinical experience, supervised directly by a licensed PT or PTA with focus on gaining hands-on treatment experience in a clinical environment in a pass/fail course. Addresses communication skills such as documentation and patient interview. Provides students with opportunity to develop clinical problem solving skills.

**Prerequisite:** PTA 108, PTA 111 and PTA 115 with grades of C or better.

**PTA 201 Cardiopulmonary/Integumentary for the Physical Therapist Assistant (3-4)** 5 crs.

Describes common cardiopulmonary diagnoses. Introduces students to principles of skilled intervention and progression of intervention. Focuses on advanced treatment techniques for aerobic capacity training, and airway clearance techniques. Provides instruction on safe functional training for activities of daily living and plyometric activities. Explains recognition of wounds of various etiologies. Presents strategies for repositioning, pressure relief, and edema management.

**Prerequisite:** PTA 130 with a grade of P.

**PTA 205 Therapeutic Modalities (1-2)** 2 crs.

Introduces therapeutic modalities as they are applied to patients in a clinical setting to alter physiologic processes and decrease pain. Focuses on indications, precautions, and contraindications for use of each modality. Instructs students on safe techniques for application.

**Prerequisite:** PTA 130 with a grade of P.

**PTA 208 Special Populations for the Physical Therapist Assistant (1-0)** 1 cr.

Presents considerations for treating pediatric, bariatric, and geriatric patients and those with multiple co-morbidities. Focuses on treatment strategies for each classification of patient. Introduces interventions for common congenital diseases, diabetes, amputations, and the aging process.

**Prerequisite:** PTA 201 and PTA 205 with grades of C or better, and PTA 230 with a grade of P.

**PTA 225 Physical Therapist Assistant Professional Seminar (1-0)** 1 cr.

Continues to develop student's understanding of Physical Therapist Assistant scope of practice and professional code of ethics. Prepares student to sit for professional licensing exam upon graduation. Instructs student in preparation for job search.

**Prerequisite:** PTA 201 and PTA 205 with grades of C or better, and PTA 230 with a grade of P.

**PTA 230 Physical Therapist Assistant Clinical Experience II (0-9)** 3 crs.

Provides students with full-time clinical experience, supervised directly by a licensed PT or PTA with focus on implementing treatments and modifying interventions in a clinical environment in a pass/fail course. Addresses communication skills such as documentation and interacting with other disciplines in the health care team. Presents students with opportunity to develop clinical problem solving skills. Provides students with experiences to begin to transition from PTA student to entry-level clinician.

**Prerequisite:** PTA 130 with a grade of P.

**PTA 235 Physical Therapist Assistant Clinical Experience III (0-15)** 5 crs.

Provides students with experiences to transition from PTA student to entry-level clinician at the culmination of this course while being supervised directly by a licensed PT or PTA with focus on independently implementing treatments and modifying interventions in a clinical environment in a pass/fail course. Continues to address communication skills such as documentation and interacting with other disciplines in the health care team. Provides opportunity for students to demonstrate entry-level clinical problem solving skills.

**Prerequisite:** PTA 201 and PTA 205 with grades of C or better, and PTA 230 with a grade of P.

**RAC Refrigeration and Air Conditioning****RAC 101 Refrigeration Fundamentals (3-3)** 4 crs.

Introduces vocabulary, concepts and scientific principles used in the refrigeration industry. Develops skills in pipe fitting, use of hand tools and operation of instruments used in the refrigeration trade.

**RAC 102 Refrigeration Systems (3-3)** 4 crs.

Continues to develop principles and concepts learned in RAC 101. Familiarizes students with components and accessories added to basic refrigeration systems for special applications. Develops trouble-diagnosing procedures.

**Prerequisite:** RAC 101 with a grade of C or better.

**RAC 103 Heating Principles (3-3)** 4 crs.

Describes sources and methods of producing heat for residential, commercial and industrial systems. Develops skills in testing, adjusting, and replacing heating system components.

**RAC 104 Residential Comfort Systems (2-2)** 3 crs.

Integrates concepts, principles and knowledge of equipment available for residential comfort systems including solar heat. Describes several residential systems and places emphasis on diagnosing system malfunctions.

**Prerequisite:** RAC 101 and RAC 103 with grades of C or better.

**RAC 105 Heating and Cooling Controls (3-3)** 4 crs.

Describes the purposes and principles of operation, and causes of failure in electrical components common to residential and small commercial systems. Emphasizes wiring schematics and diagrams.

**Prerequisite:** RAC 103 with grades of C or better.

**RAC 106 Advanced Controls (3-3)** 4 crs.

Continues RAC 105. Includes electrical components. Emphasizes control systems, system malfunctions and proper repair procedures.

**Prerequisite:** RAC 105 with a grade of C or better.

**RAC 108 Domestic Refrigeration Appliances (3-3)** 4 crs.

Provides a comprehensive examination of the operation, problem solving and repair of residential refrigeration appliances.

**Prerequisite:** RAC 101 and RAC 105 with grades of C or better.

**RAC 201 Refrigeration System Design I (3-3)** 4 crs.

Considers the factors in the selection of refrigeration compressors, evaporators, condensers, and compressor oil, as well as the accessories used in commercial refrigeration. Examines the thermodynamic properties of the common refrigerants.

**Prerequisite:** RAC 102 with a grade of C or better, or consent of instructor.

**RAC 202 Refrigeration System Design II (3-3)** 4 crs.

Continues consideration of factors in the selection of metering devices, pipe sizing, motors and controls. Develops concepts of lubrication, multi-staging and cascade freezer systems.

**Prerequisite:** RAC 201 with a grade of C or better, or consent of instructor.

**RAC 203 Air Conditioning Principles (2-2) 3 crs.**

Examines the properties of air through the use of the psychometric chart and tables. Studies methods of computing heat gains and losses for residential and light commercial systems.

**Prerequisite:** RAC 104 with a grade of C or better, or consent of instructor.

**RAC 204 Air Distribution (2-3) 3 crs.**

Considers the factors in the selection of a duct system for efficient air distribution. Studies fan laws and pressure drops for proper fan and duct size selection. Describes types of registers and their location for optimum performance.

**Prerequisite:** RAC 104 with a grade of C or better, or consent of instructor.

**RAD Radiologic Technology****RAD 101 Intro to Radiologic Technology (3-0) 3 crs.**

Provides an introduction to the field of radiologic technology, health care delivery systems, issues related to the health care environment, importance of effective communication, team building, professionalism, and diversity in the health care center. The student will develop basic skills in radiography and patient care essential for providing quality health care. Professional development and lifelong learning will also be emphasized by introducing the students to various organizations and agencies within radiography and other health care systems. **NOTE:** Students must be admitted into the Radiologic Technology program to register for this course.

**RAD 102 Radiologic Procedures I (2-2) 3 crs.**

Examines radiologic anatomy and examination procedures for the upper appendicular skeleton, the chest and the abdomen. The basic concepts of radiologic positioning are presented. Students are taught techniques and procedures related to reading various types of technique charts and are able to program X-ray units for correct exposure for designated examination. **NOTE:** Students must be admitted into the Radiologic Technology program to register for this course.

**Prerequisite:** Prior or concurrent enrollment in HSC 104, HSC 107 and HSC 112 with grades of C or better.

**Corequisite:** RAD 101 and RAD 103.

**RAD 103 Radiologic Principles I (2-2) 3 crs.**

Introduces students to the principles of radiography and factors controlling radiologic production and radiation protection. Radiation production, prime factors, radiographic film, intensifying screens, picture archived communication system/computerized radiography, laser printers, and film processing are presented. **NOTE:** Students must be admitted into the Radiologic Technology program to register for this course.

**Prerequisite:** Prior or concurrent enrollment in HSC 104, HSC 107 and HSC 112 with grades of C or better.

**Corequisite:** RAD 101 and RAD 102.

**RAD 105 Radiologic Procedures II (2-2) 3 crs.**

Examines the radiologic anatomy and examination procedures for the lower extremity and bony thorax. Students are taught to read various types of technique charts and program X-ray units for correct exposure for these examinations.

**Prerequisite:** RAD 102 and RAD 103 with grades of C or better.

**Corequisite:** RAD 106 and RAD 107.

**RAD 106 Radiologic Principles II (2-2) 3 crs.**

Provides supervised environment to develop the necessary skills needed to evaluate the radiologic image and provide appropriate recommendations for improving the diagnostic quality of the radiograph.

**Prerequisite:** RAD 103 with a grade of C or better.

**Corequisite:** RAD 105 and RAD 107.

**RAD 107 Radiologic Clinical Education I (0-8) 2 crs.**

Applies principles of radiologic positioning under the supervision of qualified registered American Registry of Radiologic Technologists (ARRT) technologist. Emphasizes appendicular and axial skeleton. Includes principles of exposure, image quality and other associated professional skills. Placement of clinical assignment by program coordinator. **NOTE:** American Heart Association Cardiopulmonary Resuscitation (CPR) certification must be completed prior to placement in a clinical rotation.

**Prerequisite:** RAD 102 and RAD 103 with grades of C or better.

**Corequisite:** RAD 105 and RAD 106.

**RAD 201 Radiologic Clinical Education II (0-8) 2 crs.**

Applies principles of radiologic positioning under the supervision of qualified registered American Registry of Radiologic Technologists (ARRT) technologist. Continued emphasis on contrasted procedures, appendicular and axial skeleton, the chest and bony thorax, and other radiologic skills. Placement of clinical assignment and seminar by program coordinator.

**Prerequisite:** RAD 107 with a grade of C or better.

**RAD 202 Radiologic Procedures III (1-0) 1 cr.**

Covers the radiologic anatomy and examination procedures for the digestive, urinary, and hepatobiliary systems. Students are taught to read various types of technique charts and program X-ray units for correct exposure for these examinations.

**Prerequisite:** RAD 102 and RAD 105 with grades of C or better.

**Corequisite:** RAD 201.

**RAD 215 Principles and Procedures in Mammography (3-0) 3 crs.**

Provides a detailed overview of the history, equipment and radiographic principles and their application to mammography. Course focuses on breast anatomy and physiology, mammographic techniques, positioning skills, critical equipment features, image receptor characteristics, and image quality management. Successful completion of this course along with RAD 216 will meet the required contact hours of documented learning required to sit for the Mammography Technologist Certification exam. This course may be scheduled as (1) a week-long (five days) course offered in fall and spring, (2) one full day per week for five weeks, or (3) two evenings per week for six weeks.

**Prerequisite:** Admission into the Mammography certificate program.

**RAD 216 Mammography Externship (0-2) 1 cr.**

Provides students with 32 hours of clinical experience to gain required skills to perform quality breast imaging mammograms in a health care setting under the direct supervision of a qualified practitioner. Emphasis on principles and procedures of mammography. Presented as a precepted clinical to complete in two weeks immediately following successful completion of RAD 215.

**Prerequisite:** Prior or concurrent enrollment in RAD 215.

**RAD 222 Radiologic Procedures IV (2-2) 3 crs.**

Covers the radiologic anatomy and examination procedures for the vertebral column, the cranium, paranasal sinuses and facial bones. Includes instruction on how to read various types of technique charts and program X-ray units for correct exposure for these examinations.

**Prerequisite:** RAD 102, RAD 105 and RAD 202 with grades of C or better.

**Corequisite:** RAD 225.

- RAD 223 Advanced Radiologic Principles (2-0)** 2 crs.  
Provides a continuation of topics covered in RAD 106 such as the principles involved in diagnostic X-ray production and radiographic and fluoroscopic equipment. Topics include X-ray production, electromagnetic interactions with matter, X-ray devices, equipment circuitry, targets and filtration. Covers the application of physical concepts as related to X-ray image production.  
**Prerequisite:** RAD 106 with a grade of C or better.  
**Corequisite:** RAD 222, RAD 224, and RAD 225.
- RAD 224 Radiobiology (2-0)** 2 crs.  
Provides an in-depth study of radiation biology, radiation regulations and radiation measurements. Somatic and genetic effects of ionizing radiation is presented. Radiation safety practices for staff and patients/clients are covered.  
**Prerequisite:** RAD 106 with a grade of C or better.  
**Corequisite:** RAD 222, RAD 223 and RAD 225.
- RAD 225 Radiologic Clinical Education III (0-12)** 3 crs.  
Provides a continuation of radiologic experiences with emphasis on radiographic positioning of the cranial and facial bones; trauma; surgery and mobile procedures; and observation of radiologic interpretation. Placement of clinical assignment by program coordinator.  
**Prerequisite:** RAD 201 with a grade of C or better.  
**Corequisite:** RAD 222, RAD 223, and RAD 224.
- RAD 228 Digital Imaging (0.5-1)** 1 cr.  
Provides an in-depth investigation of digital medical imaging including digital radiography systems, image acquisition, exposure principles, image processing and post-processing, image display and quality control, and picture archiving and communication systems. The student will gain a comprehensive understanding of computer system components and function, digital imaging systems (including comparison with film/screen systems), radiation safety principles, cassette-based compared with cassetteless systems, exposure factor and processing selections, quality assurance and acceptance standards.  
**Prerequisite:** RAD 106 and RAD 223 with grades of C or better.  
**Corequisite:** RAD 239.
- RAD 236 Radiologic Pathology (3-0)** 3 crs.  
Examines the etiology and processes of trauma and disease. Emphasis placed on radiologic pathology of body systems.  
**Prerequisite:** RAD 222 and RAD 224 with grades of C or better.  
**Corequisite:** RAD 240.
- RAD 237 Radiologic Quality Assurance (0.5-1)** 1 cr.  
Presents analytical and statistical concepts and tools necessary to plan and manage continuous quality improvement efforts in a health care setting. Emphasis is placed on analyzing radiological processes to ensure quality patient care and services, to improve departmental efficiency and to establish and maintain a nurturing work environment.  
**Prerequisite:** RAD 225 with a grade of C or better.
- RAD 238 Sectional Anatomy for Imaging (2-0)** 2 crs.  
Studies human anatomical structures in multiple imaging planes. Reviews images created by MRI and Computed Tomography as well as gross anatomical images. Focuses primarily on identification of normal anatomy, but also includes some pathological conditions. Discusses the role of MRI and CT in physiological imaging.  
**Prerequisite:** BIO 161 with a grade of C or better.
- RAD 239 Radiologic Special Procedures (3-0)** 3 crs.  
Emphasizes routine special procedures including cardiovascular imaging, neuroradiography, reproductive system radiography and special studies of the viscera. The course details portable and surgical radiography, pediatric and geriatric radiography and related imaging modalities such as mammography, computed tomography, magnetic resonance imaging, ultrasonography and neuroradiography. Includes interventional radiology procedures such as stent-coil placement and venous access placement. The student will be able to participate and function in each of these different special procedures.  
**Prerequisite:** RAD 222 with a grade of C or better.  
**Corequisite:** RAD 236, RAD 237, and RAD 240.
- RAD 240 Radiologic Clinical Education IV (0-12)** 3 crs.  
Covers advanced clinical experiences with guided practice of special procedures. Experience with mobile units at bedside and in the operating room and emergency room. Placement of clinical assignment by the program coordinator.  
**Prerequisite:** RAD 225 with a grade of C or better.  
**Corequisite:** RAD 236, RAD 237, and RAD 239.
- RAD 251 Radiologic Clinical Education V (0-12)** 3 crs.  
Provides a continuation of advanced clinical experiences with guided practice of special procedures. Experience with mobile units at bedside, in the operating room and in the emergency room. Placement of clinical assignment by the program coordinator.  
**Prerequisite:** RAD 239 and RAD 240 with grades of C or better.
- RAD 258 Radiologic Seminar (1-0)** 1 cr.  
Provides a review and discussion of radiologic principles, techniques and methods, and film critique. Emphasis is placed on the interdependence of theory and principles in preparation for the American Registry for Radiologic Technology (ARRT) examination and resume writing and job search skills.  
**Prerequisite:** RAD 236 and RAD 240 with grades of C or better.
- RAD 260 CT Procedures/Patient Care (3-0)** 3 crs.  
Provides detailed coverage of procedures for CT imaging. Procedures include, but are not limited to, indications for the procedure, patient education, preparation, orientation and positioning, patient history and assessment, contrast media usage, scout image, selectable scan parameters, filming and archiving of the images. CT procedures will be taught for differentiation of specific structures, patient symptomology and pathology. CT images studied will be reviewed for quality, anatomy and pathology. CT procedures vary from facility to facility and normally are dependent on the preferences of the radiologists.  
**Prerequisite:** Admission into the Computed Tomography program and prior or concurrent enrollment in RAD 238 with a grade of C or better.  
**Corequisite:** RAD 261.

**RAD 261 CT Principles I (3-0)****3 crs.**

Imparts the fundamentals of the physical principles and instrumentation utilized in computed tomography (CT). Reviews the historical development and evolution of CT. Physics topics covered include CT beam attenuation, linear attenuation coefficients, tissue characteristics and Hounsfield numbers application. Explains data acquisition and manipulation techniques and image reconstruction algorithms such as filtered back-projection. Explores CT systems and operations with full coverage of radiographic tube configuration, collimator design and function, detector type, characteristics and functions of the CT computer and array processor. Examines CT image processing and display from data acquisition through post-processing and archiving, and patient factors related to other elements affecting image quality as well as artifact production and reduction, and image communication.

**Prerequisite:** Admission to the Computed Tomography (CT) Program is required or consent of instructor and prior of concurrent enrollment in RAD 238 with a grade of C or better.

**Corequisite:** RAD 260.

**RAD 262 CT Principles II (2-0)****2 crs.**

Continues the physical principles and instrumentation involved in computed tomography (CT). Physics topics covered include the characteristics of x-radiation, CT beam attenuation, linear attenuation coefficients, tissue characteristics and quality control procedures. Also includes an overview of the principles of radiation protection including the responsibilities of the radiographer for patients, personnel and the public. Incorporates radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations.

**Prerequisite:** RAD 238, RAD 260 and RAD 261 with grades of C or better.

**RAD 263 CT Clinical Education I (0-12)****3 crs.**

Applies principles of computed tomography procedures under the supervision of qualified registered American Registry of Radiologic Technologists (ARRT) technologist. Emphasizes principles of exposure, image quality, patient care, radiation safety and other associated professional skills. Placement of clinical assignment is by program coordinator. NOTE: American Heart Association Cardiopulmonary Resuscitation (CPR) certification must be completed prior to placement in a clinical rotation.

**Prerequisite:** RAD 260 and RAD 261 with grades of C or better.

**Corequisite:** RAD 262.

**RAD 264 CT Clinical Education II (0-12)****3 crs.**

Continues to apply the principles of computed tomography procedures under the supervision of a qualified registered American Registry of Radiologic Technologists (ARRT) technologist. Emphasizes the principles of exposure, image quality, patient care, radiation safety and other associated professional skills. Placement of clinical assignment is by program coordinator. NOTE: American Heart Association Cardiopulmonary Resuscitation (CPR) certification must be completed prior to placement in a clinical rotation.

**Prerequisite:** RAD 262 and RAD 263 with grades of C or better.

**RAD 270 MRI Patient Care and Procedures (3-0)****3 crs.**

Provides detailed coverage of procedures for MR imaging. Procedures include, but are not limited to, indications for the procedure, patient education, preparation, orientation and positioning, patient history and assessment, contrast media usage, scout image, selectable scan parameters, filming and archiving of the images. MR procedures will be taught for differentiation of specific structures, patient symptomology and pathology. MR images studied will be reviewed for quality, anatomy and pathology. MR procedures vary from facility to facility and normally are dependent on the preferences of the radiologists.

**Prerequisite:** Admission into the Magnetic Resonance Imaging program, and prior or concurrent enrollment in RAD 238 with a grade of C or better.

**Corequisite:** RAD 271.

**RAD 271 MRI Principles I (3-0)****3 crs.**

Reviews the historical development and foundation of magnetic resonance imaging (MRI). Explains basic principles and fundamentals classically and through quantum physics. Explores MRI systems and interactions of the magnetic fields within the systems. Discusses advantages of MRI imaging through contrast characteristics exploring the important mechanisms that affect image contrast in MRI. Explains resonance, interaction of radiofrequency, gradients including data collection and image formation. Explores hardware required for production of magnetic resonance images to include magnet, radiofrequency source, image processor, computer system including MRI ancillary equipment. Discusses the artifacts causes and explores solutions to avoid artifact appearance.

**Prerequisite:** Admission to the Magnetic Resonance Imaging (MRI) Program is required or consent of instructor, and prior or concurrent enrollment in RAD 238 with a grade of C or better.

**Corequisite:** RAD 270.

**RAD 272 MRI Principles II (2-0)****2 crs.**

Continues the physical principles and instrumentation involved in Magnetic Resonance Imaging (MRI). Explains data acquisition and processing, sequence parameters and imaging options. Explains quality control and quality assurance principles in Magnetic Resonance Imaging. Incorporates Magnetic Resonance health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations.

**Prerequisite:** RAD 271 with a grade of C or better.

**RAD 273 MRI Clinical Education I (0-12)****3 crs.**

Applies principles of magnetic resonance imaging procedures under the supervision of a qualified registered American Registry of Radiologic Technologists (ARRT) technologist. Emphasizes principles of exposure, image quality, patient care, radiation safety and other associated professional skills. Placement of clinical assignment by program coordinator.

**Prerequisite:** RAD 270 and RAD 271 with grades of C or better.

**Corequisite:** RAD 272.

**RAD 274 MRI Clinical Education II (0-12)****3 crs.**

Continues to apply the principles of magnetic resonance imaging procedures under the supervision of a qualified registered American Registry of Radiologic Technologists (ARRT) technologist. Emphasizes the principles of exposure, image quality, patient care, radiation safety and other associated professional skills. Placement of clinical assignment by program coordinator. NOTE: American Heart Association Cardiopulmonary Resuscitation (CPR) certification must be completed prior to placement in a clinical rotation.

**Prerequisite:** RAD 272 and RAD 273 with grades of C or better.

**RDG Reading****RDG 080 Reading Skills I-Deaf/Hard-of-Hearing (4-0) 4 crs.**

Presents instruction in the fundamental reading skills for deaf and hard-of-hearing students. Recognizing the unique learning needs of deaf/hard-of-hearing students, American Sign Language (ASL) will be used to promote the development of reading skills. Vocabulary development will be stressed. This course will stress both academic reading development and reading in a vocational context. Carries no transfer credit.

**RDG 085 Reading Skills II-Deaf/Hard-of-Hearing (4-0) 4 crs.**

Continues the development of fundamental reading skills from RDG 080. The student's first language, American Sign Language (ASL), will be used to promote the development of reading skills. The curriculum materials will once again stress vocabulary development, academic reading development and vocational applications. Carries no transfer credit.

**Prerequisite:** RDG 080 with a grade of C or better, or consent of instructor.

**RDG 090 Fundamentals of Reading (3-0) 3 crs.**

Presents instruction in the fundamental skills of reading. Designed for students whose linguistic and reading skills are insufficient for successful college work. Enrollment is determined by a score below the required score on the Harper College reading assessment test. Prepares students for RDG 097 or RDG 099. Carries no transfer credit.

**RDG 091 Bridge to CNA Success (2-0 to 4-0) 2-4 crs.**

Prepare students for success in passing CNA 101 and the State of Illinois Nurse Aide Competency Exam. Includes instructions in Blackboard and other online instructional tools, reading comprehension strategies, study skills and time management techniques, CNA course vocabulary review, test-taking strategies and practice, supplemental instruction, and personal and classroom career counseling support. Carries no transfer credit.

**Prerequisite:** ENG 100 or ENG 101 with a grade of C or better; or ESL 073 with a grade of B or better; or RDG 090 or RDG 099 with a grade of C or better; or an ACT Reading score of 20 or higher; or required placement test scores.

**RDG 097 Reading and the College Textbook (3-0) 3 crs.**

Provides classroom instruction in reading strategies to improve comprehension and vocabulary development in the college text. Utilizes a specific text from a selected college course and related readings with the goal to bring textbook reading skills to college level. Student must enroll in an identified course that is paired with RDG 097. Successful completion of RDG 097 fulfills the reading proficiency requirement of the Harper College assessment policy. Carries no transfer credit.

**Prerequisite:** RDG 090 with a grade of C or better, or required placement test score.

**RDG 099 Developmental Reading (3-0) 3 crs.**

Provides classroom instruction in comprehension utilizing a wide variety of written materials for students who need assistance in bringing their reading skills to college level. Enrollment in RDG 099 is determined by obtaining a score below the passing score on the Harper College reading placement test. Successful completion of RDG 099 fulfills the reading proficiency requirement of the Harper College assessment policy. Carries no transfer credit.

**Prerequisite:** ENG 001 or RDG 090 with a grade of C or better, or required placement test score.

**RDG 100 Reading for the Technologies (3-0) 3 crs.**

Teaches reading, writing and problem-solving strategies appropriate to vocational/technical programs. Provides practice with applying skills necessary for success in specific career-vocational programs. Carries no transfer credit.

**RDG 106 Critical College Reading Skills (3-0) 3 crs.**

Develops the full array of mature, fluent reading skills, including critical and analytical comprehension, content area reading, predictive reading, vocabulary development, speed and flexibility. Also covers theories of comprehension and language development.

**SCM Supply Chain Management****SCM 101 Supply Chain Management (3-0) 3 crs.**

Introduces Supply Chain Management (SCM) and the end-to-end (E2E) business processes necessary to achieve market and financial value, as well as competitive advantage. SCM is achieved by an organization proactively adopting initiatives to move suppliers and customers into collaborative relationships for mutual gain. Attention is focused on the fundamentals including customer service, fulfillment, demand planning and forecasting, inventory control, procurement, storeroom/warehousing, production control/operations, and physical distribution/logistics. All topics focus on technology, financial trends and career paths within the field.

**SCM 120 Production Control (3-0) 3 crs.**

Describes the development, scope, and objectives of production control. Outlines the coordination of manufacturing resources (money, manpower, materials and machines) and how they apply to this function. Focuses on scheduling, releasing and tracking of production orders and associated schedules, and the reporting of materials and resources used in the production process. Outlines the Enterprise-wide linkages and technology implications as related to overall company and business strategy through CRP, ERP, MRP and MPS activities and related roles.

**Prerequisite:** SCM 101 or consent of program coordinator.

**SCM 122 Inventory Management (3-0) 3 crs.**

Provides an overview of the dynamics of managing inventory within the constantly evolving supply chain environment. Topics include forecasting inventory requirements based upon customer and consumer demand, understanding inventory management as related to production planning, modeling various scenarios based upon demand information, and recognizing the various processes and technology used in inventory management today.

**Prerequisite:** SCM 101 or consent of program coordinator.

**SCM 123 Transportation (3-0) 3 crs.**

Reviews the framework of the transportation/distribution component of Logistics as part of the broader Supply Chain, and how it is a key component of the strategy and customer service for an organization. Provides an overview of various transportation systems and the impact on costs and service that each system provides. Examines the different types of modes and routings, and the impacts of regulatory and environmental decisions. Reviews the operational aspects of the transportation function, responsibilities for the key job functions associated with transportation, and overall trends within the industry.

**Prerequisite:** SCM 101 or consent of program coordinator.

**SCM 124 Warehouse Operations (3-0) 3 crs.**

Provides an overview of the movement of goods within a warehouse environment, including the overall concepts of material handling, warehouse management, and packaging. Covers topics such as warehouse automation, containerization, palletization, conveyor systems, racking, kitting, picking and sorting. Reviews concepts such as the strategic nature of distribution centers versus traditional warehousing, and the overall impact of packaging beyond just product protection. Discusses the overall organizational structure and impact of warehouse operations as part of the broader supply chain

**Prerequisite:** SCM 101 or consent of program coordinator.

**SCM 125 Procurement (3-0) 3 crs.**

Covers the overall function of Procurement and its importance within the Supply Chain. Focuses on the strategic role of Procurement within the organization and how it directly contributes to the financial results of the business. Discusses overall roles and responsibilities within the function including preparation for and analysis of supplier bids and quotations, processes for purchase orders and contracting, inventory management and materials planning, supplier relationship management and performance management, total cost of ownership review, business continuity planning, and social and ethical responsibility.

**Prerequisite:** SCM 101 or consent of program coordinator.

**SCM 126 Demand Planning (3-0) 3 crs.**

Provides an introduction and overview of the demand planning function as part of the broader supply chain. Topics covered include objectives of the function, the benefits of effective demand planning in an organization, the process of forecasting demand, the various types of demand, rules for ordering and optimizing of orders, the concept of economic order quantity and mitigating stock out risks, differences in demand distribution, sales and operations planning (S&OP), MRP and JIT.

**Prerequisite:** SCM 101 or consent of program coordinator.

**SCM 127 Customer Service and Fulfillment (2-0) 2 crs.**

Provides an introduction and overview of customer service and order fulfillment as part of the overall end to end (E2E) supply chain of an organization. Topics covered include 1) The overarching supply chain and logistics infrastructure, strategy and terminology 2) the design of the service value stream to meet customer and consumer needs, 3) the order management and fulfillment cycle and how it drives success and revenue growth, 4) the role of the customer service professional and the importance of planning, strategy, and performance measures, and 5) the increasing role of technology to enable a customer-centric approach.

**Prerequisite:** SCM 101, or consent of program coordinator.

**SCM 226 Advanced Planning and Integration (3-0) 3 crs.**

Focuses on the advanced concepts of planning, processes and technology to ensure a successful supply chain. Covers systems-based Material Requirements Planning (MRP) as part of the broader Enterprise Requirements Planning (ERP) framework and explores problem solving and complex solutions to supply chain integration needs. Focuses on leveraging systems to reduce inventories, set priorities, initiate orders, initiate purchase requirements, develop master production schedules and optimize the total cost structure within the supply chain. Also explores the concepts of Total Quality Management (TQM) and various elements of LEAN production and processes.

**Prerequisite:** SCM 101 and SCM 120, or consent of program coordinator.

**SCM 228 Logistics Design and Strategy (3-0) 3 crs.**

Provides a comprehensive view of existing logistics practices and strategies within a global economy. Explores ways to create a competitive advantage through logistics principles and network design models, and outlines an approach for integrating logistics as a core competency within an organization's supply chain strategy.

**Prerequisite:** SCM 101 and SCM 123, or consent of program coordinator.

**SCM 259 Sourcing and Supply Management (3-0) 3 crs.**

Takes the study of the procurement function to the next level following the completion of SCM 125. Focuses on a deeper look at the total cost of ownership (TCO), the overall processes and details behind strategic sourcing, the function of category management, more complex negotiation skills, the components of supplier relationship management (SRM), and the leadership function and role of the Procurement/Supply Management professional.

**Prerequisite:** SCM 101 and SCM 125, or consent of program coordinator.

**SCM 281 Topics in Supply Chain Management (1-0 to 3-0) 1-3 crs.**

Studies selected problems or topics in supply chain management. The exact content and instructional methodology will vary semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be repeated to a maximum of six credit hours.

**Prerequisite:** Six (6) hours of SCM coursework (effective Spring 2012) or consent of program coordinator.

**SGN Sign Language**

**SGN 101 American Sign Language I (4-0) 4 crs.**

Introduces the student to American Sign Language with emphasis on comprehension and production of basic language functions, grammatical structures and level-appropriate vocabulary. Presents information about the Deaf community and culturally appropriate behaviors. Designed for students with no previous experience in American Sign Language.

**SGN 102 American Sign Language II (4-0) 4 crs.**

Reviews American Sign Language vocabulary, language functions and grammatical structures presented in SGN 101. Integrates material previously presented in SGN 101 and further develops language comprehension and production skills at increasing levels of complexity. Applies increasingly complex grammatical structures to language functions. Presents and integrates additional information about Deaf culture into language usage.

**Prerequisite:** SGN 101 with a grade of C or better, or consent of department chair.

**SGN 103 Fingerspelling and Numbering Systems in American Sign Language (3-0) 3 crs.**

Provides instruction in the rules of fingerspelling and numbering systems in American Sign Language. Students will have opportunities for practice in the development of expressive and receptive skills at increasing levels of complexity. Receptive skill development focuses on whole words and numbers in isolation, as well as reading fingerspelling and numbers embedded in signed sentences. Expressive skill development focuses on accuracy, fluency, clarity and speed.

**Prerequisite:** SGN 101 with a grade of C or better, or consent of department chair.

**SGN 201 American Sign Language III (4-0) 4 crs.**

Reviews American Sign Language vocabulary, language functions and grammatical structures presented in SGN 102 and focuses on grammatical and lexical expansion with emphasis on idiomatic usage and socio-cultural communicative functions.

**Prerequisite:** SGN 102 with a grade of C or better, or consent of department chair.



**SGN 202 American Sign Language IV (3-0) 3 crs.**

Reviews American Sign Language grammatical structures and lexical items presented in SGN 201. Focuses on conversational practice to develop expressive and receptive facility with the language. Includes culturally significant topics and interaction with members of the deaf community. H1 900

**Prerequisite:** SGN 201 (American Sign Language III) with a grade of C or better, or consent of department chair.

**SGN 205 American Sign Language V (3-0) 3 crs.**

Provides an examination of the grammatical features of American Sign Language. Includes a contrastive analysis of English and ASL syntax and semantics. Further develops ASL discourse skills. Emphasizes ASL storytelling, analyzing, retelling, and translating ASL discourse. Designed for students interested or currently enrolled in the Sign Language Interpreting program.

**Prerequisite:** SGN 202 with a grade of C or better, or consent of department chair.

**SGN 210 American Sign Language: Cultural Perspective (4-0) 4 crs.**

Examines the history of American Sign Language, the emergence of the deaf community as a linguistic and cultural group, the cultural norms, values, traditions and rules of social behavior of the deaf community, minority dynamics and cross cultural interactions. IAI H1 900

**Prerequisite:** SGN 201 with a grade of C or better, or consent of department chair.

**SGN 212 Introduction to American Sign Language Literature (3-0) 3 crs.**

Explores American Sign Language literature as an expression of the lives of deaf people in America. Introduces the tradition of the deaf community within historical, social and cultural contexts in works of folklore, nonfiction, fiction, poetry and drama. Designed to increase students' knowledge, skills and appreciation of American Sign Language, deaf culture and deaf literature. Provides students with an appreciation of the diversity of American culture.

**Prerequisite:** SGN 205 with a grade of B or better, or consent of department chair.

**SOC Sociology****SOC 101 Introduction to Sociology (3-0) 3 crs.**

Analysis and description of the structure and dynamics of human society. Application of scientific methods to the observation and analysis of social norms, groups, inter-group relations, social change, social stratification and institutions. IAI S7 900

**SOC 120 The Family in Contemporary Society (3-0) 3 crs.**

Examines the family as a social institution and as a dynamic interactive system. Topics include courtship, marriage, family systems, parenting and non-traditional forms of the family. IAI S7 902

**SOC 205 Social Problems (3-0) 3 crs.**

Analysis of contemporary social problems. Investigation of theories dealing with conformity and deviance, racial and minority group prejudice, crime and delinquency, personality problems, urbanization and fundamental institutional problems due to social change. IAI S7 901

**Prerequisite:** SOC 101 with a grade of C or better.

**SOC 210 Social Institutions (3-0) 3 crs.**

Primary social institutions, including family, religious, educational, economic and political. Questions considered: who participates, what are the functions, what are the consequences, and an evaluation of the effects of the institutions on the society.

**SOC 215 Introduction to Social Psychology (3-0) 3 crs.**

Introduces the methods used to understand, explain and predict how the thoughts, feelings and actions of individuals are influenced by the thoughts and actions of social groups. Investigates how attitudes, beliefs, and behaviors are influenced by others within society and how society is influenced by the individual. IAI S8 900

**Prerequisite:** PSY 101 or SOC 101 with a grade of C or better.

**SOC 220 Topics in Social Science (1-0 to 6-0) 1-6 crs.**

Studies selected problems or topics in social science. The exact content and instructional methodology will vary from semester to semester depending on the material to be studied. A syllabus or course outline containing additional information will be available with pre-registration materials each time that the course is offered. This course may be taken from one to six credit hours.

**SOC 230 Sociology of Sex and Gender (3-0) 3 crs.**

Examines the social processes in society which translate biological differences (sex) between men and women into social and psychological categories or gender roles. Various theories will be considered in an attempt to understand the existence of gender inequality and how the process of socialization influences the proper "place" for men and women in society. Gender roles and power are considered when analyzing the marketplace, politics, marriage and family, or in considering issues such as the feminization of poverty, violence in the home, and male sensitivity. IAI S7 904D

**Prerequisite:** SOC 101 with a grade of C or better.

**SOC 235 Race and Ethnicity (3-0) 3 crs.**

Examines differential power relations between racial and ethnic groups. Analyzes the economic, political, and cultural structures that produce and reproduce these power differences. Focuses on cultural diversity and various dimensions of prejudice and discrimination including an analysis of racial and ethnic inequality and its origins, and conditions under which these forms of inequality are (re)produced. IAI S7 903D

**Prerequisite:** SOC 101 with a grade of C or better.

**SPA Spanish****SPA 101 Elementary Spanish I (4-0) 4 crs.**

Develops basic communicative skills in listening, speaking, reading and writing Spanish to familiarize students with the knowledge of cultures and people of the Spanish-speaking world. This course is the first of a two-semester sequence of courses designed for students with no prior knowledge of Spanish. This course is not for native speakers.

**SPA 102 Elementary Spanish II (4-0) 4 crs.**

Continues to develop basic communicative skills in listening, speaking, reading and writing Spanish to expand students' knowledge of cultures and people of the Spanish-speaking world. This course is the second of a two-semester sequence. This course is not designed for native speakers. Two years of high school Spanish are recommended.

**Prerequisite:** SPA 101 with a grade of C or better, or consent of instructor.

**SPA 112 Heritage Spanish I (4-0) 4 crs.**

Examines the dialectal and sociolinguistic variation present in Spanish-speaking communities in the United States as well as in Spanish-speaking countries. Students will become cognizant of the linguistic strengths they possess, develop a sense of pride in their heritage by studying their language and culture and expand their ability to use Spanish in new applications and contexts. Examines the concept of standard Spanish and explores the situations in which standard and non-standard Spanish should be employed and how to adjust language usage accordingly. This course emphasizes the orthography, pronunciation and lexical expansion in formal Spanish. This course is intended for Hispanic heritage students who comprehend spoken Spanish and may have varying degrees of speaking and writing ability.

**SPA 113 Heritage Spanish II (4-0) 4 crs.**

Examines the dialectal and sociolinguistic variation present in Spanish-speaking communities in the United States as well as in Spanish-speaking countries. This course is a continuation of SPA 112. Students will become cognizant of the linguistic strengths they possess, develop a sense of pride in their heritage by studying their language and culture and expand their ability to use Spanish in new applications and contexts. Examines the concept of standard Spanish and explores the social situations in which standard and non-standard Spanish should be employed and how to adjust language usage accordingly. This course emphasizes the study of formal grammatical aspects of Spanish. This course is intended for Hispanic heritage students who comprehend spoken Spanish and may have varying degrees of speaking and writing ability.

**Prerequisite:** SPA 112 with a grade of C or better or equivalent, or consent of instructor.

**SPA 121 Spanish for Law Enforcement Officers (3-0) 3 crs.**

Teaches basic Spanish phrases and questions necessary to carry out specific law enforcement protocols. Students will be able to aid victims and control offenders in potentially dangerous situations involving Hispanics. Discussions cover cross-cultural issues pertinent to relationships between non-Hispanic officers and the Hispanic community members. It is strictly non-grammar based and the focus is on immediate interaction.

**SPA 122 Spanish for Nursing (3-0) 3 crs.**

Teaches basic Spanish phrases and questions necessary to provide medical care and attention to Spanish-speaking patients in medical office settings and in hospitals. In addition to workplace Spanish language, discussions cover cross-cultural issues pertinent to relationships between health care workers and Hispanic community members. Emphasis is placed on enhancing the quality of patient care. It is strictly non-grammar based and the focus is on immediate interaction.

**SPA 201 Intermediate Spanish (4-0) 4 crs.**

Deepens the students' functional skills in comprehending, speaking, reading, and writing Spanish and provides an overview of Hispanic culture in various countries. This course begins the intermediate Spanish skills sequence and while reviewing the grammar at the elementary level, it extends the growth of communicative proficiency and furthers the understanding of Hispanic culture. Students will also be exposed to short pieces of Hispanic literature. This course is not designed for native speakers. Three years of high school Spanish are recommended.

**Prerequisite:** SPA 102 with a grade of C or better, or consent of instructor.

**SPA 202 Intermediate Spanish (4-0) 4 crs.**

Deepens the students' functional skills in comprehending, speaking, reading, and writing Spanish and provides an overview of Hispanic culture in various countries. This course completes the intermediate Spanish skills sequence and while reviewing the grammar structures previously covered, it uses an integrated skills approach to extend the growth of communicative proficiency in Spanish and to develop the understanding of Hispanic culture. Students will analyze short pieces of Hispanic literature and will engage in a basic research project. This course is not designed for native speakers. Four years of high school Spanish are recommended. IAI H1 900

**Prerequisite:** SPA 201 with a grade of C or better, or consent of instructor.

**SPA 205 Spanish Intensive Oral Practice (3-0) 3 crs.**

Focuses on conversational practice to develop oral facility; specially designed exercises in pronunciation, stress and rhythm. Individual readings of modern Spanish works discussed in class. Written and oral compositions based on readings. Designed to help students bridge the gap between the intermediate and advanced levels.

**Prerequisite:** SPA 202 with a grade of C or better, or equivalent or consent of instructor.

**SPA 210 Introduction to Modern Spanish Literature (3-0) 3 crs.**

Studies readings of selected 20th century masterpieces. Introduction to poetry. Oral readings stressing pronunciation and diction. Speaking based on discussion of works read. Writing based on readings and class discussions. Designed to help students bridge the gap between the intermediate and advanced levels. IAI 3917

**Prerequisite:** SPA 202 with a grade of C or better, or equivalent or consent of instructor.

**SPE Speech**

**SPE 101 Fundamentals of Speech Communication (3-0) 3 crs.**

Theory and practice of oral communications. Development of poise, confidence and skill in speech organization and delivery. Emphasis on frequent speaking, development of standards of criticism and selection and organization of material. IAI C2 900

**SPE 102 Advanced Public Speaking (3-0) 3 crs.**

Provides students with advanced practice of oral communication in public speaking and communication theory. Topics included are: an examination of informative, persuasive and special occasion speech preparation and delivery; effective use of visual aids; analysis of communication events and the effects of communication messages.

**Prerequisite:** SPE 101 with a grade of C or better, or consent of instructor.

**SPE 107 Oral Interpretation (3-0) 3 crs.**

Provides the student an opportunity to select, prepare and perform various types of literature. Emphasizes the use of body and voice in oral reading. IAI TA 916

**SPE 180 Applied Forensics I (0-2) 1 cr.**

Provides practical experience in the preparation of public speeches, oral interpretation programs, acting scenes, group performances and/or limited preparation speaking situations for public presentation in forensics/speech competition.

**SPE 181 Applied Forensics II (0-2) 1 cr.**

Continues SPE 180. Provides practical experience in the preparation of public speeches, oral interpretation programs, acting scenes, group performances and/or limited preparation speaking situations for public presentation in forensics/speech competition.

**Prerequisite:** SPE 180 with a grade of C or better.

**SPE 182 Applied Forensics III (0-2) 1 cr.**

Continues SPE 181. Provides practical experience in the preparation of public speeches, oral interpretation programs, acting scenes, group performances and/or limited preparation speaking situations for public presentation in forensics/speech competition.

**Prerequisite:** SPE 181 with a grade of C or better.

**SPE 183 Applied Forensics IV (0-2) 1 cr.**

Continues SPE 182. Provides practical experience in the preparation of public speeches, oral interpretation programs, acting scenes, group performances and/or limited preparation speaking situations for public presentation in forensics/speech competition.

**Prerequisite:** SPE 182 with a grade of C or better.

**SPE 200 Interpersonal Communication (3-0) 3 crs.**

Studies the nature and scope of interpersonal communication. Equips the student to manage the challenges of daily, one-on-one communication. Includes the study of identity and self as they relate to communication theory and practice as well as communication behaviors associated with the development, maintenance and termination of different types of relationships. Emphasis will be placed on practical communication skills such as listening, perception, language and nonverbal communication.

**SPE 205 Group Discussion (3-0) 3 crs.**

Provides experiences and introduces students to the principles, techniques and types of group discussion including roles, goals, cohesiveness, listening, problem-solving, leadership and conflict.

**SUR Surgical Technology****SUR 100 Orientation to the Profession (1-0) 1 cr.**

Introduces the student to the role of the surgical technologist and the professional practice of surgical technology. Emphasizes professionalism, organizations, credentialing and employability skills such as effective communication and teamwork. Students will investigate ethical, moral and legal issues, and hazard preparations, risk management and organizational relationships within the healthcare facility. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** BIO 160, BIO 161 and HSC 112 with grades of C or better and admission to the Surgical Technology degree program.

**SUR 101 Surgical Pharmacology (4-0) 4 crs.**

Introduces basic concepts and skills in pharmacology and anesthesia related to surgical technology. Emphasis is given to classification, indications, interactions and adverse reactions of commonly used medications. Terminology, abbreviations, dosage calculation, and weights and measures associated with medication administration are presented. Students are also exposed to the principles of anesthesia administration and the biopsychosocial needs of the patient. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** BIO 160, BIO 161 and HSC 112 with grades of C or better, and admission to the Surgical Technology degree program.

**SUR 102 Fundamentals of Surgical Technology (4-0) 4 crs.**

Presents fundamental principles and skills necessary for use of aseptic technique in surgical technology. Emphasizes the role of the surgical technologist including scrubbing and circulating duties, safety, ethical and legal considerations. Instrumentation for surgical procedures, equipment sterilization and maintenance are included in the course as well as pre-operative, intra-operative and post-operative preparations, and activities of the surgical technologist. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** SUR 100 and SUR 101 with grades of C or better.

**Corequisite:** SUR 103

**SUR 103 Fundamentals/Surgical Technology Lab (0-4) 2 crs.**

Applies knowledge gained in didactic coursework within SUR 102 (Fundamentals of Surgical Technology.) Students will apply theoretical knowledge in the performance of tasks performed by surgical technologists in perioperative care. Emphasizes equipment sterilization, maintenance, pre-operative preparations and the activities of the surgical technologist. NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** SUR 100 and SUR 101 with grades of C or better.

**Corequisite:** SUR 102

**SUR 104 Surgical Procedures I (4-0) 4 crs.**

Introduces relevant anatomy and physiology, factors unique to surgical procedures, supplies, equipment and instrumentation needed for various surgical procedures. Content covers general, obstetric, gynecological and genitourinary surgical procedures. Focuses on perioperative care including diagnostic testing, pre-operative and immediate post-operative care. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** SUR 100 and SUR 101 with grades of C or better.

**Corequisite:** SUR 105

**SUR 105 Clinical Applications I (0-6) 2 crs.**

Applies the principles and practice of basic surgical procedures during clinical rotations in affiliated hospitals. Focuses on knowledge, skills and professionalism necessary for perioperative case management, with an emphasis on the role of the circulator. Students will also encounter ethical, moral, legal and risk management issues as well as organization and relationships within the healthcare facility. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** SUR 100 and SUR 101 with grades of C or better.

**Corequisite:** SUR 104

**SUR 110 Fundamentals of Sterile Processing (4-0) 4 crs.**

Introduces the primary responsibilities of a sterile processing technician. Emphasizes preparation, distribution and storage of instruments, supplies and equipment; quality assurance; and inventory management. Teaches students how to minimize contagions and maintain healthy hospitals, while enforcing decontamination standards in a variety of clinical settings. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** BIO 160, BIO 161 and HSC 112 with grades of C or better.

**Corequisite:** SUR 111

**SUR 111 Fundamentals/Sterile Processing Lab (0-4) 2 crs.**

Provides supervised lab training applying the primary responsibilities of a sterile processing technician. Emphasizes preparation, distribution and storage of instruments, supplies and equipment; quality assurance; and inventory management. Teaches students how to minimize contagions and maintain healthy hospitals, while enforcing decontamination standards in a variety of clinical settings. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** BIO 160, BIO 161 and HSC 112 with grades of C or better.

**Corequisite:** SUR 110

**SUR 201 Surgical Procedures II (6-0) 6 crs.**

Examines advanced surgical procedures in relation to the physiological aspects of surgical intervention including ophthalmic; ear, nose and throat; oral and maxillofacial; plastic and orthopedic procedures. Focuses on knowledge of the involved anatomy, existing pathology, surgical hazards encountered, and a review of perioperative patient care. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** SUR 104 and SUR 105 with grades of C or better.

**Corequisite:** SUR 202

**SUR 202 Clinical Applications II (0-15) 5 crs.**

Correlates the principles and practices of advanced surgical procedures to clinical performance in affiliating hospitals. Focuses knowledge, skills and professionalism necessary for successful implementation of safe patient care in an operating room. Students will encounter surgical procedures in otorhinolaryngology, orthopedics, oral and maxillofacial, ophthalmic, plastic and reconstructive surgery. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** SUR 104 and SUR 105 with grades of C or better.

**Corequisite:** SUR 201

**SUR 203 Surgical Procedures III (4-0) 4 crs.**

Examines specialized surgical procedures related to peripheral vascular, thoracic, cardiac and neurosurgery. Includes knowledge of the involved anatomy, existing pathology, surgical hazards encountered, and a review of perioperative patient care. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** SUR 201 and SUR 202 with grades of C or better.

**Corequisite:** SUR 204

**SUR 204 Clinical Applications III (0-29) 6 crs.**

Applies all knowledge learned while assisting the surgical team with the daily pre-operative and post-operative duties of a surgical technologist. Students will progress through increasingly complex first and second scrubbing surgical procedures as they move toward entry-level surgical technologist abilities. (NOTE: This course is pending ICCB approval, effective Spring 2017.)

**Prerequisite:** SUR 201 and SUR 202 with grades of C or better.

**Corequisite:** SUR 203

**THE Theatre****THE 111 Introduction to Theatre (3-0) 3 crs.**

Introduces theatrical and dramatic art. Emphasis on providing the student with the tools of analysis which give him or her insight into the total imaginative process that makes up the art of the theatre. IAI F1 907

**THE 121 Ethnic Traditions in American Theatre (3-0) 3 crs.**

Examines how cultural perspective and minority expression shape theatre in the United States by exploring the roots of change in traditional theatre and the role of community in the formation of theatre companies. Specific focus will be given to African American theatre, Asian American theatre, Latino theatre, Native American theatre, feminist theatre, gay and lesbian theatre, political theatre, performance art and post-modernism as well as international trends. IAI F1 909D

**THE 190 Applied Theatre Practicum I (0-2) 1 cr.**

Provides practical experience in directing, acting, costuming, scene design, lighting and repertory.

**Prerequisite:** Consent of instructor.

**THE 191 Applied Theatre Practicum II (0-2) 1 cr.**

Continues SPE 190. Provides practical experience in directing, acting, costuming, scene design, lighting and repertory.

**Prerequisite:** SPE 190 with a grade of C or better and consent of instructor.

**THE 192 Applied Theatre Practicum III (0-2) 1 cr.**

Continues SPE 191. Provides practical experience in directing, acting, costuming, scene design, lighting and repertory.

**Prerequisite:** SPE 191 with a grade of C or better and consent of instructor.

**THE 193 Applied Theatre Practicum IV (0-2) 1 cr.**

Continues SPE 192. Provides practical experience in directing, acting, costuming, scene design, lighting and repertory.

**Prerequisite:** SPE 192 with a grade of C or better and consent of instructor.

**THE 212 Acting I (3-0) 3 crs.**

Methods used in the art of acting; stress on practical acting situations. IAI TA 914

**THE 213 Acting II (3-0) 3 crs.**

Continue the development of acting skills introduced in SPE 212. Helps the student develop a believable character through play analysis and scene study. Introduces the student to acting styles.

**Prerequisite:** THE 212 with a grade of C or better and consent of instructor.

**THE 216 Stagecraft (0-6) 3 crs.**

Emphasizes the technical processes of the stage. Includes stage structures and scenery, construction processes, lighting theory and practices, costuming, and related equipment and hardware. Laboratory work will be correlated with the College's theatrical productions. IAI TA 911

**WEB Web Development****WEB 101 Internet Fundamentals (0.5-1) 1 cr.**

Introduces the fundamental skills and knowledge needed to use the Internet. Students use an Internet browser, email and a number of tools to understand file management, Internet security, cloud computing, user-generated content, the Internet and the World Wide Web while participating in hands-on activities.

**WEB 150 Web Foundations (2-2) 3 crs.**

Introduces the foundational skills needed to create web pages utilizing HyperText Markup Language (HTML) and Cascading Style Sheets (CSS). Topics include Web design best practices, web site hosting, Internet protocols, graphics, media, and security. Students utilize the skills learned to create a business-oriented web site project. Recommended preparation: CIS 101, GRA 101 or equivalent experience.

**WEB 170 Web Graphics and Prototyping (2-2) 3 crs.**

Builds on web foundation skills taught in WEB 150 with a focus on creating, manipulating, and implementing graphics in web pages. Students will gain an understanding of how tools available can be combined to produce meaningful prototypes to aid with iterative development. Students utilize the skills taught to create a business-oriented web site.

**Prerequisite:** WEB 150 with a grade of C or better.

**WEB 180 Web Multimedia (2-2) 3 crs.**

Builds on web foundation skills taught in WEB 150 with a focus on configuring multimedia for the Web, using HyperText Markup Language (HTML), Cascading Style Sheets (CSS) and a currently popular animation tool. Students utilize the skills taught to create a business-oriented web site.

**Prerequisite:** WEB 150 with a grade of C or better.

**WEB 190 Web Authoring Tools (2-2) 3 crs.**

Builds on web foundation skills taught in WEB 150 with a focus on mastering a currently popular web authoring tool. Unique features of the authoring tool will be utilized. Students utilize the skills taught to create a business-oriented web site.

**Prerequisite:** WEB 150 with a grade of C or better.

**WEB 200 Web Scripting Foundations (2-2) 3 crs.**

Builds on web foundation skills taught in WEB 150 with a focus on development of interactive web pages using HyperText Markup Language (HTML), Cascading Style Sheets (CSS), and JavaScript. Students utilize the skills taught to create a business-oriented web site.

**Prerequisite:** WEB 150 with a grade of C or better AND math placement in MTH 101 or higher.

**WEB 210 Web Accessibility (2-2) 3 crs.**

Builds on web foundation skills taught in WEB 150 with a focus on development of useable and accessible web sites. Topics include Section 508 Accessibility compliance, the Web Accessibility Initiative guidelines, usability testing, and applications that test for adherence to coding syntax and accessibility recommendations.

**Prerequisite:** WEB 150 with a grade of C or better.

**WEB 235 Interactive Scripting (2-2) 3 crs.**

Builds on scripting skills taught in WEB 200 with a focus on advanced JavaScript techniques which include jQuery and Ajax to create highly functional web pages. Students utilize the advanced skills taught to create a business-oriented web site.

**Prerequisite:** WEB 200 with a grade of C or better.

**WEB 240 E-Commerce Strategies/Technologies (2-2) 3 crs.**

Provides the student with a foundation in the fundamentals of electronic commerce development. Software, hardware, security, payment systems, promotion and support strategies, Electronic Data Interchange, web auctions, international issues, legal implications, ethical issues, and taxation are among topics covered in a lecture and lab-based format. Recommended preparation: CIS 101 or equivalent experience.

**WEB 250 Server-Side Scripting (2-2) 3 crs.**

Provides an introduction to server-side scripting and web data access using a currently popular server application platform and relational database. Includes variables, control structures, functions, arrays, files, and databases. Students utilize the advanced skills taught to create a business-oriented data-driven web application that uses Structured Query Language (SQL) to access and update information.

**Prerequisite:** CIS 143 and WEB 150 with grades of C or better.

**WEB 299 Web Management Capstone (2-2) 3 crs.**

Applies and integrates skills from previous web courses as students work in groups to develop a web site while addressing topics integral to web management including web servers, establishing a presence on the web, web server configuration, and using server-side scripts. Project management issues and system development life cycle methodologies are discussed and practiced.

**Prerequisite:** WEB 190 and WEB 200 with grades of C or better.

**WLD Welding Technology****WLD 110 Welding I (1-4) 3 crs.**

Covers fundamentals of oxyacetylene welding theory and practices and beginning electric welding. Includes arc welding and gas welding, brazing and cutting in the horizontal position.

**WLD 210 Welding II (1-4) 3 crs.**

Covers advanced welding theory and practice in arc welding. Provides experience in MIG and TIG (Heliarc) techniques. Includes an introduction to strength of weld testing.

**Prerequisite:** WLD 110 with a grade of C or better, or consent of instructor.

**WLD 211 Welding III (2-4) 4 crs.**

Covers advanced welding theory and extensive practice in major arc welding process. Provides experience in advanced GMAW (gas metal arc welding), FCAW (flux cored arc welding), GTAW (gas tungsten arc welding) and other arc welding techniques. Plasma arc and air carbon arc cutting will be included.

**Prerequisite:** WLD 210 with a grade of C or better, or consent of program coordinator.

**WLD 212 Welding IV (2-4) 4 crs.**

Covers advanced out-of-position and multi-pass arc welding including GMAW (gas metal arc welding), SMAW (shielded metal arc welding) and GTAW (gas tungsten arc welding). Emphasizes working from blueprints and development of welding skills necessary to pass welder qualification tests. Students must pass guided bend tests to become "certified welders" in accordance with the AWS (American Welding Society) D1.1 Structural Welding Code.

**Prerequisite:** WLD 211 with a grade of C or better, or consent of program coordinator.

**WLD 225 Advanced Blueprint Reading (1-2) 2 crs.**

Teaches the student to become proficient in reading more complex welding blueprints. The student will learn the symbols specific to welding blueprints. Emphasizes developing the ability to transfer the two-dimensional print to the actual three-dimensional object.

**Prerequisite:** MNT 111 and WLD 210 with grades of C or better.

**WLD 240 Cutting Processes (1-4) 3 crs.**

Allows the student an opportunity to gain proficiency in all major industrial arc, oxy-fuel, and mechanical cutting processes-manual, semi-automatic and automatic. Processes include Plasma Arc, Air Carbon Arc, Shielded Metal Arc, Exothermic, and Oxy-Fuel cutting; optical tracers; and CNC controls.

**Prerequisite:** WLD 210 with a grade of C or better.

**WLD 245 Welding Fabrication I (2-4) 4 crs.**

Provides hands-on experience constructing welding projects employing arc, oxy-acetylene, gas metal arc (mig), gas tungsten arc (tig), or a combination of these welding processes using a welding blueprint as a guide.

**Prerequisite:** WLD 211 and WLD 240 with grades of C or better.

**WLD 246 Pre-Pipe Welding (2-4) 4 crs.**

Covers advanced skills in shielded metal arc welding using the E6010 and E7018 electrodes on mild steel plate up to 3/8" thickness in all positions.

**Prerequisite:** WLD 210 with a grade of C or better.

**WLD 248 Basic Pipe Welding (2-4) 4 crs.**

Covers techniques of basic pipe fitting, use of 90's, T's, flanges, valves, take offs, use of pipe blueprints, sketches, templates, and uphill welding techniques on pipe. Perform SMAW pipe welding with E6010 and E7018 electrodes in all positions.

**Prerequisite:** WLD 210 and WLD 246 with grades of C or better.

**WLD 249 Applied Welding Theory (1-4) 3 crs.**

Provides both lab and classroom experience to cover the basic theory of all major welding processes. Covers shielded metal arc welding, gas tungsten arc welding, flux core arc welding, submerged arc welding, plasma arc welding and oxyacetylene welding.

**Prerequisite:** WLD 210 with a grade of C or better.

**WLD 250 Welding Fabrication II (2-4) 4 crs.**

Prepares the student to construct welding projects employing arc, oxyacetylene, gas metal arc (MIG), gas tungsten arc (TIG), or any combination of these welding processes using a welding blueprint as a guide. Covers advanced fabrication techniques including rolling, forming and bending.

**Prerequisite:** WLD 211 and WLD 245 with grades of C or better.

**WLD 253 Welding Power Sources (1-4) 3 crs.**

Familiarizes the student with the difference between types of welding power sources. The student will learn through lab experiences the proper set-up and fine-tuning techniques which will result in a quality weld. Covers selection, use, troubleshooting and maintenance of major welding equipment.

**Prerequisite:** WLD 210 with a grade of C or better.

**WLD 260 Arc Welder Qualification (1-6) 4 crs.**  
 Helps the student attain arc (SMAW) welder qualification (certification) as required by many employers. This certification will meet the requirements of the AWS (American Welding Society) D1.1 Structural Welding Code. Upon successful completion of the certification exam, the student will be given a copy of their test results (Welding Procedure Qualification.)  
**Prerequisite:** WLD 210 with a grade of C or better.

**WLD 261 Mig Welder Qualification (1-6) 4 crs.**  
 Helps the student attain mig (GMAW) welder qualification (certification) as required by many employers. This certification will meet the requirements of the AWS (American Welding Society) D1.1 Structural Welding Code. Upon successful completion of the certification exam, the student will be given a copy of their test results (Welding Procedure Qualification.)  
**Prerequisite:** WLD 210 with a grade of C or better.

**WLD 285 Topics in Welding Technology (1-0 to 3-6) 1-6 crs.**  
 Examines selected problems or topics in welding technology. The specific course content and instructional methodology will vary each semester offered depending on the material presented. A syllabus containing specific topic information will be available in the division office with pre-registration materials each time the course is offered. This course may be repeated to a maximum of 6 credit hours.  
**Prerequisite:** Consent of instructor.

**HCB Harper College for Business**

**HCB 8121 Introduction to Local Area Networks (2-2) 3 crs.**  
 Provides students with a comprehensive introduction to local area networks. Includes OSI model, media, topologies, protocols, network maintenance, upgrades, troubleshooting, and current network operating systems.

**HCB 8122 Internet Protocols (TCP/IP) (2-2) 3 crs.**  
 Provides students with a detailed examination of internet addressing and protocols. Includes IP addressing, routing, IP, ICMP, ARP, TCP, UDP, DHCP, DNS, HTTP, FTP, and SMTP. Uses protocol analyzers to monitor and examine network traffic.

**HCB 8125 Cisco Networking CCNA (4-4) 6 crs.**  
 Provides students with experience configuring Cisco routers and switches for a variety of tasks, including IOS basics, router configuration, routing protocols, NAT, access lists, WAN settings, switching and VLANs, IPv4 and IPv6 addressing.

**HCB 8135 Autocad Essentials (0-4) 2 crs.**  
 Provides students with a comprehensive introduction to AutoCAD essentials. Includes creating a simple drawing, making drawings precise, drawing organization and information, creating more complex objects, annotating your drawing, creating and organizing blocks, drawing setup and utilities, advanced object types, advanced blocks and attributes, referencing and sharing information, and drawing standards and system setup.

**HCB 8160 Basic Supervisory Skill Development (0.5-0 to 3-0) 0.5-3 crs.**  
 Studies selected problems or topics in supervisory management. Introduces the responsibilities of the first or second echelon supervisor in either the industrial or administrative environment. Leadership qualities, human relations skills, motivation, communications, training techniques, and problems of the work group are discussed.

**HCB 8175 Business Image and Etiquette (0.5-0 to 3-0) 0.5-3 crs.**  
 Provides students with the knowledge of how a professional image and good manners affect interpersonal relationships in the workplace. They will recognize the importance of first impressions and learn to manage themselves in a professional manner.

**HCB 8180 Customer Service, Customer Loyalty (0.5-0) 0.5 crs.**  
 Delivers the strategies and skills professionals need to be more effective in virtually every aspect of customer service planning and execution. Program will enable service people to be skilled, practiced, motivated and prepared in all customer contact.

**HCB 8182 Effective Business Writing (0.5-0) 0.5 crs.**  
 Delivers the strategies and skills professionals need to be more effective in every aspect of business writing. Enables business people to be skilled, practiced, motivated and prepared in all writing that pertains to business interactions.

**HCB 8184 Teambuilding (0.5-0) 0.5 crs.**  
 Delivers the strategies and skills professionals need to be more effective in aspects of teambuilding. Enables business people to be skilled, practiced, motivated and prepared to work as members of effective teams.

**HCB 8185 Interviewing Skills (0.5-0) 0.5 crs.**  
 Builds the skills to plan and conduct interviews to elicit information needed to make sound hiring decisions.

**HCB 8186 Customer Service Excellence (0.5-0) 0.5 crs.**  
 Delivers the strategies and skills customer service professionals need to provide excellence in every customer interaction. In this interactive workshop, participants will explore reasons why customer service is critical and will practice listening and positive communication skills.

**HCB 8190 Integrity Service (1.5-0.5) 2 crs.**  
 Provides tools and skills to build and manage professional customer relationships more effectively, gain insight into business needs through effective communication and interpersonal skills, learn behaviors that demonstrate the value of customers as trusted business partners, and manage customer expectations more effectively regarding the delivery of solutions.

**HCB 8192 Communication Skills (0.5-0 to 3-0) 0.5-3 crs.**  
 Provides an overview of effective business communications. Focuses on practical experience in the preparation and delivery of oral and written communications. Emphasizes the importance of active listening and effective body language. Reviews proper etiquette in the use of email and other forms of written communication and in meetings.

**HCB 8194 Presentation Skills (0.5-0) 0.5 crs.**  
 Studies selected problems or topics in presenting information to others. Introduces the concepts of presenting in both informal and formal settings in a clear and concise manner.

**HCB 8221 Wireless Networking (2-2) 3 crs.**  
 Provides students with a comprehensive hands-on overview of wireless networking. Includes radio frequencies, wireless infrastructure, hardware, wireless standards, wireless LAN security, site surveys, and troubleshooting.

**HCB 8222 Data Communications-Convergence+ (2-2) 3 crs.**  
 Provides students with an introduction to telecommunications and data convergence. Topics include legacy telecommunications, voice telephony, public-switched telephone networks, data networking, Voice Over IP, quality of service and wireless communications.

**HCB 8280 Network Security Fundamentals (2-2) 3 crs.**  
 Provides students with a comprehensive hands-on overview of network security including authentication, encryption, digital certificates, perimeter topologies, remote access, cryptography, and operational security.

**HCB 8301 ESL: Workforce Language Skills I (1-0 to 6-0) 1-6 crs.**  
 Focuses on grammatical structures and patterns of English for high beginning English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills.

**HCB 8302 ESL: Workforce Language Skills II (1-0 to 6-0) 1-6 crs.**

Continues grammatical structures and patterns of English for high beginning English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Students must take a placement test prior to enrollment.

**HCB 8303 ESL: Workforce Language Skills III (1-0 to 6-0) 1-6 crs.**

Focuses on increasingly complex grammatical structures and patterns of English for intermediate English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Placement exam required.

**HCB 8304 ESL: Workforce Language Skills IV (1-0 to 6-0) 1-6 crs.**

Continues increasingly complex grammatical structures and patterns of English for intermediate English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Placement exam required.

**HCB 8305 ESL: Workforce Language Skills V (1-0 to 6-0) 1-6 crs.**

Focuses on increasingly complex grammatical structures and patterns of English for high intermediate English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Placement exam required.

**HCB 8306 ESL: Workforce Language Skills VI (1-0 to 6-0) 1-6 crs.**

Continues complex grammatical structures and patterns of English for high intermediate English as a Second Language students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Placement test required.

**HCB 8452 Imports and Exports (0.5-0) 0.5 crs.**

Provides a conceptual overview of the world marketing environment with emphasis on both global exporting and importing. Introduces students to marketing strategies and procedures to capitalize on domestic and overseas world trade potential.

**HCB 8501 Occupational Spanish (1-0 to 4-0) 1-4 crs.**

Studies selected problems or topics in Spanish as it relates to specific occupations. Includes three components: speaking in Spanish, listening in Spanish, and Latino culture. Introduces pronunciations of practical common phrases and questions in Spanish, comprehension of many basic and common expressions and phrases used in everyday Spanish. Also teaches some fundamental and generic and non-nationality specific aspects of Latino culture.

**HCB 8503 Occupational German (1-0 to 4-0) 1-4 crs.**

Studies selected problems or topics in German as it relates to specific occupations. This course is divided into three components: speaking in German, listening in German, and German culture. Introduces pronunciation and comprehension of practical common phrases and questions used in the German language.

**HCB 8601 Basic Welding (1-4) 3 crs.**

Covers fundamentals of oxyacetylene welding theory practices and beginning electric welding. Includes arc welding and gas welding, brazing and cutting in the horizontal position.

**LAH CE Allied Health****LAH 8003 Medical Coding Certification Exam Preparation (1.5-0) 1.5 crs.**

Prepares students for the AAPC Certified Professional Coder exam. Includes review of human anatomy, medical terminology, and pathophysiology. Provides overview of regulatory and reimbursement issues, HIPPA policies, HCPCS, and the official guidelines for coding and reporting.

**LAH 8004 Medical ICD-Cm/Pcs Bootcamp (1-0) 1 cr.**

Updates students to the new ICD-10 guidelines to be in place in October 2013. Reviews codes, anatomy and disease processes. Provides overview of expansions, revisions and guidelines changes effective with the transition to ICD-10.

**LAH 8010 Pharmacy Technician (3.5-0) 3.5 crs.**

Provides students with a comprehensive introduction to the duties of pharmacy technicians. Includes overview of pharmacy measures, major classes of drugs, regulatory agencies and requirements, different pharmacy settings, IV solutions, retail operations, calculating doses, and sterile techniques.

**LAH 8015 Physical Therapy Aide (3.5-0) 3.5 crs.**

Provides students with a comprehensive introduction to the duties of physical therapy aides. Includes evolution of physical therapy and an overview of ethical and legal issues, basic anatomy and the musculoskeletal system, range of motion, ambulation, strengthening exercises, direction of movement, patient position and transfer, and common anatomical issues.

**LAH 8020 Sterile Processing Technician Exam Preparation (2-0) 2 crs.**

Prepares students for the Sterile Processing and Distribution Technician Certification Exam. Includes review of human anatomy and physiology and sterile technician roles and responsibilities. Provides overview of principles of microbiology, infection control and methods of decontamination. Reviews instruments, packaging, storage and distribution.

**LAH 8025 Phlebotomy Refresher (1.5-0) 1.5 crs.**

Provides review of blood draw skills and optimizing blood specimens. Includes skin punctures, venous and arterial samples, drawing difficult samples, vacutainer order of draw, and special considerations. Practice sticks on course participants. Recommended preparation: formal phlebotomy or healthcare training or be currently employed in a healthcare setting.

**LAH 8030 Medical Scribe (6.5-6) 8.5 crs.**

Provides training for a career as a medical scribe in a hospital or physician office setting. Includes basic medical terminology, anatomy and physiology, health history and diagnostic tests. Covers basic medical equipment, principles of billing and coding, and the use of Electronic Medical Records software. Identifies HIPPA concepts, medical liability, Medicare and Medicaid requirements, and The Joint Commission standards.

**LAH 8101 Professional Caregiver (1-0.5) 1 cr.**

Teaches the universal worker skills for assisted, sheltered or skilled communities, and home health individuals or agencies. Discusses holistic health, physical and cognitive function, the importance of incorporating recreational activities and cultural change.

**LAH 8235 Local Anesthesia in Dentistry (2-4) 2.5 crs.**

Includes 24 classroom hours and 8 clinical hours where each participant will administer and receive a minimum of 27 injections. Dental hygienists successfully completing this 32-hour program will be able to administer local anesthesia as permitted by the Illinois Dental Practice Act.

**LAP CE Comp TIA****LAP 8002 COMPTIA Network+ (2.5-1) 3 crs.**

Teaches planning, installation, and troubleshooting of networks in a business environment. Includes the OSI model, network card configurations, diagnosing network problems, and hands-on practice setting up a network environment. Must have A+ certification or equivalent prior to enrollment.

**LAP 8008 COMPTIA A+ Technician (1.5-2) 2.5 crs.**

Provides hands-on training in PC installation, building, upgrading, repairing, configuring and troubleshooting. Prepares students for A+ certification exams which can lead to a career in PC repair, help desk support or studies in advanced technologies.

**LAP 8010 COMPTIA Security + (2-1) 2.5 crs.**

Provides vendor-neutral instruction on systems security, network infrastructure, access control, risk mitigation, cryptography, and organizational security. Covers workstation and server security, network vulnerabilities, risk assessments, monitoring tools, network security tools, authentication, rights and privileges, encryption, and disaster recovery. Helps prepare for the CompTIA Security+ certification.

**LAP 8011 COMPTIA Advanced Security Practitioner (1-2) 2 crs.**

Provides in-depth study of advanced security concepts, principles, and implementations that pertain to enterprise-level security. Explores enterprise security architecture and technologies, risk management, research analysis, and integration of computing, communications and business disciplines. This course is intended for an IT professional with 5 to 10 years experience in an IT environment and with the skills required to conceptualize, design and engineer secure solutions across complex enterprise environments. Recommended Preparation: LAP8008, LAP8002 and LAP8010. CompTIA A+, Network+ and Security+ certification or equivalent experience.

**LAP 8020 COMPTIA A+ Technician (1.5-2) 2.5 crs.**

Provides hands-on training in PC installation, building, upgrading, repairing, configuring and troubleshooting. Prepares students for A+ certification exams which can lead to a career in PC repair, help desk support or studies in advanced technologies.

**LAP 8021 COMPTIA Network+ (2.5-1) 3 crs.**

Teaches planning, installation, and troubleshooting of networks in a business environment. Includes the OSI model, network card configurations, diagnosing network problems, and hands-on practice setting up a network environment. Must have A+ certification or equivalent prior to enrollment.

**LAP 8022 COMPTIA Security+ (2-1) 2.5 crs.**

Provides vendor-neutral instruction on systems security, network infrastructure, access control, risk mitigation, cryptography, and organizational security. Covers workstation and server security, network vulnerabilities, risk assessments, monitoring tools, network security tools, authentication, rights and privileges, encryption, and disaster recovery. Helps prepare for the CompTIA Security+ certification.

**LAP 8025 COMPTIA Linux+ (1-1) 1.5 crs.**

Teaches students how to administer a Linux environment and prepares for two CompTIA Linux+ certification exams. Reviews the basic system architecture, installation and management; understand commands, devices and file systems; utilize shells, scripting and data management techniques; and navigate user interfaces, desktops and essential system services.

**Recommended:** CompTIA A+ certification or equivalent experience.

**LAP 8051 IT Fundamentals (0.5-1) 1 cr.**

Teaches how to identify and explain basic computer components. Explains how to set up a basic workstation. Conducts basic software installations. Establishes basic network connectivity. Identifies compatibility issues and identifies/prevents basic security risks. Helps students prepare for CompTIA's IT Fundamentals certification exam.

**LBS CE Business Solutions****LBS 8000 Lean Six Sigma Green Belt (2.5-1) 3 crs.**

Provides an overview of Lean Six Sigma methodologies using Define, Measure, Analyze, Improve and Control techniques. Analyzes situations using MiniTab software. Encompasses all aspects of business including management, service delivery, design, production and customer satisfaction. Drives the execution of key processes. Recommended preparation: MS Word, MS Excel, high school graduate or GED, basic understanding of math functions, 12th grade reading level.

**LBS 8001 Exploring a Career in Human Svcs (3-0) 3 crs.**

Covers history and philosophy of human services; function and orientation of human services agencies and institutions; career opportunities and qualifications at various entry levels of human services employment. Includes opportunities for volunteer and/or shadowing experiences to help students better understand the human services arena.

**LBS 8004 Association Management (3.5-0) 3.5 crs.**

Provides students with a comprehensive perspective on association management. Includes the roles associations have within the industry, profession, and society. Describes the governance and organizational units, membership, importance of volunteers, and how to develop leadership potential.

**LBS 8005 Apprenticeship Train-The-Trainer (1-0) 1 cr.**

Provides attendees with comprehensive training to serve as coaches for Harper College students enrolled in the Advanced Manufacturing program. Includes setting expectations for both industry trainers and student apprentices.

**LBS 8010 Introduction to Accounting (3-0) 3 crs.**

Provides students with a foundation in fundamental accounting procedures using the accounting cycle for both service and merchandising businesses, including adjustments, preparation of financial statements and closing procedures. Includes reconciliation of bank statements, petty cash and examination of fraud and internal controls. Is intended for students planning to take only one semester of accounting or for those who need preparation before enrolling in ACC101 or LBS8011.

**LBS 8011 Financial Accounting Basics (4-0) 4 crs.**

Presents accounting as an information system that produces summary financial statements primarily for users external to a business. Emphasizes the reporting of the effect of transactions and other economic events on the financial condition and operating results of a business. Includes basic accounting concepts, financial statements, accrual and cash basis, the accounting cycle, monetary assets, inventories, fixed assets, current and long-term liabilities, and owner's equity. Assumes a corporate form of organization.

**LBS 8111 Business Organization (3-0) 3 crs.**

Introduces the nature of business and the environment in which it operates. Includes forms of business ownership, introduction to operative and facilitating facets of business operation, management, marketing, accounting, statistics, business law, finance, investments, insurance, and labor-management relations.

**LBS 8113 Quickbooks Applications (1-2) 2 crs.**

Provides students with applications of Quickbooks. Students apply accounting principles and manage accounting records like those used in small business.



- LBS 8130 Transportation Safety I (3-0)** 3 crs.  
Introduces the responsibility of shippers, corporate entities, supervisors, material handlers and drivers to design and implement programs and policies that correct identified deficiencies to ensure safety compliance. Teaches how to administer drug and alcohol programs that meet federal requirements. Covers the development of programs to address issues of Comprehensive Safety Analysis (CSA).
- LBS 8131 Emergency Dispatcher 1 (3-0)** 3 crs.  
Introduces students to the field of emergency services dispatching and provides an overview of its components and responsibilities. Provides the foundation for statewide competency as a public safety telecommunicator as outlined by the Illinois Law Enforcement Training and Standards Board (ILETSB).
- LBS 8135 Transportation Safety II (3-0)** 3 crs.  
Introduces issues of transportation as they relate to insurance, cargo security and securement, vehicle inspection and maintenance, and warehouse material handling and storage. Teaches concepts of liability issues and mitigation strategies; legal weights and dimensions, oversized/overweight routing and permits, and theft reduction. Examines proper vehicle inspection techniques and the identification of unsafe vehicle components and material handling equipment; proper storage including hazardous materials, food grade products, and overhead storage issues; and proper goods movement documentation.
- LBS 8155 Introduction to Payroll Accounting (2-0)** 2 crs.  
Explains the preparation of payroll records including tax returns for old age benefits and employment insurance.  
**Prerequisite:** ACC 100, ACC 101, LBS 8010 or LBS 8011
- LBS 8231 Emergency Dispatcher II (3-0)** 3 crs.  
Builds upon the foundation laid through EMG131 or LBS 8131 and provides students with specific knowledge required to professionally handle emergency as well as non-emergency calls for service in the public safety environment. Provides students with a basic understanding of the role, responsibility and equipment utilized by telecommunicators to accomplish their mission.  
**Prerequisite:** EMG 131 or LBS 8131 with a grade of C or better.
- LBS 8245 Marketing Concepts (3-0)** 3 crs.  
Focuses on marketing activities that will cover product planning, pricing strategies and promotional efforts including advertising, selling, sales promotions and distribution channel effectiveness.
- LBS 8300 Rope Access Training Level 1 (1-2)** 2 crs.  
Provides workers how to safely access structures working two-rope systems. Includes advanced techniques of structural progression and rescue using SPRAT guidelines.
- LBS 8301 Rope Access Training Level 2 (1-2)** 2 crs.  
Provides advanced workers or lead technicians how to safely lead a rope access team. Includes advanced techniques utilizing SPRAT guidelines.
- LBS 8302 Rope Access Training Level 3 (1-2)** 2 crs.  
Provides rope access supervisors advanced training of rigging and rescue techniques required to supervise a team of rope access workers. Includes SPRAT guidelines.
- LCE CE Career Exploration**
- LCE 8003 Professional Meeting/Event Planning (1.5-0)** 1.5 crs.  
Explores roles and responsibilities, budgets, program planning, speakers, site inspection, site selection, negotiations and contracts, risk management issues, marketing, exhibits, sponsorship, registration, transportation, catering, audiovisual, technology and legal issues.
- LCE 8006 Veterinary Assistant (5-3)** 6 crs.  
Prepares students to work at an entry-level position in a veterinary hospital. Includes veterinary clerical responsibilities, diagnostics, pharmacy, patient treatment, overview of surgery, anesthesia and emergency care, all within the scope of the law. Each topic includes a required clinical practicum at an area veterinary facility; competencies must be demonstrated prior to clinical placement and a preliminary interview is conducted onsite. Students must be at least 18 years old, high school graduate/GED, and proficient in reading, writing, and math. Attendance at an information session is mandatory; background checks and insurance will be discussed.
- LCE 8008 Private Investigation Training (1-0.5)** 1 cr.  
Develops investigative and research techniques for pursuing a career as a private investigator. Includes professional surveillance, legal guidelines, missing persons and research regarding the most common encountered types of investigations. Taught by a licensed professional, this course satisfies IDPR requirements. Successful students are qualified and eligible to apply for the Permanent Employee Registration Card (PERC), the first step to becoming a licensed private investigator.
- LCE 8009 Professional Wedding Consultant (1-0)** 1 cr.  
Provides information about negotiations, contracts, vendors, etiquette, wedding insurance, décor, destination or theme weddings, and cultural protocol. Provides marketing information for both self and business. Includes the completion of a project portfolio.
- LCE 8010 Event Design (0.5-0)** 0.5 crs.  
Provides students with a comprehensive introduction to event design including the elements of lighting, furniture, products, landscaping and fashion.
- LCE 8013 Truck Driver Training 240 (3-15)** 10.5 crs.  
Provides 240 hours of CDL-A Illinois license requirements. Includes pre-trip inspections, yard skills practice, highway driving and road tests, advanced skills and planning, plus endorsements.
- LCE 8014 Power Selling (3-0)** 3 crs.  
Focuses upon understanding the sales process and putting it into action. Examines strategies used in building effective relationships, understanding buying motives, properly representing a product or service, and delivering a compelling presentation.
- LCE 8015 CDL Permit Training (2-0)** 2 crs.  
Provides students with a comprehensive training to prepare for the Illinois Commercial Driver's License (CDL) permit test. Demonstrated knowledge of topics including pre-trip CLP, space management turns, transporting and combination vehicles
- LCE 8016 Truck Driver Training (3-9)** 7 crs.  
Includes classroom, yard, and over-the-road experience leading to a Class A license. Includes 40 hours of classroom instruction and 120 hours of yard and road skills in a four-week program. Students must attend a mandatory orientation session prior to beginning the course. (Note: Yard and road skills are conducted at Eagle Training Services, Lake in the Hills, IL)
- LCE 8017 Truck Driving Tanker Training (1-1)** 1 cr.  
Provides students with a comprehensive study of tanker truck operations. Includes over the road training and observation as well as specific issues and requirements. NOTE: Students must hold a valid Commercial Driver's license (CDL).
- LCE 8018 Cdl: Train the Trainer (2-0)** 2 crs.  
Fulfills the national on-going need for Commercial Driver's Licensed Class A drivers. Includes curriculum and teaching model as a standard template of best practices for CDL training, FMCSA regulations, use of double trailers and hazmat endorsement.

**LCE 8019 Library Assistant (2-0) 2 crs.**

Teaches library organization and operations. Provides an overview of how to order, process, catalog, locate and circulate library materials. Includes conflict resolution and customer service. Provides insight into library automation systems and how library departments interact to meet patron needs. Showcases skills with a completed portfolio. Recommended preparation: Basic keyboarding skills and familiarity with both Microsoft Word and the internet.

**LCE 8108 Human/Animal Bond and Animal Careers (3-0) 3 crs.**

Provides students with a comprehensive introduction to careers involving the human-animal bond including Anthrozoology, the psychological perspective describing the paradox of human-animal relationships and examining what the bonds teach us about our humanity and relationship to nature.

**LCI CE Cisco****LCI 8001 Cisco CCNA Network Specialist (2-1) 2.5 crs.**

Introduces standard networking terms, concepts and devices. Focuses on the selection, connection, configuration and troubleshooting of Cisco switches and routers as they are commonly used in small- to medium-sized networks. Helps students prepare for the CCNA certification exams. Must have Comp TIA Network+ training or equivalent experience prior to enrollment.

**LCI 8002 Implement Cisco IOS Security (2-1) 2.5 crs.**

Teaches installation, troubleshooting and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices. Illustrates technologies that Cisco uses in its security structure.

**LCI 8003 Cisco Wireless Networking (2-1) 2.5 crs.**

Teaches students the information and practice activities to help design, install, configure, monitor and conduct basic troubleshooting tasks for a Cisco WLAN in SMB and Enterprise installations. Recommended preparation: Cisco CCNA.

**LCI 8004 Cisco Voice Over IP (2-1) 2.5 crs.**

Teaches students Unified Communication concepts, component definition and high level designs. Covers implementation and configuration of small to medium-sized IP Telephony solutions. Recommended preparation: Cisco CCNA.

**LCS CE Career Stimulus****LCS 8001 Networthing I (0.5-0.5) 0.5 crs.**

Assists students in finding insight into him or herself and his or her career goals and explains how those goals can be achieved through the process of career assessment and learning networking skills. Teaches job search approach from the positive perspective, gives students a comprehensive introduction to personal development elements of the job search. Encourages students to examine their attitudes, skills, and barriers and to develop an awareness of their strengths and strategies needed in mounting a successful job search. Includes understanding of critical elements including Emotional Intelligence; communication theory and styles; networking; and personal development including stress, professional appearance, self-care and time management.

**LCS 8002 Networthing II (0.5-0.5) 0.5 crs.**

Continues instruction on career goals and networking skills, delving into more advanced concepts. Teaches additional job search approaches and provides students a comprehensive overview of personal development elements within the job search. Encourages students to examine their attitudes, skills, and barriers and to develop an awareness of the strengths and strategies needed to mount a successful job search. Demonstrates methods and tools of networking and accountability groups.

**LCT CE Computer Training****LCT 8001 Introduction to MYSQL (1-0) 1 cr.**

Teaches how to create MySQL databases, which are designed specifically as a web back end. Explains how to quickly and efficiently set up a MySQL databases. Administers MySQL databases. Uses real-world exercises. Identifies how to become proficient in running SQL queries against the server. Customizes a SQL database using the tools in the MySQL distribution.

**Recommended:** Prerequisites: LCT0193 Introduction to JavaScript Programming and LCT0292 Introduction to PHP or equivalent experience.

**LCT 8002 Intermediate MYSQL (1-0) 1 cr.**

Focuses on the way business applications are created and distributed using websites. Learns how to connect centralized database technology with the stack of open-source applications known as LAMP (Linux, Apache, MySQL, and PHP).

**Recommended:** LCT8001 Introduction to MySQL or equivalent experience.

**LCT 8036 Photoshop (1-0.5) 1 cr.**

Covers program interface, documentation navigation, application preferences setup, practical application of basic tools, layers and channels usage, selections, resolution, color spaces, file type/formats, and image modes. Includes Photoshop's extensive color manipulation settings, the pen tool, layer styles and bitmaps and duotones. Students should have general computer experience (daily usage), and Introduction to OSX or Introduction to Windows.

**LCT 8040 Indesign (1-0.5) 1 cr.**

Covers creation-adding/deleting pages, adjusting layouts, working with text boxes and the type tool-importing text, linking text boxes, text and paragraph formatting and styles, working with pictures and frames-importing pictures, text wrap, changing frame and content size, the links palette, working with shapes and color, use of the transform tools, working with document guides, tables, templates and master pages. Students need a strong background in Mac or PC usage and experience with word processing program recommended.

**LCT 8055 Illustrator (1-0.5) 1 cr.**

Develops skills in using the tool palette, color and image creation, and other features of Adobe Illustrator. Enhances documents created in Quark by working with paint effects, type, perspective drawing and creating artwork for the web. Strong Mac or PC skills and a previous computer graphic arts course such as QuarkXpress, is advised.

**LCT 8071 Quarkxpress (1-0.5) 1 cr.**

Demonstrates how to use palettes and how to set-up documents for printing. Teaches how to create master pages, develop style sheets, apply paragraph formats to documents, set tabs, wrap text, and use short cut keys. Includes how typeface and type styles are used, file formats and Quark document conversion to an EPS format. Strong MAC or PC experience and excellent mouse skills required.

**LCT 8075 Vmware Certified Professional (1-2) 2 crs.**

Provides knowledge of the VMWare Software Server virtualization product that makes it possible to partition a single physical server into multiple virtual machines. VMware server works with Windows, Solaris, Linux and Netware--any or all of which can be used concurrently on the same hardware. Prepares students for the VMware Certified Professional exam (VCP) by planning, installing, configuring, securing and upgrading vSphere and virtual machines.

**Recommended:** LCT 0310 (Introduction to Windows Environment) or equivalent experience and networking experience.

**LCT 8101 Graphic Arts Fundamentals (0.5-1)** 1 cr.  
Teaches the fundamentals of the graphic arts industry. Uses industry based software to create professional layouts for print media. Introduces basic operations of Adobe Photoshop, Illustrator and InDesign will allow for the hands-on development of documents. Explores graphic arts workflow, various printing methods, typography, design elements, color management and the many career possibilities the industry has to offer.

**LCT 8103 Digital Imaging I (2-2)** 3 crs.  
Covers fundamentals of professional image-editing software (Adobe Photoshop). Emphasizes skills to manipulate photos using current software tools and special effects filters. Explores program tools, color correction, channels, layers and masks. Strong computer skills are required for success in this course. Upon request this course can be converted to college credit for course GRA103.

**LCT 8151 Graphic Arts Techniques (0.5-1)** 1 cr.  
Explains how to become an intermediate skill level user of the software (Photoshop, Illustrator, InDesign) by designing a one-page layout to meet the needs of the client and using basic design principles to develop a digital color comprehensive that will be presented to the client. Includes creating thumbnails using FPO images along with text to produce professional layouts that will be used for print purpose. Identifies how Illustrator will be used to create vector graphics that will integrate into the process. Emphasizes on the steps required for a project to progress through the graphic arts workflow will be address. Recommended Preparation: LCT8101 Graphic Arts Fundamentals

**LCT 8301 Graphic Arts Applications (0.5-1)** 1 cr.  
Explains how to employ a working knowledge of InDesign, Photoshop and Illustrator to create a four-page newsletter. Introduces industry standards used to design a document to meet the production requirements of the graphic arts industry. Describes resolution, color modes, file management, vector and pixel image utilization, text formatting, stock requirements, file format, color output, finishing processes and bindery operations topics. Recommended Preparation: LCT8151 Graphic Arts Techniques

**LCT 8400 Big Data Analytics (1-0)** 1 cr.  
Teaches students about predictive models that create business value from Big Data solutions, the technology (databases, query languages, architectures) and statistical techniques of Big Data Analytics.  
**Recommended:** basic understanding of statistics, databases and data management.

### LCW CE Certified Webmaster

**LCW 8007 Social Media Strategist (1.5-0.5)** 1.5 crs.  
Provides instruction on planning, implementing, managing, and reporting on all aspects of an organization's social media strategy and prepares students to take the NISM Social Media Strategist certification exam. Includes strategic questions that every business must consider in order to find the right mix of tools and engagement for an effective social media program. Teaches students to adapt to the unique needs that every business has based on its particular goals and mission. Recommended Preparation: Students should have a basic understanding of the end-user experience with common social media platforms as well as social media terminology and functions. If you are planning to take the Social Media Strategist certification exam, you must have, in addition to completing the Social Media Strategist course, a minimum of 64 academic credits or at least 2 years of business experience related to social media.

**LCW 8300 iPhone Applications Development (1-2)** 2 crs.  
Provides in-depth study of the design, development and publication of object-oriented applications for the iPhone and iPad touch platforms using the Apple SDK. Explores Objective-C and multiple SDK frameworks to build iPhone and iPad touch applications under the Macintosh Operating System. Recommended preparation: LCT 0290, LCT 0193. Some programming and web development experience required. Knowledge of HTML and Object-Oriented Programming beneficial.

**LCW 8301 iPhone Application Development Advanced (1-1)** 1.5 crs.  
Provides continued study of the design, development and publication of object-oriented applications for the iPhone and iPad touch platforms using the Apple SDK. Examines good design principles, reading and writing application data, working with rich media, database and HTML integration, and Java Hooks. Recommended Preparation: LCW8300. Knowledge of HTML and Object-Oriented Programming.

**LCW 8500 Introduction to Phone/Android Application Development (1.5-0.5)** 1.5 crs.  
Teaches students how to build a single, complete application on both the iPhone and Android platforms from beginning to publication in the Mobile Application Development Program. Explains application design issues, how to use Eclipse for Androids, use Xcode for iOS, and perform Android and iOS navigation. Recommended Preparation: This course is for the beginner, but will go into enough depth that you could move into developing your own apps upon completion of the two certificate courses.

**LCW 8505 Mobile Application Development Advanced (1-1)** 1.5 crs.  
Builds a single, complete application on both platforms from beginning to publication. Utilizes Apple's iOS and Google's Android development environments.  
**Recommended:** LCW 8500 Introduction to Mobile Application Development

### LDD CE Career Skills Institute

**LDD 8001 Career Skills Institute (9-0)** 9 crs.  
Provides an educational experience for students with mild cognitive disabilities. Includes instruction in self-advocacy, fundamentals of reading and arithmetic of whole numbers. Builds skills that will later be used in the workplace.

**LDD 8002 Career Skills Institute II (9-0)** 9 crs.  
Provides an educational experience for students with mild cognitive disabilities. Includes instruction in English Composition, Computers in the Workplace, and Workplace Communication. Builds skills that will later be used in the workplace.

**LDD 8003 Career Skills Institute III (9-0)** 9 crs.  
Provides an educational experience for students with mild cognitive disabilities. Includes instruction in Career Exploration, Employment/Life Survival Skills, and Workplace Communication. Builds skills that will later be used in the workplace.

**LDD 8004 Career Skills Institute IV (9-0)** 9 crs.  
Provides an educational experience for students with mild cognitive disabilities. Includes instruction in Career Exploration and opportunity to apply learned skills in a workplace setting. Allows for discussion of experiences and workplace practices.

### LED CE Employee Development

**LED 8100 Shared Governance (0.5-0 to 2-0)** 0.5-2 crs.  
Provides students with a comprehensive introduction to shared governance. Includes the historical evolution of shared governance, best practices, structures and processes.

**LED 8120 Student On-Campus Employment (0.5-0) 0.5 crs.**  
Provides the opportunity to know and understand 21st century workplace readiness skills, explore jobs on campus, skills, strengths, abilities, and work-related values. Imparts specifics about Harper College and guidelines for working on a college campus. Improves ability to apply, interview, and obtain a job on campus as a student employee.

**LED 8130 Harper Leadership Institute Retreat (2-0) 2 crs.**  
Provides comprehensive leadership training for faculty and staff through a model of learning, leading and reflecting. Develops leadership competencies for community college leaders: organizational strategy, collaboration, communication, resource management, community college advocacy, professionalism and cultural competence. Provides opportunity to grow professional efficacy as a pathway to future leadership opportunities. Develops an understanding of Harper College within the context of the community college movement.

**LED 8131 Harper Leadership Institute Seminar (0.5-0) 0.5 crs.**  
Continues development of comprehensive leadership training for faculty and staff through a model of learning, leading, and reflecting. Advances leadership competencies for community college leaders: organizational strategy, collaboration, communication, resource management, community college advocacy, professionalism, and cultural competence.

**LFD CE Faculty Development**

**LFD 8001 Abstract Algebra I (3-0) 3 crs.**  
Covers modern methods, language, and ideas currently used in Algebra. Discusses algebraic structures: groups, rings, modules and fields and explores related topics.

**LFD 8002 Abstract Algebra II (3-0) 3 crs.**  
Presents concepts in Abstract Algebra, covering modern methods, language, and ideas used in current work in Algebra. Develops the topics introduced in Abstract Algebra I. Discusses the application of these abstract concepts to topics that are often stated or used without full explanation in secondary mathematics. Presents topics that impact the treatment of secondary school geometry (the so-called Erlanger Program) along with results about solutions to equations.

**LFD 8003 Greening Your Curriculum I (3-0) 3 crs.**  
Explores sustainability, bringing together faculty members from diverse fields. Addresses faculty who are "testing the waters" of sustainability in the curriculum and those interested in revising existing projects. Examines through discussions, readings and course materials the environmental dimensions of the campus and the region, as well as, broader national and international issues of public health, social justice, economics, and social change as they relate to sustainability

**LFD 8004 Teaching Online Successfully (3-0) 3 crs.**  
Prepares and supports faculty who are designing and teaching an online course for the first time. Utilizes various delivery formats to serve as practical application.

**LFD 8005 Apply Course Dsgn Rvw Principles (2-0) 2 crs.**  
Introduces and implements a peer assessment rubric that instructors can use for improving existing course designs. Introduces Web 2.0 applications to extend learning possibilities for students.

**LFD 8006 Social Equity/Environmental Justice (3-0) 3 crs.**  
Prepares higher education faculty who wish to make their curriculum relevant to issues of sustainability issues across all disciplines. Identifies areas of intersection. Explores effective assessment of critical thinking skills.

**LFD 8007 Deep Learning Across the Curriculum (3-0) 3 crs.**  
Juxtaposes learning theory and praxis to help educators create the foundation for "deep learning" to take place in the classroom. Explores varied "approaches" to learning, and challenges educators to recognize and facilitate the dynamics that cause students to learn deeply, substantively, and critically.

**LFD 8008 Integrative Teaching/Learning (3-0) 3 crs.**  
Provides community college instructors with a comprehensive understanding of Integrative Learning through research, diverse models of design, and, actual examples from other colleges. Includes selecting a design model and creating an academically sound integrative unit or project to be implemented in one or more of the participants' classes.

**LFD 8009 Food: Think Globally/Act Locally (3-0) 3 crs.**  
Explores sustainability issues related to food and its environmental dimensions. Explores ways to infuse food sustainability in curriculum and identify changes that can be made to current curriculum.

**LFD 8010 Busting Teaching Myths (3-0) 3 crs.**  
Examines commonly held beliefs about teaching. Presents information grounded in evidence instead of speculation and ideology. Includes such topics as learning styles, affective learning, multi-tasking, personality assessments and generational differences among students.

**LFD 8011 Teaching Africa Today (2-2) 3 crs.**  
Instructs Harper faculty on how to make their curriculum relevant to issues of internationalization. Encompasses global learning outcomes and assessment techniques, designing effective study abroad programs, and acquiring cross-cultural communication competencies. Provides instructors with field experience in East Africa and new curriculum projects for implementation upon their return.

**LFD 8012 Topics in Abstract Algebra (2-0) 2 crs.**  
Emphasizes algebraic structures and properties of groups, factor groups, rings, factor rings, fields and modules. Involves the use of homomorphisms, isomorphisms, group actions, and equivalence relations.

**LFD 8013 Research: Culture of Discovery (2-0) 2 crs.**  
Enhances curriculum in the area of information and research for student success. Provides opportunities to explore discipline-specific research options. Identifies student research trends and provides options.

**LFD 8014 Teach Human Rights in Rwanda/Uganda (2-0) 2 crs.**  
Explores human rights issues through focus on Rwanda and Uganda. Discusses ways to teach human rights. Acknowledges students' capacity to contribute to peacebuilding.

**LFD 8015 History/Philosophy of Community Colleges (2-0) 2 crs.**  
Covers the socio-historical context of the American community college movement. Explores the evolution of community college mission to present day.

**LFD 8016 Introduction to Theories of Pedagogy (2-0) 2 crs.**  
Helps faculty design personal pedagogical theory and practice. Discusses selected readings and reflections.

**LFD 8017 Integrative Learning: Geospatial Techniques (2-0) 2 crs.**  
Instructs higher education faculty, wishing to infuse Geographic Information Systems into their curriculum. Explores strategies and customized activities.

**LFD 8018 Complex Analysis (2-0) 2 crs.**  
Provides a detailed introduction to the complex plane, analytic functions, Cauchy's Theorem, complex integration and the calculus of residues.

**LFD 8019 The Culture of Contextualization (3-0)** 3 crs.  
Instructs higher education faculty and non-teaching faculty on ways to create materials and tools to foster inviting and inclusive environments and experiences for all students. Explores approaches necessary to foster welcoming and engaging learning and student service environments.

**LFD 8020 Category Theory in Mathematics (2-0)** 2 crs.  
Provides introduction to Math Category theory. Generalizes ideas from diverse areas of abstract mathematics.

### LIC CE Personal Skills

**LIC 8030 Enrolled Agent Exam Review (4-0)** 4 crs.  
Provides an intensive review of federal taxes that will help students prepare for the rigorous Enrolled Agent Exam administered by the Internal Revenue Service. Examines income taxes, partnerships, corporate, trusts, estates and others. Recommended preparation: Tax preparation experience.

### LIX CE Linux

**LIX 8101 Linux Computing/Python Programming (0.5-1)** 1 cr.  
Gains practical knowledge and experience of how to use a Linux operating system through the use of a virtual machine. Strengthens skills with the development of automated scripts. Develops scripts in Python, a versatile programming language. Explores ways of hosting and updating a local web page. Learns useable and effective skills to be able to navigate a Linux command line and generate scripts for creative and career-focused scenarios.  
**Prerequisite:** LCT 0190 (Intro to HTML) or equivalent experience and some programming experience is recommended.

### LMD CE Management Development

**LMD 8082 Successful Management (1.5-0)** 1.5 crs.  
Teaches practical knowledge in how to make effective decisions, the value of teamwork and the power of delegation. Includes how to hire for results.

### LNT CE Microsoft

**LNT 8003 Program Win Metro Style Apps With HTML5 (0.5-1)** 1 cr.  
Teaches the features of Metro style apps development for Windows 8. Provides knowledge on Windows 8 and how to successfully create, publish and monetize applications to the Windows Store. Provides hands-on opportunities to implement and manage the Metro style app lifecycle, and to develop Metro style apps that target multiple device types, screen resolutions and view states.

**LNT 8175 Sharepoint Application Development (2-1)** 2.5 crs.  
Provides .NET developers with practical information and labs that enable them to build solutions on the Microsoft SharePoint 2010 platform. Includes an overview of the SharePoint 2010 development platform, Web Parts, server-side objects, data access using Business Connectivity Services, workflows, user interfaces, Silverlight integration, and content management services. Recommended preparation: LNT 8310 or equivalent experience.

**LNT 8215 Implement and Manage MS Server Virtualization (1-1)** 1.5 crs.  
Provides knowledge and skills to deploy and manage a server virtualization environment, Hyper-V and Remote Desktop Services on Windows Server. Provides details on how to manage a server virtualization environment by using System Center products, Virtual Machine Manager, Systems Center Operations Manager, System Center Configuration Manager.

**LNT 8231 Maintain SQL 2008 Database (2-1)** 2.5 crs.  
Provides the knowledge and skills needed to maintain a Microsoft SQL Server 2008 database. Focuses on the use of SQL Server 2008 product features and tools related to maintaining a database.

**LNT 8232 Implement SQL 2008 Database (2-1)** 2.5 crs.  
Covers implementation of a Microsoft SQL Server 2008 database. Focuses on the use of SQL Server 2008 product features and tools related to implementing a database.

**LNT 8233 Exchange Server 2010 Messaging (2-1)** 2.5 crs.  
Examines requirements gathering and implementation of Exchange Server 2010 into an existing infrastructure. Covers server roles, security policies and compliance. Includes high availability and disaster recovery options and how to develop a troubleshooting plan. Prepares students for Microsoft MCITP Exam 70-663. Recommended preparation: LNT 8135 or equivalent knowledge.

**LNT 8234 SQL Server 2008 Analysis Services (1-0.5)** 1 cr.  
Teaches the implementation of an Analysis Services solution in an organization. Discusses how to use the Analysis Services development tools to create an Analysis Services database and an OLAP cube, and how to use the Analysis Service management and administrative tools to manage an Analysis Services solution. Recommended preparation: Experience with Microsoft SQL Server and Windows Server administration.

**LNT 8235 SQL Server 2008 Intergration Services (1-0.5)** 1 cr.  
Teaches the implementation of an Integration Services solution in an organization. Includes control flow, data flow, logging, error handling, checkpoints, transactions, management and security. Intended for IT professionals who need to implement data transfer or ETL solutions using Microsoft SQL Server 2008 Integration Services. Recommended preparation: Experience with Microsoft SQL Server and Windows Server administration.

**LNT 8236 SQL Server 2008 Reporting Services (1-0.5)** 1 cr.  
Teaches the implementation of a Reporting Services solution in an organization. Includes report creation, manipulation of data sets, report models, subscriptions, administration, and custom applications. Recommended preparation: Experience with Microsoft SQL Server and Window Server administration.

**LNT 8264 Developing Web Applications (2-1)** 2.5 crs.  
Explores development of advanced ASP.NET MVC and Web Forms applications using .NET Framework 4 tools and technologies. Focuses on performance and scalability enhancements for web applications. Recommended preparation: Experience with Visual Studio, C# or VB, and web application development.

**LNT 8265 Data Access Solutions (2-1)** 2.5 crs.  
Covers design principles and techniques for data access using the ADO.NET Entity Framework, LINQ, WCF Data Services, the Sync Framework, and ADO.NET. Instructs about multi-user scenarios, optimization, best practices, and extensible solutions. Recommended preparation: Experience with .NET, Visual Studio, LINQ, and web application development.

**LNT 8267 Introduction to Web Development (2-1)** 2.5 crs.  
Explores development of ASP.NET Web applications using Microsoft Visual Studio 2010. Covers Web Forms, validation of user input, database access using ADO.NET, data management using LINQ, ASP.NET AJAX, and web application security and deployment. Recommended preparation: LNT8994 and knowledge of HTML or equivalent experience.

**LNT 8292 Configuring Windows 7 (1-0.5) 1 cr.**

Teaches how to install, upgrade and migrate to Windows 7 client. Includes configuration of Windows 7 client for network connectivity, security, maintenance and mobile computing. Recommended preparation: Experience installing PC hardware, basic understanding of TCP/IP, and basic familiarity with Windows and Active Directory.

**LNT 8294 Planning Windows 7 Deployments (2-1) 2.5 crs.**

Demonstrates how to plan and deploy Windows 7 desktops in large organizations. Covers design, configuration and management of the Windows 7 client environment. Includes imaging, deployment tools and migration of user states. Prepares students for the Exam 70-686, Pro: Windows 7, Enterprise Desktop Administrator. Recommended preparation: Experience installing PC hardware, basic understanding of TCP/IP, and basic familiarity with Windows and Active Directory.

**LNT 8310 Developing Web Applications With Visual Studio 2008 (2-1) 2.5 crs.**

Teaches the fundamentals of web application development and best practices for Microsoft web development technologies, including ASP.NET 3.5, NET AJAX Extensions, and Silverlight. Focuses on using the Microsoft Visual Studio 2008 development environment and the Microsoft .NET Framework 3.5 to create a web application that delivers dynamic content to the web site.

**LNT 8331 Core Solutions in MS Sharepoint Server 2013 (1-1) 1.5 crs.**

Provides the knowledge and skills to configure and manage a Microsoft SharePoint Server 2013 environment. Teaches how to configure SharePoint Server 2013 and provides guidelines, best practices, and consideration that will optimize SharePoint server deployment. Prepares for Microsoft certification exam 70-467 Implementing Data Models and Reports with Microsoft SQL Server 2012. Recommended Preparation: LNT8410 Installing and Configuring Windows Server 2012, or equivalent knowledge. Experience connecting applications to Microsoft SQL Server and with SharePoint Service Application models recommended.

**LNT 8332 Advanced Solution MS Sharepoint Server 2013 (1-1) 1.5 crs.**

Examines how to plan, configure and manage a Microsoft SharePoint Server 2013 environment. Focuses on implementing high availability, disaster recovery, service application architecture, Business Connectivity Services, social computing features, productivity and collaboration platforms and features, business intelligence solutions, enterprise content management, web content management infrastructure, solutions and applications. Examines how to optimize the search experience, how to develop and implement a governance plan, and how to perform an upgrade or migration to SharePoint Server 2013. Prepares for Microsoft certification exam 70-332 Advanced Solutions of Microsoft SharePoint Server 2013. Recommended Preparation: LNT8331 Core Solutions of Microsoft SharePoint Server 2013 or equivalent knowledge. Experience connecting applications to Microsoft SQL Server and with SharePoint Service Application models recommended.

**LNT 8364 Database Administration Fundamentals (0.5-1) 1 cr.**

Builds an understanding of database administration. Understands core database concepts. Creates database objects. Manipulates data and data storage. Learns how to administer a database. This course prepares students for the Microsoft Technology Associate Exam 98-364.

**Prerequisite:** LCT 0310 (Introduction to Windows Environment) or equivalent experience.

**LNT 8410 Install/Configure Win Server 2012 (1-1) 1.5 crs.**

Provides the skills and knowledge necessary to implement a core Windows Server 2012 Infrastructure in an existing enterprise environment. Covers Active Directory Services, networking services, and Hyper-V configuration. Teaches implementing, managing, maintaining, and provisioning services and infrastructure in a Windows Server 2012 environment. Prepares for Microsoft Certification Exam 70-410: Installing and Configuring Windows Server 2012. Recommended preparation: LAP 8002, Network+ or equivalent experience.

**LNT 8411 Administering Windows Server 2012 (1-1) 1.5 crs.**

Provides the skills and knowledge necessary to implement a core Windows Server 2012 Infrastructure in an existing enterprise environment. Covers the administration tasks necessary to maintain a Windows Server 2012 Infrastructure, such as group management, network access and data security. Prepares for Microsoft Certification Exam 70-411: Administering Windows Server 2012. Recommended preparation: LNT 8410, strong hands-on experience working in a Windows Server environment, or equivalent.

**LNT 8412 Configure Advanced Windows Server 2012 (1-1) 1.5 crs.**

Teaches how to provision and configure advanced services using Windows Server 2012 and provides the skills and knowledge necessary to implement a core Windows Server 2012 infrastructure. Covers the advanced configuration of services necessary to deploy, manage and maintain a Windows Server 2012 infrastructure, such as advanced networking services, Active Directory Domain Services, identity management, rights management, Federated Services, network load balancing, failover clustering, business continuity and disaster recovery. Prepares for Microsoft certification exam 70-412: Configuring Advanced Windows Server 2012 Services.

**LNT 8420 Windows Server 2008 Fundamentals (2-1) 2.5 crs.**

Teaches basic fundamentals of networking, security and server administration with Windows Server 2008. Provides foundational knowledge needed to prepare for the Microsoft MTA exam. Includes TCP/IP, installing and configuring Windows Server, implementing Active Directory Domain Services, monitoring server performance, and virtualization. Recommended preparation: A+ certification, training, or equivalent experience required and an understanding of basic security, networking and administration recommended.

**LNT 8421 Server 2008 Network Configuration (2-1) 2.5 crs.**

Teaches how to configure and troubleshoot a Windows Server 2008 network infrastructure. Covers secure network access, fault tolerant storage, server security, and update compliance. Discusses network technologies most commonly used with Windows Server 2008 and IP-enabled networks. Recommended preparation: Work experience with Windows Server, knowledge of Active Directory, understanding of security concepts, and basic knowledge of DHCP and IP sec.

**LNT 8424 Fundamental 2008 Active Directory (1-1) 1.5 crs.**

Introduces Active Directory server roles and their basic functionality in Windows Server 2008. Covers directory, certificate, rights management, and federation services. Also covers creating user and computer accounts and creating an organizational unit infrastructure.

**LNT 8425 Configuring 2008 Active Directory Domain (2-1) 2.5 crs.**

Provides Active Directory Technology Specialists with the knowledge and skills to configure Active Directory Domain Services in a distributed environment, implement Group Policies, perform backup and restore, and monitor and troubleshoot Active Directory related issues. Recommended preparation: LNT 8424 or equivalent experience.

**LNT 8426 Configuring ID Access Solution Active Directory (1-1) 1.5 crs.**

Provides the knowledge and skills needed to configure identity and access solutions with Windows Server 2008 Active Directory. Teaches how to integrate applications and platforms with enterprise directory and security services while increasing access for groups and users.

**Prerequisite:** LNT 8424 and LNT 8425 with an outcome of satisfactory (S) or equivalent experience.

**LNT 8430 Server 2008 Planning and Administration (2-1) 2.5 crs.**

Covers planning, management and maintenance of Windows Server 2008 servers. Includes deployment, server roles, configuration change planning, application, versioning, maintenance scheduling, monitoring, and troubleshooting of hardware, software, and network issues. Recommended preparation: LNT 8421 or equivalent experience.

**LNT 8461 Windows Communication Foundation (1-0.5) 1 cr.**

Teaches the building and configuration of a Windows Communication Foundation (WCF) solution. Includes configuring services as a managed application, exposing a WCF service using behaviors adding error handling, implementing security, and protecting data integrity with transactions. Recommended preparation: Experience developing applications with web services using the .NET framework.

**LNT 8462 Administer SQL Server Databases (1-1) 1.5 crs.**

Imparts knowledge and skills to maintain a Microsoft SQL Server 2014 database. Is designed for students interested in learning SQL Server 2012 or SQL Server 2014. Covers the new features in SQL Server 2014, but also the important capabilities across the SQL Server data platform. Recommended Preparation: LNT8461 or basic knowledge of the Microsoft Windows operating system and its core functionality, working knowledge of Transact-SQL and relational databases, and some experience with database design.

**LNT 8466 Implement Data Models/Reports W/SQL (1-1) 1.5 crs.**

Shows how to create managed, enterprise Business Intelligence (BI) solutions. Instructs on implementing multidimensional and tabular data models, delivering reports with Microsoft SQL Server Reporting Services, creating dashboards with Microsoft SharePoint Server PerformancePoint Services, and discovering business insights by using data mining. Is designed for students who are interested in learning SQL Server 2012 or SQL Server 2014. Covers the new features in SQL Server 2014, but also the important capabilities across the SQL Server data platform. Recommended Preparation: at least two years' experience working with relational databases, including: designing a normalized database, creating tables and relationships, querying with Transact-SQL, some basic knowledge of data warehouse schema topology (including star and snowflake schemas), some exposure to basic programming constructs (such as looping and branching), and an awareness of key business priorities such as revenue, profitability, and financial accounting is desirable.

**LNT 8467 Design Self-Service Business Intelligence/Big Data Solutions (1-1) 1.5 crs.**

Teaches self-service Business Intelligence (BI) and Big Data analysis solutions using the Microsoft data platform. Discusses the rationale for self-service BI, and describes how to use Microsoft SQL Server Reporting Services, Microsoft Excel, Microsoft SharePoint Server, and Microsoft Office 365 Power BI to create self-service data models and reports. Describes how to use Windows Azure HDInsight to perform Big Data analysis. Instructs students who are interested in learning SQL Server 2012 or SQL Server 2014. Covers the new features in SQL Server 2014, but also the important capabilities across the SQL Server data platform. Recommended Preparation: knowledge of data warehousing and data modeling principles and familiarity with Microsoft Excel and Microsoft SharePoint Server 2013.

**LNT 8480 Programming in HTML5 With Javascript and CSS3 (1-1) 1.5 crs.**

Provides an introduction to HTML5, CSS3, and JavaScript programming. Instructs on programming logic, define and use variables, perform looping and branching, develop user interfaces, capture and validate user input, store data, and create well-structured applications. Prepares for Microsoft certification exam 70-480: Programming in HTML5 with JavaScript and CSS3. Is intended for professional developers with 1 to 3 months experience creating Web applications, including JavaScript code, experience with Visual Studio. Recommended preparation: LCT 0190, LCT 0193, LCT 0210, LCT 220 and LCT 0290.

**LNT 8481 Developing Win Store Applications With HTML5 (1-1) 1 cr.**

Teaches essential programming skills and techniques that are required to develop Windows Store apps. Provides learning in a combination of both design and development skills using Visual Studio and Expression Blend tools. Prepares for Microsoft Certification Exam 70-481: Essentials of Developing Windows Store Apps using HTML5 and JavaScript. Recommended preparation: LNT 8480 or equivalent experience.

**LNT 8483 Programming in C# (1-1) 1.5 crs.**

Teaches programming skills required for developers to create Windows applications using the C# language. Includes basics of C# program structure, language syntax, implementation detail and building an application that incorporates features of the .NET framework. Introduces techniques and technologies employed by modern desktop and enterprise applications including building new data types, handling events, programming the user interface, accessing the database, using remote data, performing operations asynchronously, integrating with unmanaged code, creating custom attributes and encrypting and decrypting data. Prepares for Microsoft certification exam 70-483 Programming in C#.

**LNT 8486 Develop ASP.NET MVC4 Web Apps (1-2) 2 crs.**

Teaches how to develop advanced ASP.NET MVC applications using the .NET framework and technologies. Incorporates coding activities that enhance performance and scalability of website applications. Imports knowledge of developing advanced web applications and creating websites that separate the user interface, data access and application logic. Prepares for Microsoft certification exam 70-486 Developing ASP.NET MVC 4 Web Applications. Recommended Preparation: LNT8480, or equivalent knowledge. Experience with JavaScript, object-oriented programming and developing web-based applications required.

**LNT 8487 Develop Windows Azure and Web Services (1-2) 2 crs.**

Teaches how to design and develop services that access local and remote data from various data sources. Explains how to develop and deploy services to hybrid environments including on-premises servers and Windows Azure. Prepares for Microsoft Certification Exam 70-487 Developing Windows Azure and Web Services. Recommended Preparation: LNT8486, or equivalent knowledge. Experience with C# programming, ASP.NET and developing web-based applications required.

**LNT 8774 Querying Microsoft SQL Server (1-1) 1.5 crs.**

Provides knowledge with the technical skills required to write basic Transact-SQL queries for Microsoft SQL Server. Serves as a foundation for all SQL Server-related disciplines in database administration, database development and business intelligence. Recommended Preparation: Working knowledge of relational databases and basic knowledge of the Microsoft Windows operating system.

**LNT 8775 Administer MS SQL Databases (1-1) 1.5 crs.**  
 Provides knowledge and skills to maintain a Microsoft SQL Server database. Focuses on how to use SQL Server features and tools related to maintaining a database. Teaches SQL Server servicing, automated updates, database containment, user-defined server roles, in-place upgrades of data-tier applications, high availability and replication concepts.

**LNT 8777 Implementing Data Warehouse W/MS SQL Server (1-1) 1.5 crs.**  
 Prepares students to implement a Business Intelligence platform to support information worker analytics. Imparts knowledge on how to create a data warehouse with SQL Server 2012/2014, implement Export Transport Load (ETL) with SQL Server Integration Services, validate and cleanse data with SQL Server Data Quality Services and SQL Server Master Data Services. Prepares for Microsoft certification exam 70-463: Implementing a Data Warehouse with Microsoft SQL Server. Recommended Preparation: LNT 8774 (Administering MS SQL Server Databases), working knowledge of Transact-SQL, relational databases and some experience with database design.

**LNT 8778 Queries SQL Ser 2008 Transact-SQL (1-0.5) 1 cr.**  
 Introduces Transact-SQL. Covers basic SELECT queries, grouping, joins, subqueries, data modification, transactions, and heterogeneous data sources. Teaches how to access and manipulate data in SQL Server 2008 databases and other data sources. Students should understand relational databases and be familiar with programming or scripting language.

**LNT 8887 Implementing Data Models and Reports Using MS SQL Server 2012 (1-1) 1.5 crs.**  
 Teaches how to implement multidimensional analysis solutions, create PowerPivot and tabular data models, deliver rich data visualizations with PowerView and SQL Server Reporting Services. Discover business insights by using data mining, self-service analytics and reporting. Prepares for Microsoft certification exam 70-463 Implementing Data Models and Reports with Microsoft SQL Server 2012. Recommended Preparation: LNT8774 Querying Microsoft SQL Server 2012, or equivalent knowledge of querying with Transact-SQL. Experience with relational databases required.

**LNT 8994 Introduction to Programming .NET Visual Studio 2005 (2-1) 2.5 crs.**  
 Enables introductory-level developers who are not familiar with the Microsoft .Net framework or Microsoft Visual Studio 2005 to learn about VS 2005's development environment. Teaches basic skills using either MS Visual Basic or MS Visual C# as a programming language. Students need basic computer skills for this class.

**LNU CE Health Career Professionals**

**LNU 8035 Train the Trainer: CNA Instructors (2-0) 2 crs.**  
 Provides training for licensed RNs in Illinois to teach the Basic Nursing Assistant Training Program, including the Alzheimer's portion of the curriculum. Completing the Evaluator Workshop portion of the course will qualify participants to test manual skills in the Basic Nursing Assistant Training Program.

**LNU 8050 Clinical Faculty Academy (0.5-0) 0.5 crs.**  
 Teaches skills for registered nurses serving as clinical instructors in college nursing programs. Strengthens existing skill set of experienced professors and provides new faculty with the resources to become quality nurse educators. Offers an overview of clinical instructing for RNs who are interested in teaching nursing.

**LNU 8100 RN Refresher (4.5-5) 7 crs.**  
 Provides out of practice nurses with the most current medical information and an opportunity to refresh bedside nursing skills. Includes current trends in nursing processes and documentation. Reviews pain management, medication administration, fluids and electrolytes, IV therapy and blood administration. Covers care for respiratory, cardiac, liver/biliary, renal/urinary, diabetic and cancer patients. Reviews post-operative procedures, skin care and wound management, mental health and caring for older adults.

**LNU 8101 RN Refresher Theory/Skills Review (4.5-0) 4.5 crs.**  
 Provides foreign nurses with the most current nursing information and an opportunity to experience United States nursing culture. Includes current trends in nursing processes and documentation. Reviews pain management, medication administration, fluids and electrolytes, IV therapy and blood administration. Covers care for respiratory, cardiac, liver/biliary, renal/urinary, diabetic and cancer patients. Prepares for the nursing licensing board exam.

**LNU 8300 RN Refresher Didactic Review (4.5-0) 4.5 crs.**  
 Updates out of practice nurses to the latest medical trends. Includes update of nursing processes, patient education and documentation. Reviews pain management, medication administration, fluids and electrolytes, IV therapy and blood administration. Covers care for respiratory, cardiac, liver/biliary, renal/urinary, diabetic and cancer patients. Reviews skin care and wound management, mental health and caring for older adults.

**LNU 8322 Current Nursing Practice Update (4-8) 7 crs.**  
 Provides U.S. nurses out of clinical practice for five or more years with an opportunity to regain hands-on skills and confidence in order to renew or obtain a State of Illinois License. This course is also for nurses working in non-hospital settings, returning to the workforce, or wanting to further their education in the most current medical practices. Accredited by IDFP. Students must attend a mandatory information session.

**LNU 8325 RN Refresher: Long Term Care (1-0 to 3-3) 1-3 crs.**  
 Discusses current documentation practices, communication and patient/family long-term relationships, and leadership in the LTC setting. Teaches healthcare team member roles, medications common to LTS and the IDPH Survey process. Explores dementia, cardiac, pulmonary and orthopedic considerations in skilled care. May consist of 35 hours of classroom education and skills practice, and 40 hours of clinical rotation, depending on the needs of the students.

**LOR CE Oracle DBA**

**LOR 8612 Oracle 12c: SQL Workshop 1 (0.5-0.5) 0.5 crs.**  
 Offers an introduction to Oracle Database 12c technology. Explores concepts of relational databases and powerful SQL (structured query language) programming. Introduces essential SQL skills that allow developers to write queries against single and multiple tables, manipulate data in tables, and create database objects. Requires familiarity with data processing concepts and techniques. Recommended Preparation: Microsoft Access or equivalent knowledge. Experience with fundamentals of creating a relational database and the different table, form, query and report objects.

**LOR 8613 Oracle 12c: Accelerated (1-2) 2 crs.**  
 Teaches effective methods to install and manage an Oracle Database instance. Explains how to create a container database and provision pluggable databases to support business needs. Demonstrates how to configure the Oracle Network Environment to perform database maintenance. Provides key information to install and administer Oracle Database 12c. Recommended Preparation: LOR 8612 Oracle Database 12c: SQL Workshop I or equivalent knowledge. Working knowledge of SQL and use of PL/SQL packages and concepts of relational databases and SQL.



**LOR 8614 Oracle 12c: Backup and Recovery (1-2) 2 crs.**

Assesses appropriate backup and recovery procedures to address business needs. Illustrates backup and recovery settings and backup operations to disk and tape. Presents Oracle Database recovery procedures to recover from media and other failures. Teaches students to diagnose and repair data failures. Utilizes Flashback Technologies and data duplication to complement backup and recovery procedures. Showcases backup and recovery strategies. Discloses methodology to effectively install and manage an Oracle Database instance. Recommended Preparation: LOR 8613 Oracle Database 12c: Admin, Install and Upgrade Accelerated or equivalent knowledge of Oracle Database 12c, SQL, and PL/SQL.

**LOR 8615 Oracle Multi-Tenant Architecture (0.5-0.5) 0.5 crs.**

Helps you gain a conceptual understanding of the multi-tenant architecture. Illustrates plugging and unplugging databases in multi-tenant container databases while learning how to create common and local users and administer database security to meet business requirements. Recommended Preparation: LOR 8614 Oracle Database 12c or knowledge of non-CDB configuration and management; working knowledge of SQL and use of PL/SQL packages; working knowledge of tools such as SQLPlus or Enterprise Manager Cloud Control. Also, Oracle Database 12c: SQL Workshop 1 and Oracle Database 12c: Backup and Recovery Workshop.

**LPM CE Project Management****LPM 8010 Business Systems Analyst (0.5-1) 1 cr.**

Provides students business analysis knowledge and an understanding of the Systems Development Life Cycle. Examines strategies for analyzing business processes and demonstrates how to apply concepts and practical techniques. Teaches how to solve complex issues to analyze business and user needs, document requirements, and translate in system requirement specifications. Recommended preparation: project management experience and technical business case writing knowledge of Microsoft Excel and Visio, or equivalent experience required.

**LPM 8200 Agile-Scrum Foundations (1-0) 1 cr.**

Reviews the essential components of Agile and Scrum. Learns how to build and motivate an Agile team; handles trade-offs, adapts the process when required. Explores Scrum, the most popular Agile method in general use. This course is geared towards anyone who is interested in implementing or improving Agile Project Management within an organization.

**Prerequisite:** Project Management Specialist or equivalent

**LRE CE Real Estate****LRE 8112 Home Inspection (3-0) 3 crs.**

Prepares students for the State of Illinois licensing exam for home inspectors. IDFPR-approved course; students must attend all classes and pass this pre-licensing final exam with a score of 70 percent or better. This technical course requires a significant amount of study outside of the classroom. Students must have a working knowledge of the building trades industry.

**LRE 8170 Broker Pre-Licensing (5-0) 5 crs.**

Provides instruction in real estate fundamentals. Includes introduction to the License Law and real property; basics of agency, seller and buyer relationships and counseling; local, state and federal laws affecting real estate; brokerage, marketing and advertising; market analysis and appraisal; financing, contracts, independent contractor and employee status; occupational disciplines and business planning.

**LRE 8171 Applied Real Estate Principles (1-0) 1 cr.**

Provides real estate instructions and includes role play situations, case studies and demonstrations. Covers listing presentations, buyer presentations, agency disclosures, purchase agreements, handling offers, negotiating, market analysis, closing costs, escrow money, fair housing, and anti-trust.

**LRE 8172 Broker Post-License (2-0) 2 crs.**

Provides instruction in license law; local, state and federal laws, real property updates and risk management issues; agency issues, seller and buyer counseling; market analysis and appraisal; financing and distressed properties; contracts and conveyances; and closing a transaction.

**LRE 8173 Managing Broker (3-0) 3 crs.**

Provides instruction in licensing, operations and handling money; managing licensees including recruiting and ongoing support, marketing and advertising, and dispute resolution; risk management, laws and issues; company policy; disclosure issues and industry issues.

**LRE 8174 Fundamentals of Commercial Real Estate (1-0) 1 cr.**

Provides students with a comprehensive introduction to listing and selling commercial real estate. Covers topics of getting started, building and land use, data gathering, property and investment analysis, financing, and commercial leases.

**LRP CE Food Service****LRP 8005 Food Standards/Sanitation Exam Preparation (0.5-0) 0.5 crs.**

Covers proper precautions, food contaminations, hazards, how food becomes unsafe, personal hygiene, cross contamination, following the flow of food (HACCP), and cleaning and sanitizing. The state approved NRA Education Foundation ServSafe exam is given the class period. Test meets certification requirement for the Illinois Department of Public Health (IDPH). By presenting your IDPH certification to the Chicago Health Department and paying additional fees, your certificate should be accepted by the city.

**LRP 8500 Bartender Training (1-0) 1 cr.**

Includes prepping the bar, free-pouring, mixing, blending, shaking, money handling, product knowledge, liquor laws and how to get hired. Covers basics of bar management and expertise on tip making. Must be at least 21 years of age.

**LSJ CE Sun Java****LSJ 8001 Java Fundamentals (1.5-0.5) 1.5 crs.**

Teaches the significance of object-oriented programming and concepts such as inheritance, encapsulation and abstraction. Explains keywords and constructs of the Java programming language and basic error handling for Java technology programs. Demonstrates how to create Java classes containing arrays, loops and conditional constructs. Provides knowledge in Java programming language constructs and shows how to create Java technology applications. Recommended Preparation: LCT0190 or knowledge of HTML. Some programming experience beneficial but not required.

**LSJ 8002 Java Programming (1.5-1) 2 crs.**

Covers core Application Programming Interfaces (API) used to design object-oriented applications with Java. Includes creating classes, extend abstract classes and programming with interfaces. Teaches how to develop applications that manipulate files, directories and file systems. Provides knowledge in how to use exceptions and the Collections framework, write database programs with JDBC and multi-threaded applications. Recommended Preparation: LSJ8001 or the ability to create, compile and execute programs. Understanding of object-oriented principles, database concepts and familiar with SQL syntax.

**LSJ 8700 Core Java (2.5-1)** 3 crs.  
 Covers the essentials of object-oriented programming and core features of the Java programming language. Explains important Java syntax in detail and helps develop knowledge and skills needed by experienced programmers. Includes environment setup, program structure, strings, primitives, references, objects, arrays, control structures, classes, methods, interfaces, enums, access control, encapsulation, inheritance, polymorphism, exception handling, collections, generics, file I/O, and concurrency. Recommended preparation: Academic or work experience in any programming language.

**LSJ 8710 Advanced Java (1.5-1)** 2 crs.  
 Explores basic Enterprise Java and related technologies essential to most Java jobs. Provides exposure to the Linux environment. Demonstrates how to implement and connect to a database using MySQL and JDBC, how to implement a web server using Apache Tomcat, and how to create dynamic web pages using JavaServer Pages, Servlets, and XML. Recommended preparation: LSJ8700 Core Java or equivalent experience.

**LSP CE Security Certified Personnel**

**LSP 8000 Ethical Hacker (2.5-1)** 3 crs.  
 Provides security professionals and site administrators with the same knowledge and tools used by professional hackers in order to understand vulnerabilities and build defenses against malicious attacks. Includes international hacking laws, reconnaissance, Google hacking, scanning, system hacking, Trojans and backdoors, viruses and worms, sniffers, social engineering, phishing, DoS attacks, session hijacking, SQL injection, wireless network hacking, Linux hacking, detection system evasion, cryptography, cyber warfare, spying, corporate espionage, software piracy, hacking and cheating online games, GPS hacking, web browser hacking and computer forensics. Recommended preparation: Two years of work experience in a security-related field or IT position involving security and strong familiarity with computer networking. (A+ and Network+ training or equivalent experience also recommended.)

**LTD CE Teacher Development**

**LTD 8152 Child Growth and Development, Birth – 5 Years (1-0)** 1 cr.  
 Discusses principles of child growth and development from birth through age five. Emphasis on developmental milestones and cultural influences.

**LTD 8153 Child Behavior and Classroom Management (1-0)** 1 cr.  
 Provides methods of guiding children's behavior, encouraging prosocial behavior, and dealing with common problems. Emphasizes on principles and skills in classroom management.

**LTD 8154 Resources and Activities for Young Children I (1-0)** 1 cr.  
 Aids in planning the learning environment which includes the schedule, themes and activities incorporating art, motor, music and movement, health and safety, and nutrition.

**LTD 8155 Resources and Activities for Young Children II (1-0)** 1 cr.  
 Aids in planning the learning environment to incorporate appropriate themes and activities in math, science, social studies, language, literature, dramatic play, and group time.

**LTD 8999 Preparing for the TAP Exam (1-1 to 3-3)** 1-3 crs.  
 Prepares prospective teachers to take and pass the Test of Academic Proficiency (TAP) by refreshing and/or improving skills and abilities in reading, language arts, writing and mathematics. NOTE: Students must have basic computer skills before enrolling in this class. This course can be repeated three times.

**LTM CE Therapeutic Massage**

**LTM 8011 Therapeutic Massage Fundamentals (7.5-5)** 10 crs.  
 Provides an overview and historical development of massage therapy and its relationship to health care. Covers the requirements for the practice of therapeutic massage, sanitary and safety issues, fundamental theory and hands-on application involving major massage approaches. Introduces theory and hands-on skills in Swedish massage, joint mobilization, range of motion, pre-and post-natal and infant massage, deep tissue massage, trigger-point therapy and neuromuscular therapy. **Prerequisite:** LTM 0001 with an outcome of satisfactory (S).

**LTM 8012 Therapeutic Massage Theory Application (6.5-7)** 10 crs.  
 Covers anatomy, physiology, complementary bodywork systems and special populations as related to therapeutic massage. Includes biomechanics and the following body systems: intergumentary, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproductive. Includes recordkeeping, assessment procedures, indications and contraindications, business considerations, and wellness education. Continues theory and joint mobilization, range of motion, pre- and post-natal massage, deep tissue massage, trigger point therapy, neuromuscular therapy and sports massage. Recommended preparation: LTM 8011

**LTM 8013 Therapeutic Massage Advanced Techniques (5.5-7)** 9 crs.  
 Develops an overall understanding of clinical therapeutic massage including hygiene, sanitation, safety, body mechanics, massage manipulations and techniques, assessment procedures, biomechanic basics, complementary bodywork systems and medical terminology. Includes theory and demonstration of skills required for clinical therapeutic massage. Recommended preparation: LTM 8012.

**LTM 8200 Therapeutic Massage Practical Clinical (0-3)** 1 cr.  
 Employs basic techniques learned in the classroom with clinic clients under the supervision of the Student Clinic Assistant. Utilizes on-site clinic rooms or classroom to complete clinical hours. Allows students to perform daily tasks associated with clinic operation such as placing reminder calls and filing clinic charts. Recommended preparation: LTM 8011

**LTM 8300 Therapeutic Massage Advanced Clinical (0-3)** 1 cr.  
 Teaches students to assess clients and prepare session to meet each client's unique needs. Utilizes on-site clinic rooms or classroom to complete clinical hours. Includes participation in four community massage events. Allows students to perform daily tasks associated with clinic operation such as answering clinic phone, scheduling clients and maintaining clinic files. Recommended preparation: LTM 8011, LTM 8012 and LTM8200

**LVM CE Volunteer Management**

**LVM 8201 Non-Profit Boards (1-0)** 1 cr.  
 Provides insight into a strategic planning process including goals, action steps, budgets and evaluation. Examines board-level legal considerations, including legal filings for Illinois and the IRS, conflict of interest, directors' and officers' liability, and whistleblower policies as they apply to the management of non-profit organizations. Recommended preparation: LVM 0200 or knowledge of non-profit organizations.

**LVM 8202 Fundraising for Non-Profits (1-0)** 1 cr.  
Provides insight into planning giving options, features and benefits to donors and institutions, and how to handle unique ethical challenges. Examines special fundraising events with best practices. Describes major gifts and capital campaigns and how to identify, cultivate and ask for funds. Defines annual giving; how to prepare a case support; cultivate, motivate and retain donors; and efforts for a long-range plan. Recommended preparation: LVM 0200 or knowledge of non-profit organizations.

**LVM 8205 Community Emergency Response Team Training (1.5-0)** 1.5 crs.  
Provides students with critical training to ensure that communities are prepared to respond to natural or manmade disasters. Concludes with attendees participating in a mock disaster.

## LVV CE Autodesk

**LVV 8090 Autocad: Create/Present 3D Models (1-1)** 1.5 crs.  
Covers the creation of 3D models to help visualize and present designs. Includes visual styles, model walk-throughs, materials, lighting, and electronic distribution. Students will need some experience using AutoCAD software prior to enrollment.

**LVV 8091 Introduction to 3D Modeling (0.5-1)** 1 cr.  
Teaches students how to operate powerful 3D Modeling applications to develop and print a design. Introduces industry-leading software applications and interface and modeling toolsets. Helps build a foundation for working within a 3D Modeling application.

**LVV 8092 Introduction to 3D Printing/Scanning (0.5-1)** 1 cr.  
Explains how 3D Printing is considered to be the next life changing technology. Explores the concepts, tools, and methods used in 3D Printing and Scanning. Describes the processes, filaments, and materials used to produce a 3D Printed prototype. Recommended Preparation: AutoCAD Creating and Presenting 3D Models, Introduction to 3D Modeling or equivalent knowledge.

**LVV 8311 3DS Max Essentials (1.5-1)** 2 crs.  
Covers the essentials of 3D design using Autodesk 3DS Max. Includes modeling, animation, materials, lighting, and rendering. Teaches skills and techniques that can be applied in a production environment, television, video game development or movie animation. Requires familiarity with Windows and experience with 3D art and design.

**LVV 8312 3DS Max for Design Visualization (1.5-1)** 2 crs.  
Provides a fundamental understanding of using 3DS Max to create 3D environments for conceptual exploration, design validation, and visual communication. Includes hands-on exercises to demonstrate the modeling process. Teaches techniques that can be applied to mainstream drafting industries.

**LVV 8314 3DS Max MAXScript Essentials (1.5-1)** 2 crs.  
Teaches you techniques for automating tasks in 3DS Max using MAXScript language. Demonstrates interacting with a 3DS Max scene and using scripts to automatically control actions. Encompasses almost all of the 3DS Max features.  
**Prerequisite:** LVV 8311 with an outcome of satisfactory (S) or consent of instructor or program coordinator.

**LVV 8330 3DS Max Advance Modeling and Mapping (1.5-0.5)** 1.5 crs.  
Focuses on creating both low-poly (in-game) and high poly models with particular attention paid to the normal mapping process. Includes use of the projection system in 3DS Max, tips on achieving the best results from your normal maps, how to edit normal maps using Photoshop, and using normal maps for both real time and pre-rendered projects.

**LVV 8411 Autocad 2009 Essentials (1.5-1)** 2 crs.  
Covers the creation of basic 2D drawings using drawing and editing tools, organization of drawing objects on layers, addition of text and basic dimensions, preparations for plotting, and more sophisticated techniques for drawing setup and productivity.

**LVV 8412 Autocad 2009 Intermediate (1.5-1)** 2 crs.  
Builds on the basic concepts of the AutoCAD 2009 Essentials course. Improves productivity when creating, annotating, and printing drawings with AutoCAD. Discusses boundaries, regions, templates dimensioning, annotation, blocks, layouts, views, sheet sets, tables, and an introduction to 3D models.  
**Prerequisite:** LVV 8511 with an outcome of satisfactory (S) or consent of instructor or program coordinator.

**LVV 8611 Autodesk Inventor 2009 Essentials (2-1)** 2.5 crs.  
Covers the fundamental principles of 3D parametric part design, assembly design, and creating production-ready part and assembly drawings using Autodesk Inventor. Instructs how to capture design intent by using the proper techniques and recommended workflows for creating intelligent 3D parametric parts; creating, placing, and constraining custom and standard components in an assembly; and simulating mechanisms, animating assembly designs, and checking for interferences. Requires familiarity with Windows, drafting, design, or mechanical engineering.

**LVV 8625 Advanced Assembly and Machine Design (1-0.5)** 1 cr.  
Creates advanced 3-D assemblies using Autodesk Inventor. Explores proper techniques for skeletal modeling, adaptive design, derived design, and functional design. Teaches steel frame designs, welded designs, and custom parts using the Content Center. Includes hands-on exercises representing real-world, industry-specific design scenarios. Recommended preparation: LVV 8611.

**LVV 8626 Autodesk Inventor Cable and Harness Design (0.5-0.5)** 0.5 crs.  
Provides students with the knowledge needed to design physical cables and harnesses for electrical systems in almost any kind of product or machine. Demonstrates specific tools to incorporate cable and harness into digital prototypes utilizing Autodesk Inventor Cable and Harness Design software. Teaches accurate path lengths, how to identify and avoid small-radius bends, and design electrical components that fit into the mechanical assembly before manufacturing. Recommended preparation: LVV8611 and LVV8625, or strong knowledge of Autodesk's Inventor user interface and working environments. Autodesk Inventor Part and Assembly Modeling and Drawing View Creation and Annotating experience recommended.

**LVV 8630 Autodesk Inventor Tube and Pipe Design (0.5-0.5)** 0.5 crs.  
Instructs students on the use of the Inventor Tube and Pipe environment to design routed elements, including tubing, piping, and flexible hose. Learn to incorporate tube and pipe runs into digital prototypes and to utilize the Inventor Tube and Pipe environment as a rules-based routing tool. Design and document tube and pipe designs through the creation of 2D drawings and export 3D design data. Required Preparation: LVV8611 and LVV8625, or strong knowledge of Autodesk's Inventor user interface and working environments. Autodesk Inventor Part and Assembly Modeling experience recommended.

**LVV 8711 Autodesk Vault Essentials (1.5-1)** 2 crs.  
Covers all features in Autodesk Vault for managing files and projects. Teaches how to organize and share files, manage file versions, work in multi-user environments, and integrate Autodesk Vault with various Autodesk products. Includes hands-on exercises representing real-world design scenarios. Requires working knowledge of Autodesk Inventor and/or AutoCAD, AutoCAD Mechanical, AutoCAD Electrical, or Autodesk Civil 3D.

**LVV 8720 Revit Architecture Essentials (1.5-0.5) 1.5 crs.**

Teaches building information modeling and the tools for parametric building design and documentation. Includes fundamental features of Revit Architecture, schematic design and construction documentation, and design visualization.

**LVV 8721 Revit Architecture Intermediate (1-0.5) 1 cr.**

Builds on concepts introduced in Revit Architecture Essentials. Covers advanced techniques for creating complex designs and professional-looking renderings, conceptual designs, creating and customizing objects, and team collaboration tools. Recommended preparation: LVV 8720 or equivalent experience.

**LVV 8722 Revit Architecture Advanced (1-0.5) 1 cr.**

Explores advanced features of Revit Architecture that streamline the design process with a central 3-D model. Includes Conceptual Design (massing studies, space planning, visualization and rendering) and BIM Management (setting up Revit and creating custom families. Recommended preparation: LVV 8721 or equivalent experience.

**LVV 8723 Autodesk Revit Mep Fundamentals (1.5-0.5) 1.5 crs.**

Teaches the concepts and principles of creating 3D parametric models of MEP systems from engineering design through construction documentation. Includes the user interface and HVAC basics, electrical, and piping/plumbing components of the Revit MEP software engineering modeling tool. Discusses how to create, document, and print the parametric model. Recommended Preparation: LVV8411 or knowledge of Computer Aided Design. Some knowledge in MEP engineering experience beneficial but not required.

**LWC CE Workforce Certification**

**LWC 8002 COMPTIA Network+ (2.5-1) 3 crs.**

Teaches planning, installation, and troubleshooting of networks in a business environment. Includes the OSI model, network card configurations, diagnosing network problems, and hands-on practice setting up a network environment. Must have A+ certification or equivalent prior to enrollment.

**LWC 8008 COMPTIA A+ Technician (1.5-2) 2.5 crs.**

Provides hands-on training in PC installation, building, upgrading, repairing, configuring and troubleshooting. Prepares students for A+ certification exams which can lead to a career in PC repair, help desk support or studies in advanced technologies.

**LWC 8010 COMPTIA Security + (2-1) 2.5 crs.**

Provides vendor-neutral instruction on systems security, network infrastructure, access control, risk mitigation, cryptography, and organizational security. Covers workstation and server security, network vulnerabilities, risk assessments, monitoring tools, network security tools, authentication, rights and privileges, encryption, and disaster recovery. Helps prepare for the CompTIA Security+ certification.

**LWC 8100 Job Search Readiness (1-0) 1 cr.**

Provides students with a comprehensive systematic approach to become job-search ready. Includes four areas of preparation: online job search, job-specific resume building and cover letter, interview skills, and understanding of general employability skills employers require for new hires. Awards the Job Search Ready Badge or the Job Search Ready Plus Badge at successful completion of this course.

**OMD One Million Degrees**

**OMD 8101 One Million Degrees Seminar (1-0) 1 cr.**

Provides learning focused on community building, exploring what it takes to find success as a college student, and building professional development skills. Explore topics through guided group dialogue, self-reflection and guest speakers. Define who you are as a college student and professional, and find your way to graduation.