

Harper College

Catalog/Student Handbook

2010-2011

10-11

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The world is changing and so are we.

Welcome to William Rainey Harper College.



Welcome to Harper College, where more than 40,000 students annually pursue their journey towards an associate or bachelor degree, advance their careers through certificate programs or further their personal aspirations through continuing education classes. Our faculty is passionate about teaching, our classes are small and personal and our facilities are second to none.

Yet, we can't afford to rest on our laurels. No community college can. The world is changing, and we're changing with it to meet new demands for the workforce of the 21st century. Today's new economy jobs demand that workers be technologically proficient, have communication and critical thinking skills and, most importantly, have access to training and credentialing to upgrade their skills over a lifetime of work.

Harper is changing to meet this new reality. While we continue to strive for strong enrollment, our goals are more closely aligned to increasing the number of students who are successful at Harper, not simply how many we attract to our front door. We are engaged in a continuous, active two-way dialogue with our local businesses to make sure our programs are meeting their changing workforce needs.

We're also collaborating more closely with our local high schools to ensure that our curriculums align and that students come to Harper well-prepared for college-level work.

When William Rainey Harper helped start the community college movement in the early 1900s he couldn't have dreamed of the difficult and complex challenges higher education faces today. But like our namesake, we believe in thinking boldly, challenging the status quo and advancing new and innovative solutions to help students achieve their personal, educational and professional goals in a fast-changing and ever-changing world.

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 that 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
- The Health Insurance Portability and Accountability Act (HIPAA).

Inquiries regarding Affirmative Action should be directed to the Vice President for HR/Diversity and Organizational Development. Inquiries regarding College compliance with Section 504 of the 1973 Rehabilitation Act and the Americans with Disabilities Act should be directed to the College Compliance Officer for ADA/504.

Institutional Core Values

Consistent with its philosophy, mission and vision, the employees and public servants of Harper College have chosen values to work by. These values are as follows:

1. INTEGRITY
2. RESPECT
3. EXCELLENCE
4. COLLABORATION

All of our values are the basis for the ongoing achievement of Harper's mission and vision. These values are intended for use in making decisions and performing in ways that benefit all of our constituencies.

Student Responsibility

It is the responsibility of each student to be aware of and meet the catalog requirements for graduation. Students are also responsible for heeding all other rules, regulations and deadlines published in the Catalog. This publication is available on the College Web site, harpercollege.edu or from the Office of Admissions Outreach.

Accreditation - regional

The Higher Learning Commission of the North Central Association of Colleges and Secondary Schools (NCA)

30 North LaSalle St., Suite 2400
 Chicago, IL 60602-2502
 312.263.0456
 800.621.7440

Policy Statement

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 preserve their educational interests.

Disclaimer

Harper College reserves the right to change all or part of this Catalog without prior notice.

Harper College Academic Calendar

First Semester — Fall 2010

Registration Continuous Until Class Begins
 Full-time Faculty Report: August 17
 Semester Begin: August 23
 Labor Day (College Closed): September 6
 Veterans Day (Classes Not in Session): November 11
 Thanksgiving Holiday (College Closed): November 25 – 28
 Last Week of Fall Term (Final Exams): December 13 – 17
 Semester Break Begins: December 18

Second Semester — Spring 2011

Registration Continuous Until Class Begins
 Full-time Faculty Report: January 12
 Martin Luther King Day (College Closed) January 17
 Semester Begins: January 18
 Lincoln's Birthday Observed (College Closed): February 11
 Spring Break: March 28 – April 3
 Classes Resume: April 4
 Reading Day (College Closed) April 22
 Last Week of Spring Term (Final Exams) May 16 – 20
 Graduation: May TBA

Summer Session 2011

Registration Continuous Until Class Begins
 First 5-week and First 8-week classes begin: May 23
 Memorial Day (College Closed): May 30
 Second 8-week Classes Begin: June 6
 Second 5-week Classes Begin: June 27

First Semester — Fall Session 2011

Registration Continuous Until Class Begins
 Full-time Faculty Report: August 16
 Semester Begins: August 22
 Labor Day (College Closed): September 5
 Veterans Day (Classes Not in Session): November 11
 Thanksgiving Holiday (College Closed): November 24 – 27
 Last Week of Fall Term (Final Exams): December 12 – 16
 Semester Break Begins: December 17

Second Semester — Spring Session 2012

Registration Continuous Until Class Begins
 Full-time Faculty Report: January 11
 Martin Luther King Day (College Closed): January 16
 Semester Begins: January 17
 Lincoln's Birthday Observed (College Closed): February 20
 Spring Break: March 26 – April 1
 Classes Resume: April 2
 Reading Day (College Closed): April 6
 Last Week of Spring Term (Final Exams): May 14 – 18
 Graduation: May TBA

Summer Session 2012

Registration Continuous Until Class Begins
First 5-week and First 8-week Classes Begin: May 21
Memorial Day (College Closed) May 28
Second 8-week Classes Begin : June 4
Second 5-week Classes Begin: June 25
Independence Day (College Closed): July 4

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 p.m. until 6 p.m. during the spring and fall semesters. The College is closed Friday, Saturday and Sunday during the summer session.

College Office Hours

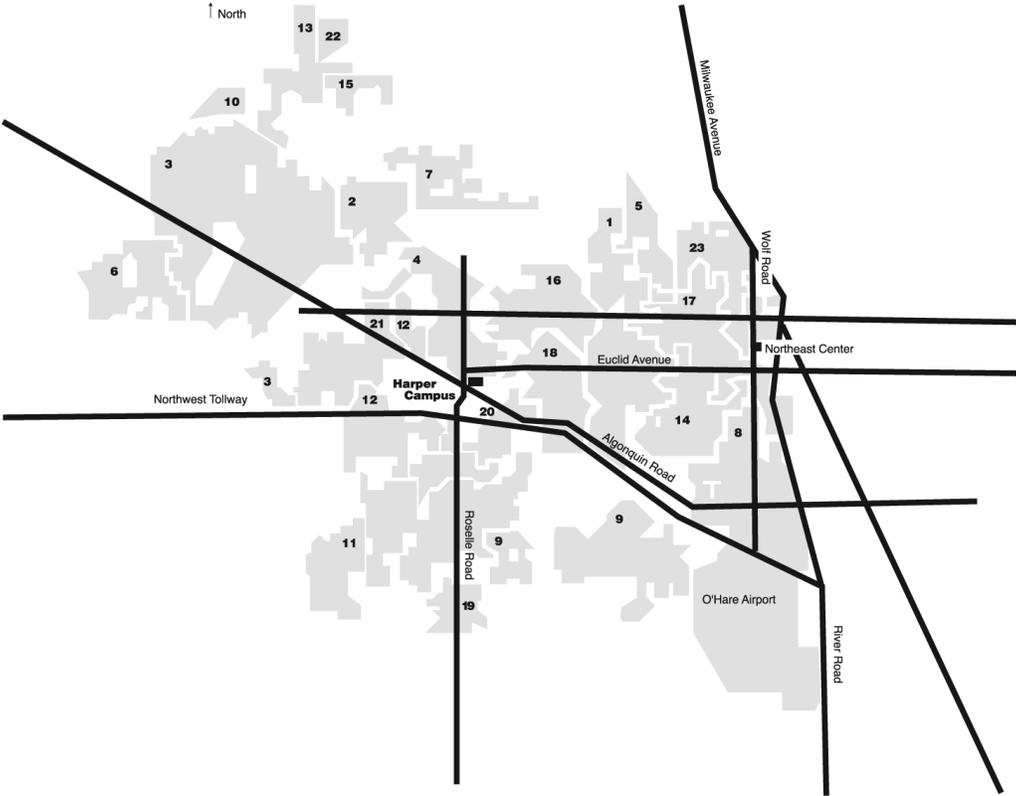
Typical office hours are Monday through Thursday from 8 a.m. to 7 p.m., Friday from 8 a.m. to 4:30 p.m. and Saturday from 9 a.m. to noon during the fall and spring semesters. Hours of operation vary for some offices and during certain times of the year. For specific office hours, please check the College Web site: harpercollege.edu

Communities served by Harper College District No. 512

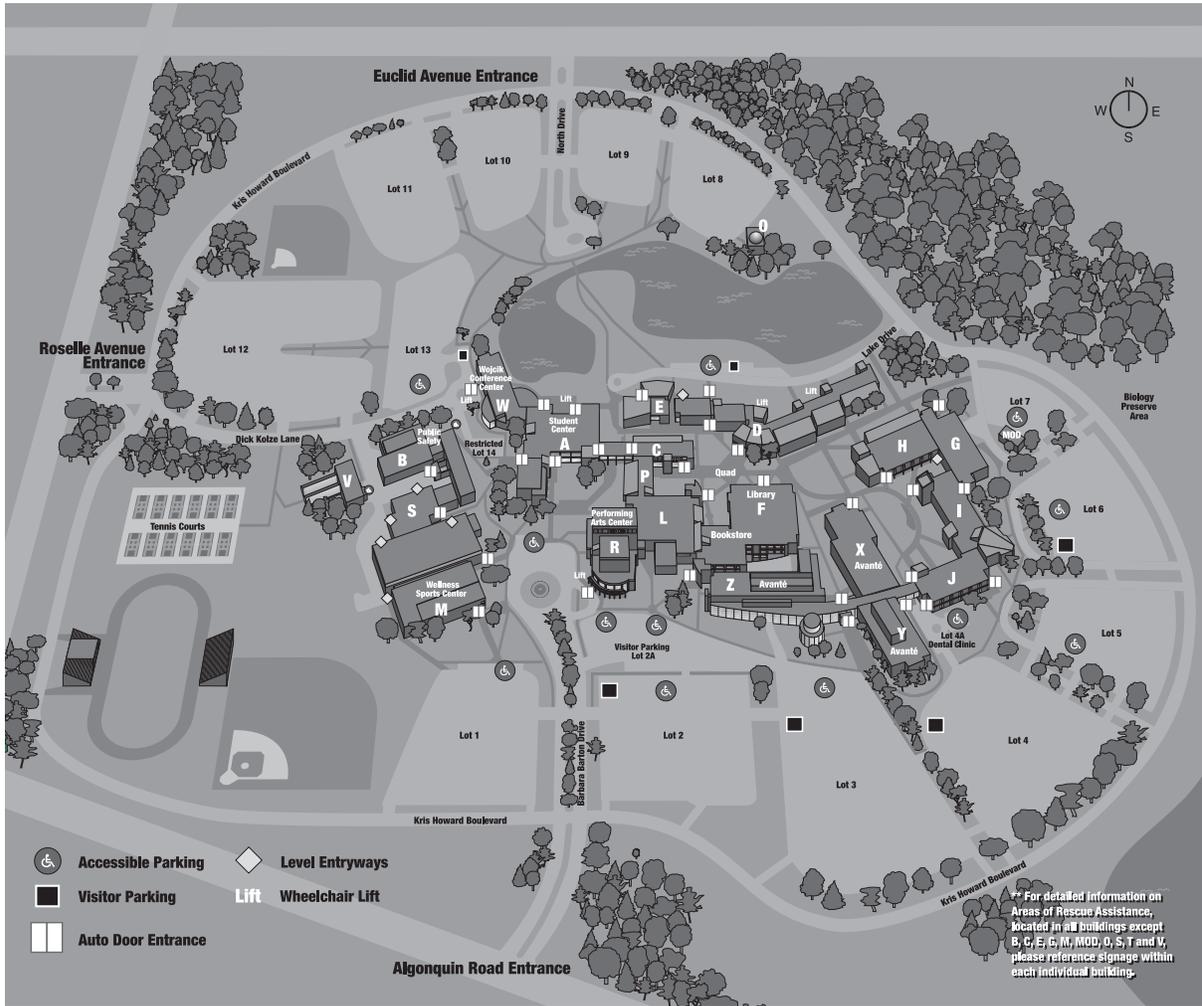
- 1 Arlington Heights
- 2 Barrington
- 3 Barrington Hills
- 4 Inverness
- 5 Buffalo Grove*
- 6 Carpentersville*
- 7 Deer Park*
- 8 Des Plaines*
- 9 Elk Grove Village
- 10 Fox River Grove*
- 11 Hanover Park*
- 12 Hoffman Estates**
- 13 Lake Barrington
- 14 Mount Prospect
- 15 North Barrington
- 16 Palatine

- 17 Prospect Heights
- 18 Rolling Meadows
- 19 Roselle*
- 20 Schaumburg
- 21 South Barrington
- 22 Tower Lakes
- 23 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.



Campus Map



About Harper College

Our roots run deep.

As far back as the early 1960s, when the greater Chicago metropolitan area was just beginning to spread out past O'Hare, the citizens of four fledgling northwest suburban townships already knew what they wanted.

What they wanted was a college.

And so, on March 27, 1965, with the ink barely dry on the brand new Illinois Community College Act, voters in the townships of Elk Grove, Palatine, Schaumburg and Wheeling overwhelmingly approved a referendum to establish a community college district. Within 34 days, those same voters returned to the polls to elect seven citizens from among 48 candidates to serve as the first Board of Trustees. The college they envisioned had no name, no buildings, no staff, and no curriculum. What it did have, however, was widespread community support and a dedicated board of seven individuals who, from their first meeting in May 1965, began to formulate a plan for what their college would one day become. Over the next year, the Board of Trustees continued to meet on a regular basis. A president was hired, architects chosen, a site selected. And the college was given its name—William Rainey Harper—in honor of the man who “fathered” the community college concept. In 1967, voters returned again to the polls, this time to approve a \$7,375,000 building referendum by a 4-1 margin. And while ground was being broken for a new campus in Palatine, Harper College was already offering classes at a nearby high school. About 1,700 students enrolled for that first term in the fall of 1967. By the following year, enrollment had jumped to 3,700. In the 2000 school year, the College had enrolled approximately 38,000 students!

Harper College was on a roll, so to speak. But steadily increasing enrollment was only one indication of the success that lay ahead. Academic excellence was another. By 1971—just six years after its founding—the College had already received unqualified full accreditation. That was especially good news for students with plans to complete their baccalaureate degrees at four-year colleges and universities. Full accreditation meant they could be assured that credits earned at Harper would readily transfer to other institutions of higher learning.

Our campus is a special place.

Harper College welcomed its first students in the fall of 1967 without a campus or a classroom to call its own. The first classes were held evenings only at Elk Grove High School. Two years later, classes moved to the initial structures on Harper's rolling 200-acre campus. From the very beginning, this was to be a campus like no other. The architects envisioned a “village” atmosphere and so into their plans, they incorporated multi-level plazas, picturesque pedestrian walkways, even a lake with a footbridge connecting the campus to the parking lots. The buildings were fashioned from earthtone materials—brick, wood and concrete. Glass window walls offered a variety of interior and exterior views. Over 30 years later, this campus remains a stimulating, pleasing environment, ideal for learning and working.

The desire to create an aesthetically pleasing atmosphere outside was extended inside as well. Among the original concepts for Harper College was a provision for displaying works of art. By the time the initial buildings were completed and occupied in May 1970, the College had acquired a sizable collection of paintings, prints and sculpture; these were used as displays throughout the campus. Over the past three decades, this collection has continued to grow and provide aesthetic enjoyment for students, staff, faculty and the community at large. Initial campus construction was completed in record time and formally dedicated on May 3, 1970. Among the early structures were a comprehensive library and learning resources center; a science and technology laboratory and classroom complex; a lecture-demonstration center; a fine and applied arts complex; a vocational-technical center; a park management and greenhouse facility; a student activities center; an administrative and data processing center; and a central utility facility designed to serve the entire campus. Later additions have included a physical education building, two classroom-specialized career program buildings, a campus publications building and a liberal arts center, which includes a bookstore, “black box theatre,” and three-dimensional art studios devoted to ceramics, sculpture, stagecraft and metal work. In 1990, a privately funded, 784-square-foot observatory was constructed. Subsequently, capital improvements were made to the science complex, fine arts wing and central utility facility.

In 1975 the College opened an extension campus to provide additional classrooms. The Northeast Center moved to its current location in Prospect Heights in 1982. An additional campus located in Schaumburg was purchased in 2001. This campus is focused on technology training and retraining.

In November of 2000 Harper College district residents passed an \$88.8 million referendum to construct a new campus building to house the College's growing technical and health career programs. Avanté, Center for Science, Health Careers and Emerging Technologies opened in the fall 2004.

In the fall of 2002, construction was completed on a new Performing Arts Center and the Instructional Conference Center that was renamed the Wojcik Conference Center in recognition of a \$1.1 million member initiative grant given to Harper by Illinois State Senator Kay Wojcik.

Our purpose is clear.

Harper College was conceived and created by a community that simply wanted more education for more of its citizens. Thus, from its inception in 1965, Harper College has operated with a single purpose in mind: We seek to provide the best possible program of higher education at reasonable cost for the community we serve.

As a community college, a primary objective has long centered on providing the first two years of baccalaureate education in liberal arts, sciences and pre-professional curricula so that students can prepare themselves for transfer to four-year colleges and universities to complete their degrees and satisfy their individual educational goals. In addition, the focus at Harper has broadened to include more opportunities for career education, training and retraining, professional development and personal enrichment. For example, increasing emphasis has been placed on providing technical and semi-technical education so that non-transfer students may prepare themselves for entry into specific careers, such as computer technology, criminal justice, nursing, early childhood education, and hospitality management, directly from their community college experience. In addition, our ability to provide area employers and employees with opportunities for training, retraining and upgrading of skills has become increasingly important as a way to address rapid technological change and adjustments in the work environment.

But there is more to the curriculum at Harper College than courses designed to prepare students for a specific career or to help them earn a particular degree or certificate. We recognize, too, our responsibility to educate all of our students so that they may assume a more active and meaningful role in a free and fluid society...so that they may vote more intelligently and adapt more readily to a complex world. As a result, we aim to not only teach students what is known, we strive to teach them where and how to look for knowledge that may not yet be available. And as life becomes more complex, the personal enrichment courses we offer provide increasing numbers of men and women with an outlet for creative energies, a means for cultivating hidden talents and a way to reduce the stress of their day-to-day lives.

With a firm commitment to the dignity and significance of each individual, Harper College strives to help each student find his or her place in the world. We seek to provide the necessary training so that every student can achieve his or her personal goals. And, above all, we desire to create an environment in which questions may be asked, theories may be tested and every student who passes through our doors may realize his or her full potential. This has been our goal for more than three decades. It will guide us through the new millennium.

History

The story of William Rainey Harper College parallels the history of the community college movement in Illinois, an educational phenomenon in the late 1960s.

Late in 1964, while legislators in Springfield were adding the final revisions to the Illinois Community College Act enabling citizens to form their own college districts, concerned citizens in Chicago's northwest suburban communities petitioned for a referendum to vote on the establishment of a college. Within a matter of days after the legislation passed, voters in the four-township area of Elk Grove, Palatine, Schaumburg and Wheeling approved a referendum establishing the Harper district — on March 27, 1965.

Groundwork for the referendum to establish a two-year college had been laid early in the 1960s with a survey of student needs and the establishment of a concerned Citizen's Committee. The success of the committee was exhibited in a 3-2 margin at the polls. Voters returned to the polls 34 days after approving the referendum to elect seven citizens, from among 48 candidates, as the first board of the new college.

Two years later, Barrington School District 224 (now Unit School District 220) annexed to the Harper district, and the boundaries of Harper's 200-square-mile constituency were established to become Illinois Community College District 512.

Since its inception, Harper College has been most fortunate in having trustees possessing the capacity to work together in planning programs, solving problems and establishing goals unique in the annals of the northwest suburbs. The first board meeting was held in May 1965. The College had no name, no staff and no facilities, but it did have seven dedicated individuals determined to establish a community college worthy of the area it serves.

During the first year, a president was hired, architects were selected to design and plan a campus, the campus site was chosen and a decision was made to adopt the name of William Rainey Harper College in honor of the "father" of the two-year college concept.

Voters in the district approved a \$7,375,000 building referendum 4-1 to begin Harper's second year. By September 1967, the College was staffed and operating with more than 1,700 students attending evening classes in Elk Grove High School, and ground had been broken for a new campus. Harper College was a reality, and the northwest suburbs had the first college in a 125-year history.

Harper serves as a cornerstone in Illinois educational history as the first two-year institution to complete Phase I of its building construction and the first to receive unqualified full accreditation—only six years after its founding—in the shortest possible time in 1971.

Throughout its brief history, Harper has had a record of monumental growth. The 1967 enrollment of about 1,700 students jumped to 3,700 in one year, double the projections. When the doors opened on Harper's new campus in fall 1969, approximately 5,400 students were enrolled.

The College employed numerous off-campus locations, instituted a Weekend College program and opened an extension campus at Willow Park Center in 1975 to provide additional classroom space for day and evening offerings. The Northeast Center subsequently moved to the Hawthorne School in Wheeling, and in the fall of 1982, to the Stevenson School in Prospect Heights.

A successful referendum held in September 1975 provided funds for the College to proceed with completion of the present campus, purchase land for a second site and construct the first phase of buildings on that site when required by enrollment increases.

Buildings G and H, were completed and classes begun in the facilities in 1977. Building M, the physical education, athletics and recreation facility, and Buildings I and J, opened to classes in the 1979-80 academic year. All plans were subject to approval by the Illinois Community College Board and the Illinois Board of Higher Education.

In 1982, the College established a 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 (CAD) and manufacturing. The innovative educational program of the CAD Center was structured to assist high technology firms in training their employees, as well as to provide some instruction in this developing technology to students in Harper programs. In 1986, the CAD Center was relocated from a Schaumburg office to Building H at the campus.

In February 1985, residents of the college district 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 in the 20 years since the College was established.

Changes in population trends over the past 10 years indicated that a second campus would not be needed to accommodate projected enrollment, and the decision was made to sell the property which had been purchased in Arlington Heights. The sale was finalized in 1986.

In August 1993, the College opened Building S which houses the Marketing Services Center. In the spring of 1994, Building L, the Liberal Arts Building was opened. This building includes the Liberal Arts division office, classrooms and faculty offices as well as the College Bookstore. First floor space includes a "black box" theatre for instructional use and three-dimensional art studios devoted to ceramics, sculpture, stagecraft and metal work. The two buildings were part of a building phase that also includes renovation plans in existing buildings. Renovations completed in 1996 included the addition of a large computer lab in Building J and updating of Building V.

Campus Facilities

With the completion of the initial buildings, the Harper campus was opened to approximately 5,400 students in September 1969. Additional facilities were needed in order to keep up with the increasing enrollment which eventually led to a complex of 18 informal contemporary buildings totaling 833,130 square feet nestled in the rolling terrain of 200 rural acres. On-time delivery of the buildings marked Harper as the first Illinois public community college to complete its entire Phase I project, which was formally dedicated on May 3, 1970.

Campus structures include a comprehensive library and learning resources center; a science and technology laboratory and classroom complex; a lecture-demonstration center; a fine and applied arts complex; a vocational-technical center and greenhouse facility; a College Center for student-related activities; an administrative and data processing center; and a central utility facility serving the entire campus.

In 1975 the College opened an extension campus to provide additional classrooms. The Northeast Center moved to its current location in Prospect Heights in 1982.

Since the first phase of the campus was completed, additions to the science complex, fine arts wing and central utility facility have been made. Building H was completed in 1977, and the Wellness and Sports Center and the Business and Building J were opened in 1980.

In 1990, a 784-square-foot observatory was completed. Privately funded, the observatory houses a 12-inch diameter Newtonian reflecting telescope and can be used by school and community organizations.

The two additional facilities, the Marketing Services Center and the Building L, were completed in 1993 and 1994 respectively. The Marketing Services Center is the campus publication building, and the Building L houses the bookstore and Liberal Arts Division. Of special note in Building L are the theater and applied arts.

An additional campus located in Schaumburg was purchased in 2001. This campus is focused on technology training and retraining.

In 2002, the College opened two new facilities, the Performing Arts Center and the Instructional Conference Center, which was renamed the Wojcik Conference Center in honor of Illinois State Senator Kay Wojcik.

In 2004 the college opened Avanté, Center for Science, Health Careers and Emerging Technologies. The Avanté Center encompasses 292,926 square feet of state-of-art learning space including 38 laboratories, 9 lecture halls, nursing lab, and a working dental clinic.

The new Student Center, a hub of the campus, is in the planning stage. This Student Center will provides a natural meeting place for students and faculty — and includes a lounge, food service facilities, various student activity offices and student services offices, community meeting rooms and provisions for almost any activity the multi-purpose design might embrace.

The informal layout of the campus was designed to have a "village street" atmosphere. The architectural concept uses scale and placement of buildings, multilevel plazas, picturesque pedestrian streets, "earthtone" building materials (brick, wood and concrete) and glass window walls to give a variety of interior and exterior views, producing a stimulating and pleasing environment for learning and working.

The structures are built into the natural contours of the land, with entrances on several levels. Panoramic vistas from several buildings embrace a small scenic lake to the north of the buildings, with a foot bridge connecting the campus to the parking lot on a hill across the lake.

The Harper campus is an exciting environment for learning, complete with the latest educational tools. Students, alumni and community residents find pride in a local campus which provides educational and cultural opportunities as well as a conference center for businesses and civic organizations.

Harper College Educational Foundation Art Collection

The original concept for the Harper College campus included public exhibition of works of art. The Educational Foundation has acquired a permanent collection consisting of over 300 paintings, prints, drawings and pieces of sculpture. Throughout Harper's history, the Foundation has actively pursued acquisition of quality works of art in order to create a vibrant educational environment for students. Students, faculty and staff can explore the wide variety of art represented in the Collection while enjoying a more aesthetic environment for learning. The Collection is also an invaluable resource for the community that Harper serves, with interesting works that provide community residents with a source of inspiration. In the future, the Foundation will continue to collect works reflecting a variety of aesthetic expressions.

The Harper College Educational Foundation Art Collection consists of over 300 original works of art valued at more than \$2.1 million. The collection of paintings, prints, drawings and sculptures includes works by a number of influential artists such as Picasso, Sol Lewitt, Romare Bearden and Alice Neel. Harper College is also fortunate to have works by a number of Chicago area artists who have achieved international acclaim, including Roger Brown and David Sharpe.

Philosophy

William Rainey Harper College is an institution of higher learning which believes that student success is achieved through academic excellence. In order to help prepare students for the challenges of life and work, the College offers an extensive curriculum taught by dedicated faculty and supported by qualified staff committed to teaching and learning. The College also recognizes the importance of the community it serves and enriches the cultural and intellectual life as well as the economic development of the Harper district. Finally, the College believes that the education of students must occur in an ethical climate that values diversity and promotes respect for all people.

Mission

William Rainey Harper College is a comprehensive community college dedicated to providing excellent education at an affordable cost, promoting personal growth, enriching the local community and meeting the challenges of a global society.

The specific purposes of the College are:

- To provide the first two years of baccalaureate education in the liberal and fine arts, the natural and social sciences and pre-professional curricula designed to prepare students to transfer to four-year colleges and universities;
- To provide educational opportunities that enable students to acquire the knowledge and skills necessary to enter a specific career;
- To provide continuing educational opportunities for professional job training, retraining and upgrading of skills and for personal enrichment and wellness;
- To provide developmental instruction for underprepared students and educational opportunities for those who wish to improve their academic abilities and skills;
- To provide co-curricular opportunities that enhance the learning environment and develop the whole person. Essential to achieving these purposes are all of the College's resources, support programs and services.

Associate Degrees

Harper College offers eight degrees: the Associate in Arts, the Associate in Science, the Associate in Arts in Teaching-Secondary Mathematics, the Associate in Fine Arts-Music, the Associate in Fine Arts-Art, the Associate in Applied Science, the Associate in Engineering Science and the Associate in General Studies. The A.A., A.S., A.F.A. and A.E.S. degrees are primarily for students desiring to transfer to four-year institutions. The A.A.S. is primarily for those in two-year career programs, although many students transfer to four-year colleges after earning the A.A.S. degree.

The Associate in General Studies (AGS) degree program, is designed to meet three specific intents—as a Liberal Studies program, as an individualized program meeting needs not met by other degree programs, or as a capstone for occupational certificate programs. Students can use credits earned toward the AGS degree to transfer, but options are limited to institutions that have a formal articulation agreement with Harper College or with institutions that choose to evaluate classes on a course-by-course basis. Because of the individualized nature of this degree transferability may be limited. Students interested in the degree should investigate its appropriateness to their goals by speaking with a counselor.

In addition, the College provides certificate programs designed to meet specific needs of the community. These programs are normally one year in length, and upon completion of the prescribed courses, the student receives a certificate of completion.

Accreditation

All courses and educational programs, including counseling services and distance learning programs, are fully accredited by The Higher Learning Commission of the North Central Association of Colleges and Secondary Schools (NCA)

30 North LaSalle, Suite 2400
Chicago, IL 60602-2502
312.263.0456
800.621.7440

- The Harper College business-related programs of accounting, computer information systems, financial services, hospitality management, management, marketing, and supply chain management are accredited by the Association of Collegiate Business Schools and Programs.
- The Harper College Music Department 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, 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:
National League for Nursing Accrediting Commission (NLNAC), Inc.
3343 Peachtree Road NE, Suite 500
Atlanta, GA 30326
- The Harper College Certified Nursing Assistant Program is accredited by the:
Illinois Department of Financial and Professional Regulations
James R. Thompson Center
100 West Randolph, Suite 9-300
Chicago, IL 60601
312.814.4500
- 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 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:
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) upon the recommendation of the Medical Assisting Education Review Board (MAERB)
The Commission on Accreditation of Allied Health Education Programs
1361 Park St
Clearwater, FL 33756
727.210.2350
- 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
- The Harper College Cardiac Rehabilitation Services is accredited by the:
Joint Commission Accreditation of Healthcare Organizations
One Renaissance Boulevard
Oakbrook Terrace, IL 60181
630.792.5000
- Illinois Department of Financial and Professional Regulations:
 - Registered Public Accounting Continuing Professional Education sponsor
 - Licensed Real Estate Pre-license School
- The Harper College General Diagnostic Medical Sonography Programs at Harper College (DMS Degree and DMS Certificate) are accredited by the Commission on Accreditation of Allied Health Education Programs (CAANEP)
1361 Park St.
Clearwater, FL 33756
772.210.2350

- The Harper College Cardiac Diagnostic Medical Sonography Programs at Harper College (Cardiac Technology Degree and certificate and Diagnostic Cardiac Sonographer Certificate) are accredited by the Commission on Accreditation of Allied Health Education Programs (CAANEP)
1361 Park St.
Clearwater, FL 33756
772.210.2350

Affiliations

Academic Enrichment and Language Studies Division

- American Educational Research Association (AERA)
- Association of Higher Education and Disability (AHEAD)
- Children and Adults with Attention Deficit/Hyperactivity Disorder (CHADD)
- Learning Disability Association (LDA)
- Member, Adult Numeracy Network
- Member, Association of International Student Educators (NASFA)
- Member, Emily Dickinson International Society
- Member, College Reading and Learning Association
- Member, Commission on Adult Basic Education (COABE)
- Member, Commission on English Language Program Accreditation (CEA)
- Member, Illinois Adult and Continuing Educators Association
- Member, Illinois Reading Council (IRC)
- Member, Illinois TESOL/Bilingual Education (ITBE)
- Member, International Reading Association (IRA)
- Member, National Association for Developmental Education (NADE)
- Member, National Association for Multicultural Education (NAME)
- Member, National Council of Teachers of English (NCTE)
- Member, National Council of Teachers of Mathematics (NCTM)
- Member, NAFSA Chicago Roundtable
- Member, Network of Intensive English Programs: Illinois, Indiana and Wisconsin
- Member, Northern Illinois Consortium of Community College International Advisors (NICCCIA)
- Member, Teachers of English to Speakers of Other Languages (TESOL)
- Northeast Suburban Council for Community Services

Business and Social Science Division

- The Harper College Child Learning Center is licensed by the Department of Children and Family Services.
- Member, American Association for Paralegal Education
- Member, American Hotel & Lodging Association (AH & LA)
- Member, Illinois Paralegal Association
- Member, Illinois Restaurant Association (IRA)
- Member, International Food Services Executives Association (IFSEA)
- Member, National Restaurant Association (NRA)
- Member, Northwest Suburban Bar Association
- Registered by the State of Illinois as a Public Accountant Continuing Professional Education Sponsor (CPA classes)

- Student Chapter of American Production and Inventory Control Society
- Student Chapter of Kappa Beta Delta, the national business honor society (ACBSP)
- Student Chapter of Lambda Epsilon Chi, the national paralegal honor society

Career and Technical Programs Division

- American Electronics Association
- American Institute of Architects (AIA)
- American Radio Relay League
- American Technical Education Association
- American Welding Society
- Association of Graphic Solutions Providers, The (IPA)
- Association of Licensed Architects
- Building Officials and Code Administrators (BOCA)
- Building Officials and Code Administrators – International Code Council (BOCA – ICC)
- Consortium for Design and Construction Careers
- Fire Department Safety Officers Association
- Illinois Advisory Commission on Arson Prevention
- Illinois Association of Architecture Instructors
- Illinois Building Commission (IBC)
- Illinois Council of Air Conditioning & Refrigeration Educators (ICARE)
- Illinois Fire Chiefs Association
- Illinois Office of the State Fire Marshal (IL OSFM)
- Illinois Professional Firefighters Association
- Illinois Society of Fire Service Instructors
- Institute of Electrical and Electronics Engineers (IEEE)
- International Design Educators Council
- National Fire Academy Alumni Association
- National Fire Protection Association (NFPA)
- National Kitchen and Bath Association (NKBA)
- National Society of Professional Engineers (NSPE)
- Northwest Building Officials and Code Administrators (NWBOCA)
- Northwest Emergency Management System
- PIA/GATF – Printing Industries of America (PIA)/Graphic Arts Technical Foundation (GATF)
- Printing Industry of Illinois and Indiana Association (PII)
- Prepress Training Solutions
- Radio Club of America (RCA)
- Refrigeration Service Engineers Society (RSES)
- Society of Broadcast Engineers (SBE)
- Suburban Law Enforcement Academy (SLEA)
- United State Green Building Council (USGBC)

Continuing Education Division

- American Heart Association
- American Massage Therapy Association
- Authorized Autodesk Training Center
- CompTIA Learning Alliance – Education to Career Programs (E2C)
- Microsoft Partner for Learning Solutions
- Novell Academic Partner
- Oracle Academic Initiative Workforce Development Program
- Sun Microsystems Academic Initiative
- The Community Music Center is a member of the National Guild of Community Schools of the Arts.

Harper College for Businesses Department

- 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
- Integrity Systems: Integrity Selling and Integrity Service
- National Safety Council
- Resource Associate Corp.: Goal Setting, Attitude Development, Skills Improvement
- Tests of Adult Basic Education (TABE)

Health Careers Division

- American Dental Association (ADA)
- Commission on Accreditation for Allied Health Education Programs (CAAHEP)
- Commission on Accreditation for Dietetics Education (CADE) of the American Dietetic Association
- Dietary Managers Association (DMA)
- Illinois Coalition for Nursing Resources (ICNR)
- Joint Commission Accreditation of Healthcare Organizations
- Joint Review Commission for Education in Radiologic Technology (JRCERT)
- National League for Nursing (NLN)
- National League for Nursing Accrediting Commission (NLNAC), Inc.
- The American Association of Medical Assistants

Liberal Arts Division

- 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)

Resources for Learning Division

- American Library Association (ALA)
- Illinois Community Colleges Online (ILCCO)
- Illinois Virtual Campus (IVC)
- Member, Consortium of Academic and Research Libraries in Illinois (CARLI)
- Member, Illinois Library Association (ILA)
- Member, Illinois OCLC Users Group
- Member, Instructional Telecommunications Council (ITC)
- Member, International Writing Centers Association
- Member, Library Orientation Exchange (LOEX) Clearinghouse for Library Instruction
- Member, Midwest Writing Centers Association
- Member, Missouri Library Network Corporation (MLNC)
- Member, National Tutoring Association

- Member, Network of Illinois Learning Resources in Community Colleges (NILRC)
- Member, North Suburban Library System (NSLS)
- Member, Online Computer Library Center (OCLC)
- Member, Sloan Consortium

Student Development Division

- National Association of Colleges and Employers
- National Association of Student Personnel Administrators

Mathematics and Sciences Division

- American Academy of Actuaries
- American Association of Physics Teachers
- American Astronomical Society
- American Chemical Society (ACS), Division of Chemical Education
- 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 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 Geologist
- 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 (2YC₃)
- Consortium for Computing in Small Colleges (Northwest Conference)
- Consortium for Mathematics and Its Applications, The (COMAP)
- Ecological Restoration
- Ecological Society of America
- EDS PLM Solutions
- Explorers Club
- 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 Council of Teachers of Mathematics (NCTM)
- National Science Teachers Association (NSTA)
- Natural Areas Association
- Natural Lands Institute
- Physics Northwest
- Project Kaleidoscope (PKAL)
- Society for College Science Teachers (SCST)
- Society of the Directed Energy Directorate
- Tex User's Group (TUG)
- The Astronomical Society of the Pacific
- Women in Mathematics Education (WME)

Wellness and Human Performance Division

- National Junior College Athletics Association (NJCAA)
- National Wellness Association
- American Red Cross
- American Sport Education Program (ASEP)
- North Central Community College Conference (N4C)
- Member, American College of Sports Medicine (ACSM)
- Member, American Alliance of Health, Physical Education, Recreation and Dance (AAHPERD)
- Member, Illinois Association of Health, Physical Education, Recreation and Dance (IAHPERD)
- Member, Midwest Football Conference
- Member, National Strength and Conditioning Association (NSCA)
- Member, American Council on Exercise (ACE)

Certifications

Cisco

- Cisco Certified Network Associate (CCNA)
- Cisco Certified Network Professional (CCNP)
- Cisco Certified Design Associate (CCDA)
- Cisco Secure Pix Firewall Advanced (CSPFA)
- Cisco Certified Security Professional (CCSP)

CompTIA Learning Alliance

- A+
- Convergence +
- Network+
- RFID +
- Server+
- Security+
- Project+
- Linux+

Linux

- Linux Certified System Administrator (LCA)

Microsoft Partner for Learning Solutions

- Microsoft Certified Application Developer (MCAD)
- Microsoft Certified Application Specialist (MCAS)
- Microsoft Certified Database Administrator (MCDBA)
- Microsoft Certified Desktop Support Technician (MCDST)
- Microsoft Certified IT Professional (MCITP)
- Microsoft Certified Professional (MCP)
- Microsoft Certified Professional Developer (MCPD)
- Microsoft Certified Solutions Developer (MCSD)
- Microsoft Certified Systems Administrator (MCSA)
- Microsoft Certified Systems Engineer (MCSE)
- Microsoft Certified Technology Specialist (MCTS)
- Microsoft Office Specialist (MOS)

Novell Academic Partner

- Novell Certified Linux Professional (CLP)
- Novell Certified Linux Engineer (CLE)

Oracle Academic Initiative

- Oracle Certified Database Associate
- Oracle Certified Database Administrator Professional
- Oracle Certified Solution Developer
- Oracle Certified Application Server Professional

Sun Microsystems Academic Initiative

- Sun Certified Solaris Administrator (UNIX)
- Sun Certified Programmer for the Java 2 Platform
- Sun Certified Enterprise Architect

Premier AutoDesk Training Center (ATC)

- Certified AutoCAD Trainer
- AutoCAD Professional
- Autodesk Inventor
- Autodesk Architecture

Authorized Prometric Testing Center

Certiport Testing Center

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Admission

Eligibility

All high school graduates or the equivalent (students who have successfully completed the GED) 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 written parental acknowledgement.

To be placed in some programs in the College, the applicant may have to meet additional requirements as specified by that program and/ or the Illinois Public Community College Act.

Applicants will be required to:

- A. Complete a Harper College application.
- B. Pay a \$25 nonrefundable application fee.
- C. Submit an official copy of their final high school transcript. Students who are enrolled in high school at the time of application must, in addition, submit a current high school transcript. Students who completed the GED must submit an official copy of GED results. Non high school graduate, please contact the Center for New Students at 847.925.6208.
- D. Submit official transcripts from all colleges attended.
- E. 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. (This requirement will be waived for students who have completed 12 or more semester hours of college level credit and for students who are age 24 or older at the time of application.)

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: Northeastern Illinois University, Northern Illinois University, Roosevelt University and Western Illinois University. Applicants may obtain detailed program information from the Harper College Admissions Outreach office.

Limited Enrollment Programs

Degrees:

Cardiac Technology, Dental Hygiene, Diagnostic Medical Sonography, Nursing, Radiologic Technology.

Certificates:

Cardiographic Technician, EMT-Basic, EMT-Paramedic, Practical Nursing, Mammography, Phlebotomy.

Consult the Web site to determine the specific admission requirements of a particular limited enrollment program.

The final review of limited enrollment program files is completed after the program application deadline. Satisfaction of admission requirements, success in course work and residency are among the factors an admissions committee may use to select candidates for admission.

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

Concurrently Enrolled High School Students

High School students who wish to concurrently enroll at Harper College must be at least 16 years of age and have junior or senior status. In addition, students will meet with a counselor in the Center for New Students and Orientation to help determine their readiness to attend college.

- A. Complete the Harper College Application for Admission and submit a one-time \$25 non-refundable application fee.
- B. Contact the Center for New Students at 847.925.6208 to schedule a "concurrent high school student appointment" with a counselor.
- C. Submit appropriate documents to the Center for New Students: high school transcript, including ACT scores (home schooled students must submit documentation of their home school program).
- D. Complete Concurrent High School Admission Form (including signed Parental Acknowledgement and Treatment Authorization).

The final decision about eligibility to enroll for Concurrent High School Admission will be made by a counselor in the Center for New Students and the student may be required to complete Compass assessment tests in Writing, Reading and/or Mathematics in order to be considered for admission.

High School Dual Credit Program

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.

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 to receive 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 with a nonrefundable \$175 application fee.
2. Official transcripts for at least the last four years of secondary school study and any university-level or postsecondary school work that has been completed or attempted. All these records must list all subjects taken, grades earned or examination results in each subject, minimum and maximum grades possible and all diplomas and certificates awarded. 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 converted score of 210. This requirement will be waived for students applying to the Intensive English Program.
4. An affidavit of support signed by the party who will be supporting the student. The affidavit must be accompanied by statements from the bank and employer of the party who will be supporting the student. (If students are able to document sufficient financial resources to support themselves, this will be considered adequate.)
5. A Harper College declaration of intention.
6. A written statement regarding what the student plans to study at Harper. (This requirement will be waived for students applying to the Intensive English Program.)
7. A Harper College "Educational Background Information Sheet."
8. International Student Responsibility Checklist.
9. Copy of passport (visa stamp and I-94 card if already in the United States).
10. Photograph
11. 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.

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 Admissions Processing Office for details.) If a student has attended any other educational institution since attending Harper, official transcripts from each college attended should be submitted to the Admissions

Processing Office. Students dismissed from Harper for disciplinary reasons must be reviewed by Harper's Vice President of Student Affairs.

Transfer of Credit to Harper College

A degree seeking student who has attended any other college(s) must have an official transcript from each college attended sent to the Admissions Office immediately upon making application. 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 a grade of C or better, 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 must petition for evaluation of transfer credit through one of the following offices: Registrar's Office, Admissions Processing, Admissions Outreach or online at 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 are considered nontransferable.
5. Evaluation of credentials from a foreign country may be requested by contacting the World Education Services at www.wes.org. The Office of the Registrar at Harper College will use the WES 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 ENG102-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. degrees, as well as the IAI core curriculum for students who are not completing the degree.

Registration Policies and Procedures

Attendance Policy

Regular attendance is necessary for satisfactory college work. 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 midterm report. It is the students' responsibility to learn the instructor's attendance policy for each course, as well as to discuss with their instructors any extraordinary circumstances affecting their attendance. Students attending without registering and paying for a class will not be allowed to receive a final grade once the semester ends.

Enrollment Status Verification

Students may have current or previous enrollment verified by the Registrar's Office, Student Center, Room A213, or by the National Student Clearinghouse online at www.studentclearinghouse.org or phone at 703.742.4200. The College Registrar's Office reports enrollment status verifications on the basis of full-time, half-time and less than half-time enrollments as defined below.

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).

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. (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 for those courses in which the student is enrolled. A previous semester verification is based on the actual dates of attendance.

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 are not 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.

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.

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

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 in the official College calendar for the year in question. Please refer to harpercollege.edu.

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. Please contact the Registrar's Office for additional information at 847.925.6500.

Residency

Students enrolling at Harper College shall be classified as In-district, Out-of district, Out-of-state or International 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 driver's license, voters registration card, lease, utility bill or tax 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.

International 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.

Business Advantage 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 Advantage Agreement Program permits these employees of in-district businesses to attend Harper classes at in-district rates if their employers have registered for this unique program. The in-district tuition is available whether the cost is to be paid by the employees or by the company. Employers who are interested in this program should contact Admissions Outreach or apply online at harpercollege.edu.

Tuition and Fees

Tuition for Credit Classes*

In-District Residents:

..... \$98.50 per credit hour
(full-time employees of in-district companies are also eligible)

Out-of-District:

..... \$355.50 per credit hour

Out-of-State:

..... \$431 per credit hour

International Student:

..... \$431 per credit hour

Programs/Courses with double tuition

Programs:

- Cardiac Technology degree
- Cardiographic Technician certificate
- Dental Hygiene degree
- Diagnostic Medical Sonography degree
- Mammography certificate (RAD)
- Nursing degree
- Practical Nursing certificate
- Radiology Technology degree

Courses:

- CTE prefix
- DHY prefix
- DMS prefix
- NUR prefix
- RAD prefix
- OCC prefix

*Subject to change without notice

Fees for Credit Classes

- *Application Fee: \$25*
- *Activity Fee, full-time student: \$42 part-time student: \$21*
- *Registration Fee (nonrefundable): \$15*
Students are responsible for payment of the \$15 non-refundable registration fees for all registrations that are dropped for non-payment.
- *Technology Fee: \$7 per credit hour*
- *Repair and Renovation Fee: \$7 per credit hour*
- *Laboratory, Music and other class fees: Will be indicated at time of registration*
- *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 nonrefundable, 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 and obtain a HarperCard (see: Student Activities).

Special Music Fee

Students enrolled in minor applied music will pay \$75 per semester. This entitles the student to one 30 minute private lesson per week. Major applied music students will pay \$150 per semester and will receive one 60 minute private lesson per week.

Laboratory, Music and Other Class Fees

Laboratory, music and other class fees will be indicated at time of registration.

Registration Fee

A \$15 non-refundable registration fee is charged to all students registering each semester for credit courses. If you are dropped from a class for non-payment, an additional \$15 registration fee will be assessed when you re-enroll.

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 campus such as computer labs, instructional technology, resources of the library, touchtone and Web registration.

Repair/Renovation Fee

A renovation fee of \$7 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.

Payment Deadlines

A payment due date is established each term for registrations prior to that date. For registrations after the payment due date, payments are due 48 hours following your registration. If payment is not made by the payment due date, your classes will be dropped. Students unable to pay all charges when due may apply for a pre-authorized payment plan. Details are available at harpercollege.edu. To pay online or set up a payment plan login to MyHarper Student Portal, select the MyPayments tab, go to the Student Account Section. Students receiving Federal, State, Private or Institutional (Harper College) Grants, Scholarships or Student Loans must sign up for e-Cashier's Deferred Payment Plan. Failure to do so may result in dropped classes. Students may apply for financial aid at the Scholarships and Financial Assistance Office, Building C, Room C104.

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.

Tuition Refund Policy

Refunds will be determined by the following schedule:

Fall/Spring Semesters

16-Week Classes Percent of Refund

First week of classes through Sunday 100%
No refund after first week of semester

12-Week Classes Percent of Refund

First week through Sunday 100%
No refund after first week of semester

8-Week Classes Percent of Refund

First week through Wednesday 100%
No refund after Wednesday of the first week of class

4-Week Classes Percent of Refund

On or prior to first day of class 100%
No refund after first day of class

Classes offered in other formats or on the weekend (Friday, Saturday and Sunday) may have separate refund and withdrawal dates. Please refer to the Academic Calendar at harpercollege.edu for specific refund and withdrawal dates.

Summer Session

8-Week Classes Percent of Refund

First week through Wednesday 100%
No refund after Wednesday of the first week of class

Refunds:

Refund deadlines vary for non 8-week classes.

- Refunds are not processed until the 100% refund period has passed.
- The Business Office, Building A, Room A214, will disburse refunds in the form of a check, direct deposit, or onto a student refund card.
- The student refund card works much like a regular debit card. It is the fastest method of obtaining your student account refund.
- Direct Deposit forms are available in the Business Office or print the form off the MyHarper Student Portal and deliver to the Business Office. A cancelled check is required for all direct deposits of refunds. Please remember that you must notify the Business Office of any change in your bank account.
- If payment was made by credit card in person, by phone or Quikpay, it will be applied to the credit card account.
- If payment was made with a credit card for a payment plan, the refund will be in the form of a check, direct deposit or onto your student refund card.

- Refunds will be processed within 15 days after a credit balance is on a student's account, assuming it was paid with guaranteed funds.
- Students who do not attend class and who do not submit an official written notice for dropping class(es) will not receive any refund and are subject to an F grade.

Chargeback Tuition

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

Approved students will pay the in-district tuition of the college where they will be attending classes. The remaining tuition charges will be paid by Harper College for approved classes.

Application for chargeback tuition must be made in the Office of the Registrar 30 days prior to the beginning of the term for the college in which the student wishes to enroll.

Out-of-district students approved for chargeback tuition from their community college will pay Harper's in-district tuition and their district community college will reimburse Harper for the balance of the tuition for approved classes.

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 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. Students may view grades online at harpercollege.edu.

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
P	Pass	.0
W	Withdrawal	.0
X	Incomplete	.0

The following classes are not computed in the semester cumulative grade point average:

- Communication Skills all courses
- English as a Second Language all courses
- All P graded courses

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

Course worth 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 or Proficiency credit - not included in grade point average.

Transfer Credit

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

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

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**. In certain courses such as open entry courses, it is necessary to meet the instructor deadline specified in the contract for that class.

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.

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.

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, Registrar's Office and at harpercollege.edu.

Academic 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 3.5 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 Designations

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 – 3.74 cumulative GPA
Magna Cum Laude:	3.75 – 3.8 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 associates degree program.

Transcripts

Official transcripts of a student's academic record will, upon written request, be issued and sent from the Registrar's Office to other educational institutions and prospective employers. The College reserves the right to withhold transcripts of persons who have past due monetary obligations such as tuition, fees or materials. Students requesting official transcripts should note that course work taken that may end prior to the end of the term will not have Academic Standing and GPA calculations processed until the end of the full semester. Transcript request are available online at harpercollege.edu.

Financial Assistance

Student Financial Assistance

Office of Student and Financial Assistance administers and manages student aid funds from the following federal, state, institutional and private sources:

- Federal (grant and loan) Programs
- State-sponsored Grant Programs
- Institutional and Private Scholarships
- Foundation Endowments and Scholarships

Students are encouraged to check with organizations such as women's clubs, service clubs; like Rotary and chambers of commerce, as many private and public agencies are ready and able to assist the worthy college students. In addition, scholarship search Web sites are linked on the Harper College Financial Aid Web page, harpercollege.edu.

There are many ways students can finance their education at Harper. There are scholarships that pay all, or a portion of their expenses. Scholarships are

awarded to students based on their academic performance, leadership experiences, community involvement, or financial circumstances. Low interest federal student loans up to \$5,500 for the first year and \$10,500 for the second year are available. Students must be enrolled for at least six credit hours per term to qualify for student loans.

On-campus jobs for students under the Federal Work-Study or other employment programs are also available to help students with college expenses. Students can work up to 20 hours per week and be paid at least minimum wage.

Many students will receive financial assistance from more than one source in addition to what they can expect to receive from their parents. More than 9,800 Harper College students are receiving some form of financial assistance administered by the Office of Student Financial Assistance.

Veteran Services

Harper has been designated as a Serviceperson's Opportunity College by meeting or exceeding the following criteria:

Uncomplicated and non-restrictive admission policies; providing for servicemen or women to pursue educational programs through courses offered on weekends, evenings and other nontraditional times; and offering maximum credit for educational experiences obtained in the Armed Forces.

The Office of Student Financial Assistance who provides advice and assistance for veterans and assists the veteran complete the veteran enrollment certification and ensures Illinois veterans are informed about the eligibility criteria for the Illinois Veteran Grant. Eligible veterans and servicepersons receive a monthly educational allowance to attend school.

Detailed information relating to Harper's veterans' assistance programs may be found on the Financial Aid page of the Harper College Web site, harpercollege.edu.

Transfer Scholarships

Most four-year institutions offer scholarships designated for community college students. The following are some that have scholarship resources available to Harper students.

- Benedictine University, Lisle
- Bradley University, Peoria
- Columbia College, Chicago
- Concordia University, River Forest
- DePaul University, Chicago
- DeVry University, Addison and Chicago
- Dominican University, River Forest
- Eastern Illinois University, Charleston
- Illinois Institute of Technology, Chicago
- Illinois State University, Normal
- Kendall College, Evanston
- Knox College, Galesburg
- Lewis University, Romeoville
- Loyola University, Chicago
- Marquette University, Milwaukee, WI
- McKendree College, Lebanon, IL
- North Central College, Naperville
- Northern Illinois University, DeKalb
- Quincy College, Quincy
- Ripon College, Ripon, WI
- Roosevelt University, Schaumburg and Chicago
- Saint Xavier University, Chicago

- Southern Illinois University, Carbondale
- University of St. Francis, Joliet
- Western Illinois University, Macomb

Academic and Leadership Recognition Scholarships

- Distinguished Scholar – Full tuition for 60 credit hours
- Trustee Scholarship – Full tuition for 30 credit hours
- Visionary Award – 50% in-district tuition plus Harper Bookstore credit

Premier Scholarships

These premier scholarship opportunities are available on a yearly basis.

- Motorola Award for Excellence
- Amersham Endowed Scholarship
- Northrop Grumman Engineering Scholarship (2+1 Program)
- Square D Engineering Endowed Scholarship (2+1 Program)
- George and Christine Winandy Distinguished Scholars for Math and Science majors (2+1 Program) Foundation Scholarships

Foundation Scholarships

By Area of Interest

Academic Enrichment and Language Studies

- Jacob and Iris Wolf Sign Language Interpreting Scholarship
- Jean B. Chapman International Student Scholarship Fund
- John and Melanie Frieberg ESL Scholarship
- John W. Davis Spanish Travel Scholarship

Access and Disability Services

- ADS Alumni Scholarship
- Donald and Patricia Torisky Endowment Fund
- Glenda F Nuccio Memorial Scholarship
- Midge C. Smith Memorial Scholarship
- Deaf/Hard of Hearing Scholarship for Continuing Students

Adult Education Development

- GED Distinguished Scholars
- GED Graduate Scholarship
- GED Persistence Award

Any Academic Area

- Betty and Matt Cockrell Endowed Scholarship
- Geraldine Cosby Endowed Government Service Scholarship
- Dr. Ernest B. and Mrs. D. Kris Howard Endowment for Community Service
- Ernie and Hazel Rilki Lifelong Learning Scholarship
- Kathleen N. Graber Scholarship

Career and Technical Programs

- Architectural Technology Endowed Scholarship
- Nick Nocchi Scholarship Fund
- Wilford C. Papenthien Memorial Fund

Continuing Education

- Anne Rodgers Scott Endowment For Student Success Scholarship
- Community Music Center Scholarship
- Gene and Hildegard Evans Memorial Scholarship
- James E. Finke Memorial Scholarship

Faculty/Staff Development

- Harper 512 IEA/NEA Association Scholarship
- Joan R. Young Scholarship

Health Careers

- Dr. Charles Shaner Memorial Scholarship—Dental Hygiene
- Harper Nursing Student Endowment Scholarship
- Illinois Health Improvement Association Scholarship
- Joanne Heinly Nursing Scholarship
- Sharlene Marchiori Nursing Scholarship
- William H. Osbourne III Memorial Endowed Scholarship

Liberal Arts

- Elizabeth Schmik Hull Fund
- Henry Meier German Scholarship
- Marilyn Shiely Coste Memorial Scholarship
- Ronald Dourlet Memorial Scholarship

Transfer Scholarships

- Harper Employee Transfer Scholarship
- James J. McGrath Humanities Scholarship
- John Louis Papandrea Liberal Arts Memorial Scholarship

Performing and Visual Arts Scholarships

- Barbara Minner-Fuhr Memorial Scholarship
- Carol A. Zack Memorial Fine Arts Scholarship
- Eugenia Makowski Endowed Scholarship
- Fine Arts Scholarship
- Fine Arts Scholarship For Women
- Harley Chapman Music Performance Scholarship
- Mary Jo Willis Theatre Scholarship Endowment

Wellness and Human Performance

- Roy G. Kearns Memorial Scholarship

Women's Program

- Beverly Kiss Memorial Scholarship
- Displaced Homemakers Scholarship
- Jean Black Women In Careers Scholarship
- Royal American Displaced Homemakers Scholarship
- AAUW Audrey Tjepkema Memorial Fund
- Women's Program Scholarship

Refund Policy for Financial Assistance Recipients

Harper students who are financial assistance recipients must be aware of all refund policies including the federal Return of Title IV Funds policy. Eligible students who officially withdraw from all classes on or before 60 percent of the term has elapsed will receive a proportional refund based upon the official date of withdrawal. The official date of withdrawal is the withdrawal date as recorded by the Registrar's Office and is based on the date that appears on the Student Add/Drop form as filed with that office.

Harper calculates refunds proportionally and must determine the unearned amount of Title IV Funds that must be returned to the Student Financial Aid (SFA) programs. The school bases the amount of unearned assistance that must be refunded on the applicable federal calculations.

Before any refund is made to the student, Student Financial Assistance must return funds to the appropriate financial aid program(s). If the student owes money to

Harper College the amount owed will be subtracted from any refund due the student. Students may contact Student Financial Assistance for further details.

Refunds will be processed within 14 days after a credit balance is on a student's account.

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 the satisfactory academic progress requirements for financial assistance as follows:

1. A student must be enrolled in a program of study leading to an associate degree or a certificate (>16 credit hours) at Harper College.
2. A student must have a cumulative grade point average of 2.0 or higher to be eligible for financial assistance.
3. A student must complete 67 percent of the courses attempted throughout his/her entire enrollment at Harper College. Courses in which a student receives an F (fail), X (incomplete), W (withdrawal) or H (audit) will not count as completed courses or earned grades.
4. A student must complete an associate degree or certificate within a specified time period. A student cannot receive financial assistance beyond the specified time allotted for completion of his/her program. The receipt of financial assistance does not alter the specified time period.

Academic Policies**Assessment 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 full-time 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.
3. To help underprepared students whose reading assessment scores are substantially below college level by requiring them to enroll in developmental reading courses prior to or along with their English courses. New full-time students who place into reading must enroll in the appropriate reading course during their first semester.

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

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 received 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 restrictions imposed upon them.

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 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.

Dismissal

Students who have returned to the College after one semester of suspension and who receive a semester GPA of less than 2.0 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.

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

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 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 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 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 of 2.0 or higher and cumulative GPA of less than 2.0.	Mandatory restriction to maximum of 13 credit hours. Required success-oriented strategies.

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.

Student Affairs

Student Development

*Academic Advising
and Counseling Center*

Career Center

*Center for Multicultural Learning / Minority
Student Transfer Center*

Assessment and Testing Center

Center for New Students and Orientation

Rita and John Canning Women's Program

Access and Disability Services (ADS)

**Health and Psychological Services and
Wellness Programs**

Student Activities

Student Senate

Harper Recreation Program

Athletics

Intercollegiate

Intramurals

Fitness Center

Resources For Learning

Academic Support Services

Library Services

Distance Learning Classes

Computer Labs

Harper College Bookstore

Bookstore Refund Policy

Book Buyback

Dining Services

Child Learning Center

Harper College Police

Emergency Preparedness

ID Cards

Box Office

Student Affairs

College can be a positive and enriching experience for students of all ages and backgrounds. Student Affairs at 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.

Student Development

This area of the College is designed to assist students in assessing, identifying and achieving their goals. Various professional services and programs are offered to maximize responsible student decisions relating to education, career, social and personal issues. Programs in this area are listed below.

Center for New Students and Orientation

This Student Development Center, located in Building C, Room C104, is available to all students entering the College for the first time. The Center for New Students and Orientation assists all entering students by providing the preliminary information helpful in their transition to Harper College. Advising is provided through appointment in small groups and individually.

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

Parents of new full-time students are invited to Parent Orientation. This special program is designed to provide parents with information about the College and answer any questions that they may have.

Academic Advising and Counseling Services:

- **Academic Advising and Counseling Center, I-117**
- **Career Center, A347**
- **Center for Multicultural Learning / Minority Student Transfer Center, D-142**

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.

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 Center assists students in making career or college major choices, or in gaining skills to aid in the job search process. 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.

Job search assistance is available through www.collegecentral.com/harper. This free password-protected job listing system annually catalogs many Chicago-area jobs. Students have the added advantage of posting their resumes at www.collegecentral.com/harper for employers' viewing. Harper students can also gain the skills necessary for successful job searching, resume writing and interviewing by making a counselor appointment.

Students looking for an on-campus job as a Student Aide can apply online at jobs.harpercollege.edu. Assistance with on-campus application completion is available in the Career Center in Room A347 or by calling 847.925.6220.

The primary objectives of the Center for Multicultural Learning / Minority Student Transfer Center are to support the academic success and retention of under-represented minority students, and to provide multicultural education programming for Harper faculty, staff, and students. The Center for Multicultural Learning / Minority Student Transfer Center is committed to the advocacy of minority issues throughout the College.

In addition to the counseling and support services provided in the other academic advising and counseling centers, the Center for Multicultural Learning / Minority Student Transfer Center offers unique services such as a summer bridge high school to college transition program, on-site advising appointments with four-year institution representatives as well as free visits to four-year institutions, and individualized assistance with scholarship / financial aid application.

The Multicultural Drop-in Center, D-131, serves as the home of the multicultural clubs. There is club meeting space as well as a place for students to gather, do homework or check email. The Center for Multicultural Learning / Minority Student Transfer Center counselors advise the multicultural clubs. They provide general assistance with academic and transfer advising in addition to campus events like Cinco de Mayo, Black History Month, Day of Silence, Indo-Pak Night and the overnight Multicultural Student Leadership Retreat.

Assessment and Testing Center

This Student Development office is located in the Student Center, Building A, Room A148, and is responsible for the coordination and administration of academic assessment and other testing programs available to Harper College students and community members. All new full-time students are required to participate in an orientation program that includes academic assessment testing. New 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. Harper College also participates in national testing programs, either as a test center or as a source of information.

A Student Development Program consisting of vocational/interest tests and/or personality measures is available for a minimal fee to students enrolled in at least three credit hours. Students first meet with a counselor to determine appropriate test options. After testing, students again meet with a counselor for interpretation of the test results. This process is intended to assist students by providing information for career and course planning and decision-making.

Rita and John Canning Women's Program

The Women's Program provides services and programming to assist women in achieving their educational and/or employment goals. Grant programs allow for such services as career, personal and academic counseling; job readiness preparation; information about and referral to appropriate resources; and limited assistance with tuition and book expenses for single parents, displaced homemakers, nontraditional career seekers, and individuals with limited English proficiency.

The Women's Program is located in the Student Center, Building A, Room A347.

Access and Disability Services (ADS)

The mission of Access and Disability Services is to create a comprehensively accessible environment and to empower students to become actively involved in all aspects of campus life. Harper College complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990.

New students should contact the ADS office to arrange an intake interview, apply for access/accommodations and furnish pertinent information about the nature and extent of their disability. All new students will be interviewed and will participate in the College assessment program. The ADS office assists students in choosing their courses, setting career goals, maintaining good academic standing and planning for after college. In addition, the ADS office offers students the use of a wide variety of specialized equipment and works closely with the faculty and staff of other departments at Harper to insure that the campus is physically, electronically and programmatically accessible to students with disabilities.

Specialized support for students with ADD or learning disabilities is available. Contact the Coordinator of L.D. services. Diagnostic testing for learning disabilities is also available for a fee. New students will be assigned to a L.D. Specialist and participate in a First Year Experience (FYE101) course for college credit.

Students interested in securing access or services should contact ADS at the earliest possible date at 847.925.6266 (voice) or 866.327.1630 (VP). Some services such as conversion of print material to digital, large print, auditory or Braille format require 4 -6 weeks lead time. The ADS office is located in Building D, Room D119. Availability of some services may be limited or delayed for students who turn in requests after the last full day of open registration, prior to the start of a semester.

ADS also provides information, accommodations and services to campus visitors as needed. Requests for information or services should be made to the director of ADS. Employees of the college who need reasonable accommodations should contact Human Resources to obtain procedures for requesting accommodations.

Kimball Hill Family Deaf Institute

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

Health and Psychological Services and Wellness Programs

Academic achievement and the completion of educational goals are largely dependent upon the physical and psychological well-being of the student. The goal of Health and Psychological Services, located in the Student Center, Building A, Room A364, 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 and Psychological Services team consists of an adult nurse practitioner, consultant physician, registered nurses, and a licensed clinical psychologist. The nurse practitioner, physician and psychologist are available to diagnose, treat and refer Harper College students as necessary.

Health care services offered include physical examinations, treatment of acute illness, tests for strep, mono, pregnancy, as well as communicable and sexually transmitted diseases. A licensed clinical psychologist is available to provide evaluation, treatment and referral to students currently enrolled in six or more credit hours in fall or spring semesters, or in three or more credit hours in summer session.

Students are encouraged to use Health and Psychological Services which are confidential and free or low cost. A valid College ID card is required to access services.

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

For further information, call 847.925.6268.

Student Activities

A comprehensive activities program is available which includes a college/community program series of lectures, concerts, films, art exhibits and theater productions sponsored by a student-faculty Cultural Arts Committee; social programs of concerts, films, special events and other programs of interest sponsored by the student Campus Activities Board; student publications including the College newspaper, *The Harbinger*; and a literary and visual arts publication, *Point of View*; Pom Pon/Dance Company; an FM student radio station, WHCM; theater and speech team activities; free legal and medical advice; personal financial guidance; student government; and a program for student leadership development. These programs are financed by student activity fees.

Numerous clubs are active, and students are encouraged to begin other organizations within the established guidelines. Among the clubs recognized are: ADS Success Club, Anime Club, ASL Club (American Sign Language Club), Astronomy Club, Black Student Union, Chess Club, Deaf Club, Food Service Club, Future Education Association, Harper Association of Mathematics, Harper College Campus Ministry, Harper College Chapter of the SCI-FI Fantasy and Gaming Club, Harper College Clay Guild, Harper College Dance Company, Harper College Democrats, Harper Environmental Club, Think Tank, Harper's Bizarre Fashion Club, Honors Society, Horticulture Club, Indian Pakistani Student Association, International Students' Club, Harper Pride, Kappa Beta Delta, Lambda Epsilon Chi, Latinos Unidos, Literature and Creative Writing, Model United Nations, Multicultural Advisory Board, MSA (Muslim Student Association), Nursing Club, Phi Theta Kappa, Robotics Club, Sign Language Interpreting Club, Sociology Club, Spirit Crew, Stop AIDS Harper, Student Ambassadors, and the Wm. Rainey Harper Amateur Radio club.

The Student Activities office is located in the Student Center, Building A, Room A336. Additional information can be found at harpercollege.edu.

Student Senate

The Student Senate is the student government body through which students are represented to the Board of Trustees, administration and faculty. Members are responsible for recommending the 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, recognize student clubs and organizations and in general promote student welfare.

Athletics

Intercollegiate

Harper College offers 13 Intercollegiate sports: Football, 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 & Field and Women's Track & 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, Grand Rapids, Mich. (football only) 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.

Intramurals

The structured intramural program includes men's and women's sports leagues, contests and tournaments. Information on intramural activities is available in the Wellness and Sports Center, M219, or contact the coordinator of intramurals in the Wellness and Sports Center, M219, 847.925.6963.

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. The Fitness Center is located in the Wellness and Sports Center, M162. Call 847.925.6919 for details.

Success Services for Students

Tutoring Center

Writing Center

Resources for Learning Division

Success Services for Students, Tutoring Center and Writing Center provide services to help students succeed in college.

Success Services for Students

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

Students can obtain 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 specific 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.

Services are free of charge to Harper students. Appointments may be scheduled by coming directly to Building F, Room F332, or by calling 847.925.6715.

Community Success Services

Sessions are offered to high students and community members for a fee of \$25 per hour. For additional information, call 847.925.6715.

Tutoring Center

Free tutoring is available in more than 90 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 and workshops. Study guides are also available for certain courses.

For additional information and hours of operation, contact the Tutoring Center in Building F, Room F315, or call 847.925.6539.

Community Tutoring Center

Harper's Community Tutoring Center serves students of all ages in the community. Qualified tutors will offer help to students in various areas including mathematics, accounting, computers, biology, English, chemistry and writing. Cost for the one-on-one tutoring session is \$25 per hour.

Tutoring sessions are scheduled by appointment only. Contact the Community Tutoring Center in Building F, Room F315, or call 847.925.6888 for more information.

Writing Center

The Writing Center provides a workshop learning environment designed to facilitate the preparation of written academic work. Technology tools, print resources, and consultations with professional writing specialists support the drafting, revising, editing and documenting of scholarly work. Since the Center operates as a walk-in service, students are advised to allow ample time for a consultation. Writers must prepare a printed draft before consultation with a specialist. Technical assistants provide support in using the Center's computer facilities to complete writing tasks.

The Writing Center is part of the Academic Resource Center, Building F, in room F303. The Center is closed when classes are not in session. For additional information, call 847.925.6000, ext. 2719.

Library Services Resources for Learning Division

Library Services, located in Building F, teaches students how to find and evaluate information for their research, provides print and electronic resources, and creates a learning environment which encourages active self-inquiry. The goal is to create a dynamic, functional relationship between information and people. The collection contains more than 300,000 books, and over 15,000 newspapers, magazines and journals (print and online). The collection also includes streaming video and compact discs. Access to reference services, library instruction, interlibrary loan, electronic resources, College Archives, reserve materials, laptops, copy machines and an online catalog is provided. Materials added to the collection are catalogued using the Library of Congress system. Individual study spaces and study rooms for small groups are also available. Viewing and listening spaces, each equipped with a variety of media, are used to support individual instruction.

The library's online catalog (I-Share) provides access to over 70 academic library collections in Illinois. All electronic resources can be accessed remotely or through workstations on the first and second floors of the library. A valid College ID card is required for borrowing materials. For more information, call 847.925.6184 or visit the Library Services Web site at harpercollege.edu/library.

Distance Learning Classes Center for Innovative Instruction

A variety of courses are available to students via the World Wide Web. Online, teleweb (media viewing with an Internet component) 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. Campus visits for orientation and proctored testing may be required. Harper uses Blackboard™ (<http://harper.blackboard.com>) for courses offered via distance delivery.

Harper also offers selected telecourses (media viewing) in history, and political science. Most telecourses have a mandatory, on-campus orientation session that provides an introduction to the instructor and course expectations. These courses often require campus visits for proctored testing. Courses may be viewed on cable TV within the Harper district area, rented from the Bookstore for a fee or viewed at the main campus Library or at select area libraries without cost. Please check with your local cable TV company to verify availability of the Harper channel access in your area as well as DVD and /or VHS tape access at your local library.

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>) and the Illinois Virtual Campus (<http://www.ivc.illinois.edu>). Discussion with a Harper counselor prior to registration is advised as students who want to enroll in courses delivered from these sources must follow specific procedures.

For information about current distance learning courses offered at Harper College, call 847.925.6586 or visit Harper Online at harpercollege.edu/distancelearning.

Computer Labs

More than 1,300 computers provide access to the Internet, the Harper Web site and program specific software.

Open Labs

Harper has three large open labs that are staffed to assist students with logging on and off, accessing specific programs and printing their work. Labs are open to all currently enrolled Harper students. Distance learning students are welcome to use these labs.

Following is a list of open computer labs and locations:

I Mega Lab

Building I, Room I223
847.925.6000 ext. 2372 and 2870

Fall and spring semesters hours:
Monday–Friday, 6:45 a.m.–11 p.m.
Closed Saturday
Sunday, 8 a.m.–6 p.m.

Summer session:
Monday–Thursday, 7 a.m. –10:30 p.m.
Closed Friday, Saturday and Sunday

Y Mega Lab

Avanté, Building Y, Room Y203
847.925.6000 ext. 6966

Fall and spring semesters hours:
Monday–Thursday, 6:45 a.m.–11:00 p.m.
Friday and Saturday, 8 a.m.–6 p.m.
Closed Sunday

Summer session:
Monday–Thursday,
6:45 a.m.–11 p.m.
Closed Friday, Saturday and Sunday

**Desktop Application Lab
Northeast Center (NEC)**

1375 South Wolf Road, Room 236
Prospect Heights, IL
847.925.6001

Fall and spring semester:
Monday, 10 a.m.–5 p.m.
Tuesday–Wednesday, 2 p.m.–5 p.m.
Thursday, noon–5:00 p.m.

All Machines in the Open Labs have:

Hardware: workstations and printers

Software: OS – Windows XP Pro and Office 2002, 2003 and 2007 – a complete install with full clip art, VBA and Speech recognition, 2007 compatability package; Word, Excel, Powerpoint, Access, Internet Explorer 6.0, Firefox, McAfee VirusScan 8, Acrobat Reader 8.0, Realplayer 10.0, Quick Time 6.4, Flashplayer MX Plugin (for IE and Foxfire) Shockwave Player MX Plugin (for IE and Foxfire) MS Windows Media Player 10.0.

As new releases become available, packages will be upgraded as appropriate to the academic calendar.

In addition, each of the three open labs have program specific software. Your faculty can direct you to the appropriate lab for the course in which you are enrolled.

Cyber Cafes – Internet only

William’s Web – Building L, across from the Bookstore

Hawk’s Nest – Student Center, near Violet’s Café

Special Purpose Open Labs

Writing Center

Building F, Room F303
847.925.6000, ext. 2719

Fall and spring semesters hours:
Monday–Thursday 8 a.m.–8 p.m.
Friday, 8: a.m.–2 p.m.

Summer session:
Monday–Thursday, 9 a.m.–7 p.m.

Lab is open to all currently enrolled Harper students seeking assistance with writing. Distance Learning students are welcome to use this lab.

Allstate Technology Lab

Building D, Room D119
847.925.6266
Monday–Friday, 8 a.m.–4:30 p.m.

Any Harper credit or Continuing Education student with a documented disability, who has registered with the Access and Disability Office, may use this lab. Assistance in creating, composing and writing assignments is available as well as use of specialized software and hardware, such as:

- Dragon Dictate and Naturally Speaking
- speech to text software
- JAWS – text to speech software
- MAGIC – screen magnification software
- Duxbury – text to Braille software
- Kurzweil – reading software
- Alpha Smart keyboards
- portable note taker device

Math Lab

Building D, Room D107
847.925.6395

Fall and spring semesters hours:
Monday–Thursday
8:30 a.m.–3:30 p.m. and 5–8 p.m.
Friday 8 a.m.–noon

Summer session:
Monday–Thursday
8:30 a.m.–3:30 p.m. and 5–8 p.m.

Harper College Bookstore

The Harper College Bookstore, located in Building L, is a resource for required textbooks, supplies, study aids, dictionaries 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 Bookstore has rental textbooks and eBooks available for many titles which can save you 50% to 62% off the price of a new textbook. Inquire with the customer service counter to find out which titles are available and specifics of the program.

The Bookstore offers a pre-paid pick-up and home delivery service for your convenience. Orders can be placed with the Bookstore Web site at harperstore.com.

Cash, checks, MasterCard, Visa or Discover Card can be used to pay for purchases. If you are paying by check or credit card, you must have a picture ID. If you plan to use financial aid or have a scholarship to purchase books, arrangements should be made with the financial aid office before making any purchases.

Bookstore Refund Guidelines

Save Your Receipts

Merchandise that is unmarked, and in original purchase condition may be returned for refund within 14 days of the date on the receipt, or 14 days from the semester start in which it was purchased. A receipt must accompany all refunds.

Textbook Buyback

The Bookstore offers a year-round buyback service. Up to 50% of the new price will be paid for textbooks that will be used for the next semester (quantities may be limited). National market value will be paid for all other books. Study guides, workbooks and lab books are acceptable only if pages are intact and contain no writing.

For more information, call the Bookstore at 847.925.6275.

Dining Services

The Harper Dining Services offers breakfast and lunch Monday through Friday in the Cockrell Dining Hall located in Building A. Dining Hall operating hours during the regular school year are as follows:

Monday through Thursday 7:30 a.m.–5:00 p.m.

Friday 7:30 a.m.–2:30 p.m.
(Service hours subject to change without notice.)

There are snack bars located in Avanté, building L and Building J which are open Monday through Thursday from 8:00 a.m.– 8:30 p.m. Dining Services also maintains food and vending machines located in buildings throughout the campus. Food purchases can be paid for with cash, MasterCard, Visa or Discover. Dining Services also provides on-campus catering for approved student activities and special events. For information call 847.925.6253.

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. – 5:45 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.
- 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.

Harper College 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:

<http://dept.harpercollege.edu/police/pdfs/12817emerg.pdf> and http://dept.harpercollege.edu/police/pdfs/Overview_of_the_Emergency_management_Base_Plan.pdf

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 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 Harper College Police Department at 911. For non-emergency information call 847.925.6330.

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 website.

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 website. 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.

ID Cards

All credit students (i.e., those who pay a student activity fee) are entitled to a free photo ID Card, known as the HarperCard. The HarperCard ID 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 and for many other campus services. Check at the Box Office about fees for lost, stolen or damaged cards.

Students may get their HarperCard ID in the Box Office, J135. Questions can be directed to 847.925.6000, extension CARD (2273).

Box Office

Harper College offers two box office locations. J Theatre Box Office is located in Building J, J135. The hours are 8 a.m.–7 p.m., Monday–Thursday and 8 a.m.–4:30 p.m., Friday. The Daily Herald Box Office is located in the Performing Arts Center. The box offices are open one hour before the start of each program. Any changes or additions to featured programs will be announced through College publications and the news media.

Regular priced tickets may be purchased at harpercollege.edu or by telephone: 847.925.6100.

Visa, MasterCard or Discover are accepted. To purchase tickets by mail, send ticket requirements, self-addressed stamped envelope and check made payable to Harper College.

Mail to: Harper College Box Office, Building J, 1200 West Algonquin Road, Palatine, IL 60067

Some programs may sell out in advance. Harper students with a current HarperCard may purchase a limit of two tickets at the student price. Harper faculty and permanent staff may also purchase a limit of two tickets at the student price.

General admission, student, staff and senior tickets may be purchased by phone, Internet or mail. Students and staff must pick up tickets in person and show their current HarperCard to receive their tickets.

Special Note: Event subject matter, times, dates and venues and Box Office hours are subject to change. Call the Box Office at 847.925.6100 for the latest updates.

Federal and State Laws

Americans with Disabilities Act

Drug Free Schools and Communities Act

Family Educational Rights and Privacy Act

Equity in Athletics Disclosure Act

Jeanne Clery Disclosure of Campus
Security Policy and Campus
Crime Statistics Act

Religious Observances Policy

Student Right to Know Act

College Policies

Academic Honesty Policy

Bulletin Boards and Publicity

The Student Center

Communicable Diseases Policy

Discrimination Complaint Procedure

Distribution of Literature and
Use of Tables or Display Space

Locker General Use Statement

Non-Solicitation Policy

Policy Regarding Sexual Offenses

Sexual Harassment Policy

Smoking Policy

Speakers Policy

Student Activities Awards Programs

Student Code of Conduct and
Dispute Resolution Procedures

Student Dress

Technology and Information Resources
Acceptable Use Guidelines

Workplace Violence Policy

This section includes information on 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 mailed to district residents and schedule printouts posted throughout the College provide specific information regarding class times and registration procedures.

Federal and State Laws

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 in the Building D, Room D119, or telephone 847.925.6266 (voice) or 847.925.6011 (TTY). 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.

Drug Free Schools and Communities Act

It is the policy of Harper College to provide a drug and alcohol free environment and workplace 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.

These sanctions will be consistent with local, state and federal laws in reference to the Cannabis Control Act, the Controlled Substance Act and the Liquor Control Act. Students and employees are reminded that these laws provide for a variety of legal sanctions and penalties which include, but are not limited to, incarceration and monetary fines. Further information on these local, state and federal ordinances and statutes will be maintained on the Harper Web site at harpercollege.edu.

Students and employees are encouraged to access this information.

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 after 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 bi-annual reviews of the drug and alcohol abuse programs to determine their effectiveness and implement appropriate changes.

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 students' 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 students, except to officials of other institutions in which students seek to enroll; to persons or organizations providing students 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; and 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 staff member 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 personnel such as faculty, counselors and administrators, 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, e-mail address, 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, photographs, degrees and awards received and 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 Vice President 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, and academic cooperative education, disclosure and placement records.

Students wishing to review their education records must make 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, 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 students' 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 Vice President 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 Vice President of Student Affairs of their right to a formal hearing. Students' requests for a formal hearing must be made in writing to the Vice President 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 students' 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 place with the education records 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 the 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 Registrar's Office, Student Center, Building A, Room A213.

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 harpercollege.edu/about/consumer.shtml
Hard copies are available upon request.

Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act

The Clery Act requires colleges and universities to disclose data on 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 at harpercollege.edu/about/consumer.shtml.
Hard copies are available upon request.

Religious Observances Policy

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, and accordingly encourages the instructional and administrative staff to make reasonable accommodations to minimize the resulting difficulties for individuals concerned. In compliance with the Higher Education Religious Observances Act (110 ILCS 110/0.01), students faced with such conflicts must make prior arrangements with the instructor five (5) school days* in advance of the examination or other activity creating the conflict. 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.
Hard copies are available upon request.

College Policies

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 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 requiring 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 dishonesty that is not related to a specific course, the student may be disciplined in accordance with the Student Conduct Policy with the appropriate vice president involved in the decision.

Bulletin Boards and Publicity

Announcement of College events can be found on:

- print event listings, distributed to all students who have paid an activity fee, and to all community members who request one from the Student Activities office.
- the online Events Calendar (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 Activities office and may be hung or distributed only in designated locations according to posting guidelines. Recommended poster 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 logo. A poster service is available to student clubs and organizations through the Student Activities office, Student Center, Building A, Room A336. A

three-week lead time is requested for posting and the poster service. Generally, posters will be displayed for a period not to exceed three weeks. Exceptions to these regulations may be requested through the Student Activities office.

If space allows, bulletin boards may also be used for announcements of events by non-Harper not-for-profit organizations; contact the Student Activities 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).

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, refer to the Student Activities "Posting Policy Guidelines" online at harpercollege.edu

The Student Center

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, game room, video arcade, three TV areas, lounges, meeting rooms and offices for student government, clubs and organizations, student publications, student development and health services.

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

- Playing cards or table games, visiting and studying are not permitted in the Student Center dining hall between 10:30 a.m. and 1:30 p.m. The second floor lounge and third floor game room may be used for these activities at any time. However,
- Students are expected to be respectful of others who are using the facility.
- Regulations governing the use of the third floor of the Student Center are posted in that area.
- 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, lounge area and game room may be closed during formally scheduled activities in the lounge.

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 Vice President of Student Affairs 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 Vice President of Student Affairs 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.

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).

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 appropriate Vice President 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 Vice President for HR/Diversity and Organizational Development 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 appropriate Vice President by filing an appeal with the President within five calendar days of receipt of the Vice President's decision. The President shall respond within 30 calendar days of receipt of the appeal.

Distribution of Literature and Use of Tables or Display Space

The College encourages student organizations, individuals and agencies to interact and communicate directly with Harper students in the Student Center, Building Z or in Building J lobby. In the designated areas, tables may be set up without charge for representatives of student organizations, as well as representatives of non-profit, non-commercial organizations in accord with the following rules:

1. The space is available only upon advance request, which shall be obtained by filing a reservation form in the Student Activities office, Student Center, Building A, Room A336; 847.925.6242.
2. Space shall be allocated on a first-come, first-served basis. It shall be requested at least five days prior to desired date. Requests for a subsequent semester will not be accepted earlier than six weeks prior to the beginning of that semester.
3. No displays or distribution shall be conducted when the lounge is reserved for an activity.
4. A maximum of three tables or displays may be placed in the designated area in the Student Center at the same time, and a maximum of two may be placed in the designated area of either Building Z or Building J at the same time. Tables will be provided by the College. Displays shall not exceed 4' x 8' in size. The tables and displays will be placed next to the windows along the south corridor of the Student Center lounge in front of the glass case near the Z119/111 sign, or along the north wall by the events sign in the Business and Social Science Center.
5. In order to allow as many groups as possible to be represented in the Student Center, Building Z, and Building J, an exhibitor may reserve a space for a maximum of once a week, per organization. If preferred, space may be reserved for a maximum of one week per semester.

6. 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. No more than four, nor less than one person(s), shall staff any display.
7. Displays may not be distributive in nature. No sound amplification equipment may be used in the designated area.
8. Representatives of organizations or individuals may communicate anywhere in the designated area.
9. Representatives of organizations or individuals must clearly identify themselves to Harper students.
10. Alcoholic beverages, narcotics, profane language, quarreling, fighting or gambling are prohibited. Smoking is also prohibited.
11. The solicitation of funds, the sale of goods or services, or advertising for the sale of goods or services is prohibited except:
 - a. by student organizations as part of a bona fide fund-raising activity for the organization; and
 - b. by a tax-exempt charitable organization, if approved by Student Activities.
12. The distribution of literature that is obscene or pornographic is prohibited.
13. Literature may be sold and contributions solicited in the designated areas.
14. The individual or organization is responsible for prompt payment of any damage to the College property.
15. The College may assume a violation of regulations has occurred if an organization does not staff its reserved space for two reserved dates without notifying the Office or Director of Student Activities. In the event of such a violation, the College may cancel the balance of the reserved time.
16. Violation of the regulations shall result in the revocation of the organization's or individual's reservation by the Director of Student Activities for the remainder of the semester or three months, whichever is longer, by service of a cancellation notice in writing upon the person making the reservations. If there is a dispute as to the facts causing the violation, the party contesting the cancellation notice may, within five days of the cancellation, request the Vice President of Student Affairs to hold a meeting with the aggrieved party and the College office cancelling the reservation to review the alleged violation.

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 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

Employees of the College are required at all times to perform their duties in such a manner that they present a proper and official image to the community and avoid the activities that may result in personal or private gain. Toward that end, class lists and any other data about students are to be utilized solely for College instructional, administrative, advising/counseling and business purposes. Use of this information for personal or business solicitation is strictly prohibited.

Policy Regarding Sexual Offenses

Harper College is committed to providing a safe environment for its students, free of harassment, coercion and violence. Moreover, Harper College recognizes that it is a part of a larger community and is obligated to uphold the laws of that community. Although the College policies and procedures and the laws of the community may overlap, they also function independently from one another.

It is illegal and against the policy of Harper College for any student, employee or other person to commit the offense of stalking (when such person transmits a threat with intent to place the victim in reasonable apprehension of sexual assault), sexual assault, aggravated sexual assault, sexual abuse, aggravated sexual abuse, as defined in the Illinois Criminal Code of 1961, 720 ILCS 5/12-7.3, 12-13 through 12-16, against any person while on the Harper College campus, at a College activity or off-campus if there is a direct relationship between the sexual offense and the College. Such illegal and prohibited activities include, but are not limited to, sex offenses which are commonly called date rape or acquaintance rape, or which may involve unwanted touching or fondling, whether forcible or non-forcible.

In conformance with these Acts, the President of the College shall establish a program and rules to implement this policy. The rules will be delineated in the Administrative Services Procedure Manual, the Academic Affairs Procedure Manual, the Student Affairs Procedure Manual and other appropriate publications.

Rules and Regulations

A. Introduction

These procedures clarify definitions of acquaintance rape and sexual assault, outlines the steps the institution is taking toward education, prevention and treatment, sets forth disciplinary procedures that may occur when acquaintance rape/sexual assault has taken place on the campus and explains resources available to Harper College students who are victims/survivors of acquaintance rape/sexual assault.

B. Definitions

Acquaintance rape is defined as forced, manipulated or coerced sexual contact by someone the victim knows. Under Illinois law, acquaintance rape is a crime—the law makes no distinction between sexual assault by strangers or acquaintances. Any forced sexual conduct including forced touching and fondling is also a crime under Illinois law. Under this law, consent cannot be given by someone under the age of 18, someone under the influence of alcohol or someone who is diagnosed with a mental disability and therefore unable to make a reasonable judgment about the harmfulness of an activity.

C. Reporting Procedures

1. If any person believes that he or she has been a victim of a sexual offense, such person should report the alleged sexual offense immediately to the Vice President of Student Affairs, a faculty member, administrator or Harper College Police. If an employee other than the Vice President of Student Affairs receives a report of a sexual offense, the employee shall report the alleged sexual offense to the Vice President of Student Affairs.

2. Such person who believes he or she is a victim of sexual offense has the option of also notifying any other law enforcement authorities, including on-campus Harper College Police and local police. The Vice President of Student Affairs shall offer to assist such person in notifying law enforcement authorities, and will assist such person if he or she so requests.
3. There are no express time limits for initiating reports under this Policy; however, every effort should be made to file such complaints as soon as possible, while facts are known and potential witnesses are available.
4. The victim of a sexual offense shall make every effort to preserve evidence as may be necessary for the proof of the sexual offense.

D. Notification to Victims of Sexual Offense

Upon receipt of a report of an alleged sexual offense, the Vice President of Student Affairs, or designee shall notify the victim of his or her right:

1. To report the sexual offense to other law enforcement authorities including on-campus Harper College Police and local police.
2. To be assisted in reporting the sexual offense to such law enforcement authorities.
3. To seek the services of existing counseling, mental health, medical or student services for victims of sexual offense, both on-campus and in the community.
4. To receive assistance in changing academic situations if the victim is a student, and if such changes are reasonably available.

E. Investigation

1. The Vice President of Student Affairs shall undertake an investigation of all reports of sexual offense or appoint a qualified person (including the Harper College Police) to conduct the investigation.
2. The accused shall be notified in a timely manner that an investigation is being conducted.
3. The investigator shall file a written report of his/her findings with the Vice President of Student Affairs and the President within twenty-eight (28) days after the report of a sexual offense has been made. In the event the investigative report cannot be completed within twenty-eight (28) days, the report shall state the reasons for the delay. Both the accuser and accused shall be notified of the finding of the investigation.

F. Disciplinary Procedures

The person accused and found guilty of a sexual offense through the Harper College investigation shall be subject to disciplinary action in accordance with established procedures, which procedures shall provide at a minimum that (1) the accuser and the accused are entitled to the same opportunities to have others present during a campus disciplinary proceeding; and (2) both the accuser and the accused shall be informed of the outcome of any campus disciplinary proceeding brought alleging a sexual offense.

G. Sanctions

An employee found to have committed a sexual offense against another individual will be subject to discipline, up to and including termination.

A student found to have committed a sexual offense against another individual will be subject to discipline, up to and including expulsion and/or barring the student for re-enrollment in the College. Any other person found to have committed a sexual offense against another individual may be barred from the College campus.

H. Prevention and Education

The Student Development Sexual Assault/Prevention Task Force is dedicated to the prevention of sexual offenses. The Task Force's goal is to educate and promote awareness of rape, acquaintance rape and other sexual offenses. In furtherance of this goal, modules have been developed by counselors to address this issue and facilitate discussion in the classroom. The prevalence of the connection between the use of alcohol and other drugs and the occurrence of acquaintance rape is an important part of this discussion. Counselors are available to faculty campus-wide to present these modules which can be modified depending on the classroom subject area.

A fact sheet about acquaintance rape and a list of resources are included in the orientation packets for new students and is available in the Health and Psychological Services and Student Development offices.

I. Services for VictimsOn-Campus

Student Development counselors will provide assistance to a victim in changing academic situations after an alleged sexual offense incident if such changes are reasonably available.

The Office of Harper College Police is committed to the safety and security of the students and will make appropriate efforts to safeguard the campus.

Off-Campus

CASA-Northwest is a local agency which can provide free counseling and advocacy services to Harper students or employees who are victims/survivors of sexual offenses. The agency is also utilized as a resource for training Harper staff and provides consultation in person or via telephone.

Sexual Harassment Policy

It is the policy of Harper College that no staff member or student shall be subject to sexual harassment.

Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- A. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or education;
- B. Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting that individual; or
- C. Such conduct has the purpose or effect of substantially interfering with an individual's academic or professional performance or creating an intimidating, hostile or offensive education or employment environment.

Individuals engaging in such prohibited activity shall be subject to disciplinary action up to and including termination from this institution as determined by such administrative or Board action as is required by Illinois law or by Board policy. This policy applies to acts of sexual harassment by any member of one sex against a member of the opposite or the same sex at all levels of the College community (i.e., supervisor-subordinate, faculty-student, employee-peer, student-student).

Rules and Regulations**A. Reporting**

If a student believes that she/he has been sexually harassed, the student should report the alleged act immediately to the Vice President of Student Affairs.

B. Investigation

1. The Vice President of Student Affairs or the Vice President for HR/Diversity and Organizational Development shall undertake an investigation of all such complaints or appoint an administrator or other qualified person to conduct the investigation. No complaint or identity of a complainant will be disclosed except when necessary to fully investigate the complainant and after notification to the complainant. After a written complaint has been filed, the person accused of sexual harassment shall be notified of the substance and content of the complaint expeditiously.
2. The investigator shall file a written report as to his/her findings with the Vice President of Student Affairs or the Vice President for HR/Diversity and Organizational Development within twenty-eight (28) days after a written complaint has been made. In the event the report cannot be completed within twenty-eight (28) days, the report shall state the reasons for the delay. The complainant and the person accused shall be notified of the findings of the investigation.
3. If the investigation discloses evidence that an act or acts of sexual harassment have been committed, the person accused of sexual harassment may be subject to disciplinary action in accordance with established procedures. Also, one or both parties may be recommended for counseling in order to understand the nature and/or deal with the consequences of the complaint.

C. Dissemination of Policy

1. Any student is encouraged to raise questions she/he may have regarding sexual harassment with Student Development counselors or other faculty members or administrators, including vice presidents or the president.
2. A copy of the Student Handbook containing Board policy and implementing regulations shall be made available to students annually.

Smoking Policy

It is the policy of Harper College to provide a smoke/tobacco free environment consistent with its efforts to promote wellness and a campus environment conducive to work, study and activities for students, employees and the public. The policy pertains to all of the facilities of Harper College, which includes all owned or leased facilities, regardless of location.

The College recognizes the rights of those who choose to use tobacco and does not prohibit the use of tobacco products. It does, however, in accordance with the State of Illinois Public Act 86-1018, the Illinois Clean Indoor Air

Act (effective July 1, 1990), and the Smoke Free Illinois Act (effective January 1, 2008), restrict the use of these materials to designated areas outside College buildings and vehicles.

This policy complies with the Americans with Disabilities Act, which provides smoke-free entrances for employees and students with respiratory and other conditions affected by exposure to smoke. In addition, in accordance with the American College Health Association guidelines, smoking will be prohibited in outside athletic and classroom areas, which include but are not limited to, the tennis courts, baseball and football fields, track and field areas, and stadium and seating areas.

As defined in this policy, tobacco products include cigarettes, cigars or tobacco in any other form, including smokeless tobacco which is any loose, cut, shredded, ground, powdered, compressed or leaf tobacco that is intended to be placed in the mouth without being smoked.

A map of the designated smoking areas is available online and at all information desks.

Health and Psychological Services will offer assistance to staff and students who desire to quit smoking through cessation workshops and other support.

In the event of a disagreement between a non-smoker and smoker, the rights of the non-smoker to protect his/her health shall prevail over the rights of the smoker.

Speakers Policy

Harper College respects the right of all members of the academic community to explore and to discuss questions which interest them, to express opinions even if unpopular, publicly and privately. It is the policy of the College to make its facilities available for peaceful assembly, to welcome guest speakers and to encourage the exercise of these rights free from disruption or interference.

Recognized student organizations may invite guest lecturers, panel participants, discussion leaders or others from off campus to speak, provided such programs are registered with the Student Activities office four weeks in advance; (If the program is open to only members of the sponsoring organization – and not open to other students or the public – then two weeks advance notice is sufficient). All expenses involved in retaining the speaker shall be specifically provided for by the sponsoring organization at the time of registration.

No arrangements with guest speakers are to be made until the registration with the Student Activities office has been completed. Individual students may request guest speakers through recognized campus organizations under the above procedures.

Permission to appear at the campus does not imply College endorsement of a speaker or an issue.

Limitations on speakers are warranted only when the Vice President of Student Affairs office deems their appearance or content of their speech represents a real threat toward maintaining campus order (e.g., it is obscene, defamatory, or intent on inflicting emotional distress, or it invites lawlessness or contains “fighting words”). In such cases, an ad hoc speakers committee composed of three faculty members appointed by the

Vice President of Academic Affairs, three students chosen by the Student Senate, subject to approval of the Vice President of Student Affairs and the Coordinator of Media Relations shall determine whether or not the speaker will appear.

The committee’s decisions may be appealed by either the sponsoring organization or the Vice President of Student Affairs office, and subject to the approval of the College President and Board of Trustees. Should the speaker represent a real threat toward maintaining campus order after being contracted, the Vice President of Student Affairs office or the sponsoring organization with the approval of the Vice President of Student Affairs office may cancel the contract.

In the event the speaker or issues are not deemed a real threat toward maintaining campus order but are deemed controversial or extreme by the Vice President of Student Affairs office, the sponsoring organization shall obtain a member of the faculty to chair the program, and shall provide time during the program for the audience to question the speaker.

Student Activities Awards Programs

The annual Student Awards Banquet program recognizes outstanding contributions by students in all areas of the Student Activities program. Nominations are submitted by individual organizations and faculty advisors, generally in March. The students are honored at an awards banquet sponsored by the College in May and given awards in the form of plaques, special awards or certificates depending upon the particular level of activity.

Student Service Awards reimburse full (up to 12 credit hours) or half-tuition (up to 6 credit hours) for students who have made outstanding contributions to student activities. These awards are granted for one semester. Since the budget is limited, only a specific number of students in each club are eligible for consideration. Club and organization officers and members may be nominated by the advisor and/or other students, based on their performance, position, responsibility, leadership, length of service and involvement in Harper’s student leadership program. Only students who have served in their position 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 Student Activities office.

Student Code of Conduct and Dispute Resolution Procedures

I. Introduction

The core values of Harper College are:

Integrity
Respect
Excellence
Collaboration

These values are the hallmark of the College and will be protected vigorously. When students choose to attend Harper College, they accept the rights and responsibilities of membership in the College’s academic and social community. Each person has the right and ability to make personal decisions about his or her own conduct. Just as importantly, each person has the responsibility to live with the consequences of his or her decision-making.

Students have rights under the United States Constitution, which may be exercised in the College as in other public institutions. The law recognizes that these rights are subject to restraints that may be imposed because of the College's role and function. It is the policy of the Board of Trustees of Harper College to respect the properly exercised rights of the students.

The Student Code of Conduct describes misconduct that is inconsistent with the essential values of Harper College. It lists procedures to respond to such behaviors, and it provides for sanctions that are intended to educate and to safeguard members of the College community. If you have any questions about this Code, please contact the Office of the Vice President for Student Affairs (D129/847.925.6738).

The term "school days" as used in this "Student Code of Conduct / Discipline and Dispute Resolution Procedures" means those weekdays (Monday through Friday) when classes are in session.

II. The Student Code of Conduct

A. Violations of Code

Whenever a student commits or attempts to commit a violation of the Student Code of Conduct as set out below on the College campus, or at an activity, function or event sponsored or supervised by the College, discipline and sanctions may be imposed on the student. Discipline may also be imposed whenever a student commits a violation of this Student Code of Conduct off campus, if the misconduct adversely affects the College community or the pursuit of its educational objectives.

Violations of the Student Code of Conduct include but are not limited to:

1. Possession, use or distribution of an illegal or controlled substance, or look-alike drug.
2. Unauthorized and/or illegal possession, use or distribution of any alcoholic beverage.
3. Theft of property or services.
4. Intentional or willful and wanton destruction of property.
5. Assault and/or battery.
6. Conduct which constitutes harassment or abuse that threatens the physical or mental well-being, health or safety of any individual.
7. Sexual assault or sexual harassment of another person.
8. Possession or use of weapons or explosive devices.
9. Trespassing on College property or other unauthorized use of College property or services.
10. Abuse of College computer, network, or other technology system resources, including unauthorized distribution of copyrighted material and other violations of the Acceptable Use Guidelines as published in the Student Handbook and updated from time to time on the College website.
11. Academic dishonesty, including cheating, plagiarizing or furnishing false information on such forms as transcripts or applications for admission.

12. Disrupting the peace, the education process or related activity.
13. Failure to comply with the directions of an authorized College employee or representative who is performing his/her duties.
14. Any conduct that constitutes a violation of the terms of any discipline imposed in accordance with this procedure.
15. Any conduct that constitutes a violation of handbooks, contracts, or behavioral agreements specific to College programs or activities.
16. Any conduct that constitutes a violation of a Federal or State law, local ordinance or College rule or regulation.

B. Determination of Sanctions

In keeping with the essential values of Harper College, sanctions are designed to promote the College's educational mission. Sanctions may also serve to promote safety or to deter students from behavior that harms, harasses, or threatens people or property. Some behavior is 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 recommended.

1. Factors Considered in Determining Sanctions

Although in no way binding or definitive, the following factors may be considered in determining what sanctions are appropriate in a particular case:

- a. The nature of the violation(s).
- b. Prior violations and disciplinary history.
- c. Mitigating circumstances surrounding the violation.
- d. The student's motive or purpose for engaging in the behavior.
- e. Sanctions which have been imposed in similar cases in the past.
- f. The development and educational impact on the student.

2. Possible Sanctions

Multiple sanctions may be imposed, including but not limited to one or more of the following:

- a. **Expulsion:** Expel a student from the College, a program, course, or activity on a permanent basis.
- b. **Suspension:** Suspend a student from the College, a program, course or activity for a specified period of time.
- c. **Prohibition on Re-enrollment:** Bar a student from re-enrolling in the College, a program, course or activity for a specified or unlimited period of time, if a student withdraws prior to being suspended or expelled.
- d. **Conditional Enrollment or Re-Enrollment:** Condition a student's enrollment or re-enrollment on his or her taking or refraining from specific actions.

- e. **Disciplinary Probation Status:** Place a written reprimand in the student's file admonishing him/her about the conduct and warning that further conduct in violation of the Student Code of Conduct may result in additional sanctions.
- f. **Community and/or College Service:** A student may be offered an opportunity to complete a specified number of hours of community and/or College service.
- g. **Educational Requirements:** A provision to complete a specific educational requirement directly related to the violation committed. The provision will be clearly defined. Such educational requirements may include, but are not limited to, completion of an alcohol education workshop, a diversity awareness workshop, essays, reports, etc.
- h. **Remedial Action:** An agreement between the student and the Office of the Vice President of Student Affairs that the student shall pursue specific remedial action.
- i. **Probation and/or Restrictions:** The withdrawal of specified privileges or restrictions on action for a definite period of time (i.e., restriction from entering specific College areas and/or all forms of contact with certain person(s)).
- j. **Restitution:** A payment to compensate an injured party for financial harm, in cases involving misconduct such as theft, destruction of property or deception.
- k. **Reprimand:** A formal letter of warning or final warning shall be placed in the student's file.

III. Procedures for Resolving Alleged Violations of the Student Code of Conduct

The College encourages students, faculty and staff to resolve disputes informally in appropriate cases. A variety of means to resolve informal disputes is available. Contact the Office of the Vice President of Student Affairs for consultation.

A. Filing of Complaint

Any person may allege a violation of the Student Code of Conduct by completing a "Student Code of Conduct Referral Form" and submitting it to the Office of the Vice President of Student Affairs. The complaint shall describe the conduct in question and, if known, the name of the person or persons alleged to have engaged in that conduct. The filing of a complaint assumes that the complainant desires to initiate the inquiry that may result in official disciplinary action against the alleged violator.

B. Notification of Charges and Preliminary Investigation

Upon receiving a complaint, the Vice President of Student Affairs will designate a Resolution Coordinator who will conduct a preliminary investigation of the complaint. The Resolution Coordinator will inform the student in writing of the charge(s) against him or her, including the specific provision(s) of the Student Code of Conduct alleged to have been violated, and will request the student to attend a mandatory meeting with the

Resolution Coordinator. The purposes of the mandatory meeting are to review the charge(s) and possible sanctions in the event that the student is found to have committed the violation(s) in question; to provide the student with an opportunity to respond to the charge(s); and to review discipline and dispute resolution procedures and the student's rights in connection with those procedures.

C. Possible Outcomes of the Preliminary Investigation

1. Insufficient Cause

If the Resolution Coordinator finds insufficient cause to charge a student with violating the Student Code of Conduct, the record regarding the complaint will be purged from the student's education record.

2. Mediation

In appropriate cases, the Resolution Coordinator may encourage the complainant to pursue mediation. Mediation is a voluntary process in which the parties involved meet with a trained, neutral third party to discuss and design a resolution of the issues in concern. Mediation often results in a written agreement that is drafted and signed by both parties.

3. Student Waiver of Right to a Formal Hearing

If the violation(s) charged would not warrant immediate suspension or expulsion, the student and the Resolution Coordinator may agree to resolve the matter. In that event, the student and the Resolution Coordinator shall review the charges and the student shall accept responsibility for the charged violations of the Student Code of Conduct. The student and the Resolution Coordinator may then discuss a plan for resolving the issues involved in the misconduct, which may include agreed-upon sanctions. A student who elects to resolve the charge(s) with the Resolution Coordinator shall, after being informed of his/her rights, sign a written waiver of a formal Resolution Board Hearing and a written acceptance of the specified sanction(s) imposed.

4. Resolution Board Hearing

The student may elect to proceed to a formal hearing before a five-person Resolution Board, to be held in accordance with the procedures described in Part III.D. 2 below.

D. Hearing Procedures

1. Discipline Prior to Hearing in Certain Cases

If in the opinion of the Resolution Coordinator a student who has been charged with violating the Student Code of Conduct poses a danger to self or others, or a threat to or disruption of the educational process, or if the student cannot be located or refuses to attend the mandatory preliminary investigation meeting, the Resolution Coordinator may impose disciplinary measures without first providing a hearing.

In that event, the Resolution Coordinator shall send written notice of such measures to the student at his or her last known address by certified mail, return receipt requested. The notice shall state the specific discipline imposed and the reason for the discipline, and shall request that the student attend a hearing within five (5) school days after the notice is received. If the student does not attend the scheduled hearing, he or she will be deemed to have waived the right to the hearing.

2. Resolution Board Hearing Procedures

a. Composition of Board; Votes Required for Action

The Resolution Board will consist of three faculty members and two students designated by the Student Life Committee; provided, however, that in the event that the Student Life Committee is unable to convene because the hearing will occur during summer or due to other circumstances beyond its control, the Chair of the Student Life Committee or the Resolution Coordinator will designate three faculty or staff members and two students to constitute the Resolution Board for the case. An alternate faculty member and an alternate student member will be designated for and shall attend each hearing.

The affirmative vote of four members of the Resolution Board shall be required to take action.

b. Notice of Hearing

The Resolution Coordinator will inform the student of the hearing date and time by certified mail, return receipt requested, sent at least five (5) school days prior to the hearing date. The notice will enclose a description of the procedures to be followed at the hearing.

c. Conduct of Hearing

All Resolution Board hearings shall be held in closed session.

Prior to the hearing, members of the Resolution Board shall agree to and sign the "Resolution Board Member Responsibilities" form, and shall designate one member as Chair to facilitate the proceedings.

The hearing may be recorded. If either party causes a recording to be made, the other party shall be offered an opportunity to purchase a copy of the recording or transcript of the tape.

The student may at his or her expense have an attorney or other representative present to advise the student, but the representative may not otherwise participate in the hearing. If the student does not attend, but the Office of the Vice President of Student Affairs has proof of notice to the student of the hearing, the Resolution Board may choose either to proceed with the hearing, or to reschedule the hearing to another date.

No later than the commencement of the hearing, the charged student shall be provided with a copy of any document which the complainant intends to present as evidence during the complainant's case in chief.

At the commencement of the hearing, either party may request exclusion of witnesses other than the student who has been charged and the representative of each party. The Resolution Board will make the final determination on any exclusion of witness.

The complainant(s) and the charged student may make brief opening statements to the Resolution Board.

The complainant(s) shall first present evidence. The charged student may cross-examine any of the complainant's witnesses in attendance and may review any written evidence presented by the complainant(s).

The charged student may then present evidence to refute or otherwise to defend against the charges. The complainant(s) may cross-examine any of the student's witnesses in attendance and may review any written evidence presented by the student.

At the close of the charged student's case, the complainant shall have an opportunity to present evidence in rebuttal of the student's presentation.

The Resolution Board may, at any time, direct questions to the parties or their witnesses.

The Resolution Board may receive all relevant oral or written evidence without regard to the legal rules of evidence, provided such evidence is relevant to a determination of whether the student committed the violation(s) of the Student Code of Conduct with which he or she has been charged, and would be relied upon by reasonably prudent persons in the conduct of their affairs.

If during its preliminary investigation of the complaint, the Office of the Vice President of Student Affairs has reasonably determined that a witness to or having knowledge of the alleged violation would be subject to physical or mental harassment or reprisal if requested to testify in person or be identified by name at a hearing before the Resolution Board, the witness may be asked to prepare a written summary of his or her testimony, including a statement of the reason for the witness' absence from the hearing and a statement verifying that the contents of the summary are true. If an imminent fear of the reprisal exists, the Resolution Coordinator may also present a written statement in which the witness' identity has been concealed.

The complainant(s) and the student may make closing statements at the conclusion of the hearing concerning the issues of whether the student has committed the charged violation(s) of the Student Code of Conduct, and if so, what sanctions should be imposed for the misconduct involved.

At the conclusion of the parties' presentations, the Resolution Board shall declare the hearing closed, shall excuse the parties and their representatives, and shall then deliberate and determine

1. whether or not it has been shown, by a preponderance of the evidence, that the student committed the charged violation(s) of the Student Code of Conduct, and
2. if so, what sanctions are appropriate.

After the Resolution Board determines whether the student has committed the violation(s) charged, it may review the student's academic and disciplinary records only for the limited purpose of determining the appropriate sanction(s).

The Resolution Board shall render and forward its written findings and decision to the Resolution Coordinator within ten (10) school days after the end of the hearing.

E. Notice of Decision

The Resolution Coordinator shall provide to the student written notice of the final resolution of charged violation(s). The written notice shall be sent to the student by certified mail, return receipt requested, or by receipted-for personal delivery, within ten (10) school days of the student's signature of a written waiver of formal hearing and a meeting with the Resolution Coordinator pursuant to Part III.C.3 above, or within ten (10) school days of the Resolution Coordinator's receipt of the written findings and decision of the Resolution Board pursuant to Part III.D.2, as the case may be.

The written notice to the student shall include:

1. The specific provision of the Student Code of Conduct that was violated;
2. The sanction(s) imposed and the date(s) on or periods for which they are in effect;
3. A statement of the student's right to appeal in writing to the Vice President of Student Affairs; and
4. A statement that failure to file a request for such an appeal within the time provided in Part III.F below shall be deemed a waiver of the right to an appeal.

F. Appeal to Vice President of Student Affairs

An appeal of the result of the Resolution Process may be filed based on the following grounds:

1. Proper procedures were not followed.
2. There is new relevant evidence not reasonably available at the time of the hearing or the imposition of the sanction(s).
3. The evidence does not clearly support the finding(s).
4. The sanctions are excessive relative to the violation.

An appeal must be submitted in writing to the Vice President of Student Affairs within ten (10) school days of the student's receipt of notice of the decision from the Resolution Coordinator. The Vice President of Student Affairs will render and cause a decision to be sent to the student within ten (10) school days after receipt of the appeal. The decision of the Vice President of Student Affairs is final.

IV. Disciplinary Records

The college will maintain disciplinary records as part of the student's education record in accordance with the Family Educational Rights and Privacy Act, 20 U.S.C.S. §1232g ("FERPA").

If a student is found not to have committed a violation to the Student Code of Conduct, the record regarding the complaint will be purged from the student's education record.

If a student accepts responsibility for or is determined to have violated the Student Code of Conduct, the record regarding the complaint may be maintained in the student's education record for up to four (4) years from the date the resolution process of the charged violation concludes, except in cases where the sanction includes permanent disciplinary probation or expulsion. In such cases, the record may be maintained permanently.

Separate files may be maintained by the Office of the Vice President of Student Affairs, apart from the student's education record, in cases where there is credible evidence of a danger or threat of violence.

A student's education record, including disciplinary 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. Appropriate disclosure of disciplinary records without consent includes disclosure of information:

- concerning disciplinary action taken against the student for conduct that poses a significant risk to the safety or well-being of that student, other students, or other members of the school community to teachers and school officials, including teachers and school officials in other schools, who have legitimate educational interests in the behavior of the student;
- 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; and
- to any alleged victim of any crime of violence as defined in 18 U.S.C.S §16 or of a non-forcible sex offense, the final results of any disciplinary proceeding conducted by such institution against the alleged perpetrator of the crime or offense and shall include disclosure of the final results of any disciplinary proceedings conducted by the College against the student who is the alleged perpetrator of any crime of violence (as defined in 18 U.S.C. §16) or non-forcible sex offense if the institution determines as a result of the disciplinary proceeding that the student committed a violation of the College's rules and policies.

Final results of any disciplinary proceeding include only the name of the student, the violation committed, and any sanction imposed by the College on that student and may include the name of any other student, such as a victim or witness, only with the consent of that other student. The sanction imposed means a description of the disciplinary action, the date of its imposition, and its duration. The violation committed means the institutional rules or codes of conduct sections that were violated and any essential findings supporting the institution's conclusion that the violation was committed.

V. Student Academic Complaints

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 Vice President of Academic Affairs or designee within ten (10) school days after receipt of the dean's written response. The student may request a meeting with the Vice President or designee. The Vice President 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 Vice President shall be final.

VI. Student Non-academic Complaints

The Vice President of Student Affairs or designee shall be responsible for responding to complaints from students on non-academic issues. These issues include, but are not limited to, refunds, admissions, withdrawals, transcripts, and use of facilities.

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 conference to informally discuss the concerns. It is also recommended, but not required, that the student contact the College Ombudsperson to facilitate an informal resolution of the complaint.

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 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 Vice President of Student Affairs or designee within ten (10) school days after receipt of the

dean's written response. The student may request a meeting with the Vice President or designee. The Vice President 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 Vice President shall be final.

Student Dress

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 asked to leave campus.

Technology and Information Resources Acceptable Use Guidelines

I. Philosophy

Harper College provides for the use of technology and information equipment, software, networks and facilities to further the College's mission of instruction, communication, research and public service. 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, and users are subject to such procedures and processes, which operate in the College. Responsibility for the provision and support for the resources resides with the Information Technology organization.

II. Risk and Responsibility: E-mail, Internet Resources and Electronic Files

A. Security

The College cannot and does not guarantee the security of electronic files on its computer systems. These systems can be breached by someone determined to do so. Additionally, it is impossible to filter all materials transmitted or received via these resources. Harper College assumes no 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 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 public records as defined in the AFIRE may be subject to inspection. Any inspection of electronic files, and any action based upon such inspection, will be governed by all applicable Federal and State laws and 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 back up important work. They are responsible for learning and properly using the features of securing and/or sharing access to files.

III. Unacceptable Uses

It is the joint responsibility of all users to help avoid unacceptable uses such as but not limited to:

1. Using the resources for any purpose, which violates Federal laws, State laws or College policies.
2. Using the resources for commercial purposes.
3. Misrepresenting the user's identity or affiliation in the use of information technology resources.
4. Creating, sending, storing or soliciting patently harassing, intimidating, abusive or offensive material to or about others.
5. Intercepting, disrupting or altering electronic communications.
6. Using another person's account, user ID, name or password.
7. Sharing of individual user accounts and resources with another person or another organization.
8. Attempting to exceed, evade or change assigned specifications or limitation of an account without the approval of appropriate College personnel.
9. Impeding the use of systems by others.
10. Attempting to corrupt the system.
11. Reproducing 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, 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 Vice President for HR/Diversity and Organizational Development.

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 Vice President for HR/Diversity and Organizational Development 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 Vice President for HR/Diversity and Organizational Development. Recommendations for changes in this procedure will be brought to the Human Resources Committee.

Continuing Education

Continuing Education Computer Training

*Information Technology and AutoCAD Noncredit
Courses and CE Certificates*

Extension Centers

Workforce Development

Workforce and Business Outreach

Harper College for Businesses

Computer Training

Community Services

Community Orientation and Involvement

Community Career Services

Senior Citizen Discounts

Continuing Education

A lifelong pursuit of learning is needed to keep abreast of the knowledge explosion and the influence of social and cultural changes. The Continuing Education division makes available to the community a rich array of courses, seminars and short-term programs that encourage lifelong learning and help students meet their professional, career, civic and personal development goals.

- Noncredit Programs are available in the Community Music Center, Computer Training, Health Care Career Programs, Career Training, Personal Enrichment and Sports and Recreation. Continuing education units (CEUs) can be earned for continuing education courses, satisfying the needs of many professional development requirements.
- Youth programs in sports, enrichment, and music are available for children of all ages throughout the year as well as during our In Zone summer program for students age 8-14.
- Continuing Education instructors are working professionals who possess practical, up-to-date work experience.
- Courses are offered in a variety of traditional and alternative learning formats that include workshops, seminars and extended training sessions, and on-line courses.
- Continuing Education courses designated "credit" are career skills credit and generally cannot be applied to credit certificates or degrees. No formal application or entrance assessments are required for enrollment in career skills credit classes.
- Courses are scheduled at Harper College extension sites as well as at the main campus.
- The majority of programs provide year-round start dates and are offered during the day, in the evenings and on weekends.

Schedules for Continuing Education courses are published and distributed throughout the year. A full schedule of classes and program information is also available on the Harper Web site at harpercollege.edu/ce. For any questions, please contact Continuing Education at 847.925.6300 or e-mail ce@harpercollege.edu.

Computer Training

Information Technology and AutoCAD Noncredit Courses and Certificates

Harper College's Continuing Education Computer Training Program specializes in Certified IT Training and education that is designed for individuals who need hands-on technical and project management skills.

The program offers computer and project management training from end user software application classes to internationally recognized information technology and professional certifications. Short-term training classes help you learn efficiently and effectively to further career opportunities or explore new ones. Many classes run on nights or weekends to accommodate daytime work schedules, and many larger certification programs can be completed in just a few months.

Most courses are organized into CE Certificate programs, which are a series of classes that provide comprehensive training in subject areas that lead to professional certifications or a Harper CE Certificate.

Instructor-led training solutions are available in Microsoft, Oracle, Cisco, Novell Linux, Sun Solaris, Java, CompTIA, Project Management, Autodesk (CAD), Convergence and Wireless, Video Game Development, Web Design and Development, Adobe, Macromedia, QuickBooks and more!

The Harper College CE Computer Training Department provides training lab rentals in the Northwest Suburbs and Chicago land area. Computer Labs are available at two convenient locations, Schaumburg and Prospect Heights. Our computer labs are fully configurable and equipped with the latest technology, with a choice of operating systems and applications to meet all your technical training needs.

Microsoft Office Specialist exams are offered at the Harper Professional Center located at 650 E. Higgins Road, Suite 9 South in Schaumburg. As an authorized Prometric and Certiport Testing Center, you can take all of your technical certification exams in one convenient location.

For more information, contact a representative at 847.925.6066, E-mail: tech@harpercollege.edu or visit harpercollege.edu.

Extension Centers

Harper College operates two major sites and more than 50 neighborhood centers as a convenience to students. A wide variety of credit and continuing education courses are available at these extension centers. Sites include:

- Northeast Center (NEC), Prospect Heights
- Harper Professional Center (HPC), Schaumburg

Northeast Center (NEC), the largest of the extension centers, is located at 1375 South Wolf Road in Prospect Heights. This center features 20 classrooms and 11 computer labs. Offerings at the NEC include a daytime general education transfer curriculum, nonnative literacy, general education development (GED), the expanding Fast Track option, and a variety of professional and personal development courses. The Lifelong Learning Institute for adults 55+ is housed at the NEC and provides more than 100 learning opportunities at various off campus locations.

Located in the Harper Professional Center (HPC), the CE Computer Training Program is centrally located to serve businesses in the Schaumburg area, and provides easy access for students. Certified training in the latest technologies for IT professionals meets the demands of the high-tech industry. The HPC is an authorized Prometric Testing and Certiport Center, offering on-line testing for hundreds of students per year. The Small Business Development Center is also located at the Harper Professional Center (HPC), as well as the accelerated Fast Track courses for degree seeking adults.

For information about classes held at any of the extension sites, call the Extension Information Center at 847.925.6001. Office hours are Monday–Friday, 8 a.m.–9:30 p.m. and Saturday, 8 a.m.–3:30 p.m.

Workforce Development

Workforce and Business Outreach

Harper College for Businesses 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 Businesses helps organizations translate business strategies into bottom line results through employee development. Harper College for Businesses 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 Businesses 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 Businesses is a service organization—the success of our business partners defines our future.

For more information on how Harper College for Businesses can provide training, education or consulting opportunities that will help you develop your people and/or your organization, please call 847.925.6640 or e-mail training@harpercollege.edu or visit our Web site at harpercollege.biz.

The Small Business Development Center (SBDC) offers free one-on-one consulting to individuals who are considering starting a small business. The Center also provides consulting to existing businesses that are looking for growth strategies or funding sources. Incubator offices are available for interested businesses.

For more information or to make an appointment with a small business advisor, please call 847.925.6520 or e-mail sbdc@harpercollege.edu.

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.

Community Services

Community Orientation and Involvement

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 Businesses 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.

During the summer of 2000, Harper College held "Discovery Sessions" with various community members, business leaders and students and talked about some of the key challenges facing the College to "discover" what the community really wanted from Harper. The Community Response Team (CRT), which was subsequently formed, presented several recommendations to the Board of Trustees which identified science, technology and health care as top priorities for the College to address.

At its special board meeting on August 16, 2000, the Harper College Board of Trustees was presented with the first comprehensive long-range Campus Master Plan in the history of the College. The plan, which represents a vision for the next 12 years and included the CRT's priorities, is a dynamic plan intended to guide the College into the future. It will be revised periodically to see that it still reflects the needs of the College and the community it serves.

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.

Community Career Services

Community Career Services provides fee-based individual career counseling for community members. Offerings include:

- Individual career counseling for job or career change or to improve current career skills
- Career assessment instruments to help identify your interests, personality strengths and unique talents
- Resume and interviewing skill preparation.

Community Career Services is located in the Student Center, Building A, Room A347. For further information, call 847.925.6293.

Senior Citizen Discounts

District residents age 65 and older are eligible for a 100 percent tuition discount on most Continuing Education classes on a space available basis. Available space is determined by the number of class seats open three calendar days prior to the first class meeting. Those wishing to take advantage of the discount should register three calendar days (or less) prior to the start of the course. Fees are due at the time of registration.

Students who wish to guarantee a seat in a particular course also have the option to pay the full tuition amount.

Some Continuing Education courses including Aquacise and Lifelong Learning Institute offerings are already discounted and do not qualify for the 100 percent tuition discount.

The Lifelong Learning Institute at Harper College is dedicated to adult learners age 55+.

The Lifelong Learning Institute at Harper College opens the door to a world of great discussions, innovative classes and new friendships. Our members pursue knowledge for the sheer joy of learning. We offer more than 100 learning opportunities each year including courses, seminars, study groups, trips, tours and lectures – all designed for the adult learner 55+. There is no homework, tests or grades to worry about! For more information, call 847.925.6065.

Associate Degrees

Graduation Requirements

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Degree Requirements Overview

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Late Start Classes
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XLR8 Classes

International Studies Program

Honors Program

English as a Second Language (ESL)

Intensive English Program
Part-time Academic ESL Program

Adult Educational Development

**Student Development Credit Courses
and Seminars**

Credit Courses
Noncredit Seminars

Alternative Credit Program/Credit Options

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 seventh, the Associate in General Studies (AGS) degree program, is designed to meet three specific intents—as a Liberal Studies program, as an individualized program meeting needs not met by other degree programs, or as a capstone for occupational certificate programs. Students can use credits earned toward the AGS degree to transfer, but options are limited to institutions that have a formal articulation agreement with Harper College or with institutions that choose to evaluate classes on a course-by-course basis. Because of the individualized nature of this degree, transferability may be limited. Students interested in this option should investigate its appropriateness to their goals by speaking with a counselor.

The eighth, the Associate in Applied Science (AAS) degree, is awarded upon completion of a two-year career program and is designed to prepare the graduate for immediate entry into a specific career field.

In addition to the graduation requirements outlined below, each degree has its own requirements for credit hours to be completed in various groups of courses. These requirements are shown on seven separate charts in this section of the Catalog.

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 associates degree, you 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 Vice President of Academic Affairs 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. Fulfillment of a World Cultures and Diversity Requirement. Students seeking an associate degree using the 2005 Academic Catalog and thereafter must satisfactorily complete a three credit hour World Cultures and Diversity course. Fulfillment of this requirement for one associate degree and/or program of study does not guarantee it has been met for another.
6. A student must petition for graduation in the Registrar's Office 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 petition for graduation when registering for the semester in which their graduation requirements will be fulfilled..

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.

World Cultures and Diversity Requirement

New students entering or using the 2005 or later catalogs to meet graduation requirements must meet a World Culture and Diversity Requirement. The courses identified as satisfying this requirement include components designed to raise awareness, appreciation and understanding of one or more of the ways in which diversity is reflected in the global society.

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 Web site. 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 to know 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 Counseling Faculty member 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 in Building I, Room I117, Building D, Room D142 and the Student Center, Room A347.

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. or A.S. 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 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. and A.S. degrees.

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.

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.) or Associate in Science (A.S.) 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

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:

- Alverno College
- Argosy University
- Arizona State University
- Arkansas State University
- Ashford University
- Aurora University
- Benedictine University
- Bradley University
- Brigham Young University
- California University of Pennsylvania
- Columbia College – Chicago
- Concordia University
- DePaul University
- DeVry Institute of Technology
- Dominican University
- Elmhurst College
- Ferris State University
- Fort Lewis College, Colorado
- Franklin University
- Gallaudet University
- Harrington Institute
- Illinois Institute of Art
- Illinois Institute of Technology
- Indiana University – Bloomington
- International Academy of Design and Technology
- Iowa State University
- Judson University
- Kansas State University
- Kaplan University
- Kendall College
- Lake Forest College
- Lewis University
- Lexington College
- 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 Continuing Studies
- Northwood University
- Olivet-Nazarene University
- Palmer College of Chiropractic
- Regis University
- Rhodex International Interior Design School
- Robert Morris College
- Rockford College
- Roosevelt University
- St. Anthony College of Nursing
- St. Joseph's College
- St. Xavier University
- State University of New York - Canton
- Trinity International University
- University of Hawaii – Manoa
- University of Illinois – Chicago
- University of Illinois – Global Campus
- University of Illinois – Urbana/Champaign
- University of Iowa
- University of Kansas
- University of Maryland
- University of Michigan
- University of Missouri – St. Louis
- University of New Mexico
- University of North Carolina – Chapel Hill
- University of Phoenix
- University of St. Francis
- University of Wisconsin – Green Bay
- University of Wisconsin – Madison
- University of Wisconsin – Platteville
- University of Wisconsin – Stout
- University of Wisconsin – Whitewater
- Valparaiso University
- West Suburban College of Nursing

Contact the Student Development Center in Building D, Room D142, Building I, Room I117, or in the Student Center, Room A347, for more information.

COLLEGE CREDIT PROGRAMS AND REQUIREMENTS

Degree Requirements Overview

AREA	DEGREE TYPE							
	AA	AS	AAT	AES	AAS	AFA ART	AFA MUSIC	AGS
Communications	9	9	9	6	6	9	9	6
Mathematics	3-6	6	19	18	3	3	3	3-4
Computer Science	–	–	–	4	–	–	–	–
Physical and Life Science	7-8	8	7-8	15	0-9*	7	7	3-4
Humanities and Fine Arts [♦]	9	9	9	3-6	0-9*	6	6	6
Social and Behavioral Sciences [♦]	9	9	9	3-6	0-9*	6	3	6
Engineering	–	–	–	18	–	–	–	–
Technical Requirements and Electives [♦]	–	–	–	–	42-45	–	–	36
Music	–	–	–	–	–	–	39	–
Art	–	–	–	–	–	33	–	–
Education	–	–	9	–	–	–	–	–
Special Electives [♦]	6	3	–	–	–	–	–	–
Other Electives [♦]	17	20	–	–	–	–	–	–
Total Minimum Hours Required:	60	64	62	70	60	64	67	60

* Nine credit-hours must be taken from a minimum of two groups.

** Credit for Liberal Studies, Certificates and Electives for the AGS degree must come from a) additional credit hours in one or more departments included in the General Education Groups 1-5 including courses not designated as meeting general education requirements in these departments; b) one or more certificates may be included as part of these credit hours; c) any 100 to 200 level elective courses in any discipline that fit specific educational goals of an individual student.

♦ The World Cultures and Diversity graduation requirement must be met in at least one of these areas. See specific degree programs for courses that meet this requirement.

Courses Approved for Fulfilling the World Cultures and Diversity Requirement

Each degree has specific requirements. Please check the catalog degree pages for appropriate courses.

ANT	GEG	HUM	PSC
101	100	103	250
202	101	104	260
203	103	110	270
206		125	280
207	GER		
	205	LNG	SCM
ART	210	205	230*
133			
	HMS	LIT	SGN
ATE	121*	208	210
130*		220	
	HST	223	SOC
DIT	121	224	101
205	210		120
	214	MUS	205
DIV	231	104	215
101	232		230
	241	PED	235
FRN	242	203	
205	243		SPA
210	245	PHI	205
		160	210
		190	
		205	SPE
		215	121

*ATE 130, HMS 121 and SCM 230 are specific to the ATE AAS, HMS AAS and SCM AAS degrees respectively.

Requirements for Associate in Arts Degree (A.A.)†

These requirements apply to students who first enrolled for fall 2010 or later. Students who first enrolled prior to fall 2010 should obtain the appropriate sheet of requirements from a Student Development Center.

Fall 2010 IAI Core Curriculum	Hours Required	Harper Courses
Group 1 Communications 3 courses. A grade of C or better is required for ENG 101 and 102.	9	ENG 101, 102 and SPE 101
Group 2 Mathematics 1 to 2 courses. MTH 124 may be used if taken Spring 1999 or later.	3-6	MGT 225 or MTH 165 ¹ ; MTH 101, 124, 131, 134 or 200, 201, 202, 220
Group 3 Physical and Life Sciences 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 *). With appropriate prerequisites an initial course for science majors or advanced level course may be substituted.	7-8	Life Science: BIO 101, 103, 104*, 105, 110*, 120*, 130*, 135, 136, 140*, 150*, 160*; DIT101 Physical Sciences: AST 100, 101*, 112*, 115*, 150*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, GEG 112*; GEO 101*, 103*; PHS 101, 105*, 111*, 112*, 115*, PHY 121*, 201*
Group 4 Humanities and Fine Arts 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.	9	Humanities: FRN 202 or GER 202 or JPN 202 or SGN 210 [♦] 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, 231, 232; FRN 210 [♦] or GER 210 [♦] or SPA 210 [♦] Fine Arts: ART 105; ART 130, either 131 or 132, 133 [♦] ; ART 114; MUS 103, 104 [♦] , 120; SPE 111, SPE 121 [♦] Interdisciplinary Studies: HUM 101, 102, 103 [♦] , 110 [♦] , LIT 112
Group 5 Social and Behavioral Sciences 3 courses with courses selected from at least 2 departments. May not choose SOC 215 and two PSY courses.	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 [♦]
Total General Education	37-41	
Group 6 Special Electives	6	Creative Expression: ART 110, 111, 121, 122, 201, 206, 225, 236, 240, 261, 291, 296; MUS 101, 102, 130, 136, 140, 145, 150, 165, 166, 167, 169, 180-199, 265, 280-299; SPE 107, 212, 216 Languages: ARB 101, 102, 201; FRN 101, 102, 201; GER 101, 102, 201; JPN 101, 102, 201 SGN101, 102; SPA 101, 102, 112, 113, 201 Wellness: ECE 250; PED 100, 203 [♦] , 213 Work and Life Skills: CAS 160, CDV 110; CIS 100, 101; CSC 121, 208, 214; DIT 205 [♦] ; DIV 101 [♦] ; ECO 115; FYE 101; MGT 111, 160, 170, 204; PHI 150; PSY 106, 107; SPA 121, 122; SPE 115, 200, 205
Group 7 Approved Electives	17	Courses must be selected from: 1. Additional credit hours from Groups 1-6 from the A.A. or A.S. degree 2. Credit hours from approved elective courses (listed after A.S. degree requirements) 3. Up to 10 credit hours from 100 to 200 level courses not included in 1. and 2. above 4. Up to two hours of PED activity courses may be used to fulfill degree requirements 5. Up to four hours of Independent Study credit
World Cultures and Diversity Requirement One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4 – 7.	0-3	Select one course marked with a ♦ from the above Groups.
Total Hours Required	60	

¹ Credit will not be granted for both MGT 225 and MTH 165.

† No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

Requirements for Associate in Science Degree (A.S.)†

These requirements apply to students who first enrolled for fall 2010 or later. Students who first enrolled prior to fall 2010 should obtain the appropriate sheet of requirements from a Student Development Center.

Fall 2010 IAI Core Curriculum	Hours Required	Harper Courses
Group 1 Communications 3 courses. A grade of C or better is required for ENG 101 and 102.	9	ENG 101, 102 and SPE 101
Group 2 Mathematics 2 courses. MTH 124 may be used if taken spring 1999 or later.	6	MGT 225 or MTH 165 ¹ ; MTH 124, 131, 134 or 200, 201, 202, 220
Group 3 Physical and Life Sciences 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 *). With appropriate prerequisites, an initial course for science majors or advanced level course may be substituted.	8	Life Science: BIO 101, 103, 104*, 105, 110*, 120*, 130*, 135, 136, 140*, 150*, 160*; DIT101 Physical Sciences: AST 100, 101*, 112*, 115*, 150*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, GEG 112*; GEO 101*, 103*; PHS 101, 105*, 111*, 112*, 115*; PHY 121*, 201*
Group 4 Humanities and Fine Arts 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.	9	Humanities: FRN 202 or GER 202 or JPN 202 or SGN 210 [♦] 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, 231, 32; FRN 210 [♦] or GER 210 [♦] or SPA 210 [♦] Fine Arts: ART 105; ART 130, either 131 or 132, 133 [♦] ; ART 114; MUS 103, 104 [♦] , 120; SPE 111, SPE 121 [♦] Interdisciplinary Studies: HUM 101, 102, 103 [♦] , 110 [♦] ; LIT 112
Group 5 Social and Behavioral Sciences 3 courses with courses selected from at least two departments. May not choose SOC 215 and two PSY courses.	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 [♦]
Total General Education	41	
Group 6 Special Electives	3	Creative Expression: ART 110, 111, 121, 122, 201, 206, 225, 236, 240, 261, 291, 296; MUS 101, 102, 130, 136, 140, 145, 150, 165, 166, 167, 169, 180-199, 265, 280-299; SPE 107, 212, 216 Languages: ARB 101, 102, 201; FRN 101, 102, 201 GER 101, 102, 201 JPN 101, 102, 201; SGN 101, 102; SPA 101, 102, 112, 113, 201 Wellness: ECE 250; PED 100, 203 [♦] , 213 Work and Life Skills: CAS 160; CDV 110; CIS 100, 101; CSC 121, 208, 214; DIT 205 [♦] ; DIV 101 [♦] ; ECO 115; FYE 101; MGT 111, 160, 170, 204; PHI 150; PSY 106, 107; SPA 121, 122; SPE 115, 200, 205
Group 7 Approved Electives At least six hours, 100 level or above, must be selected in mathematics, science or computer science (CSC only).	20	Courses must be selected from: 1. Additional credit hours from Groups 1-6 from the A.A. or A.S. degree 2. Credit hours from approved elective courses (listed after A.S. degree requirements) 3. Up to 10 credit hours from 100 to 200 level courses not included in 1. and 2. above 4. Up to two hours of PED activity courses may be used to fulfill degree requirements 5. Up to four hours of Independent Study credit
World Cultures and Diversity Requirement One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4 – 7.	0-3	Select one course marked with a ♦ from the above Groups.
Total Hours Required	64	

¹ Credit will not be granted for both MGT 225 and MTH 165.

† No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

Associate in Arts (A.A.) and Associate in Science (A.S.) Degree Programs

Approved Elective Courses

Course or credit hours for Group 7 electives must come from:

1. Extra credit hours from the list of approved electives below.
2. Extra credit hours from Groups 1-6 from the AA or AS degree.
3. Up to 10 credit hours from 100 to 200 level courses not included in 1. and 2. above.
4. Up to two hours of PED activity courses may be used to fulfill degree requirements.
5. Up to four hours of Independent Study credit.

ACC	CSC	EGR	HST	MGT	PED*	PSY	SPA
101	122	100	151	218	200	108	205♦
102	211	120	152	275	201	210	
201	216	121	153		205	220	SPE
202	217	212	202	MKT	207	225	102
203		260	210♦	245	208	230	180
211	DIT	262	214♦		209	235	181
212	110	270	219	MTH	210	245	182
213			261	103	212		183
	ECE	ENG	270	104	218	RDG	190
ANT	101	103	281	130	219	105	191
203♦	102	130	282	140	220	106	192
207♦	219	200		203	221		193
208	252	201		212	222	SGN	213
209	291	220	HUM	265	223	101	
215		221	115		224	102	
220	ECO	222		MUS	225	103	
250	210	230	IDS	106	226	104	
255			290	111	228	201	
	EDU	FRN	JPN	112	230	202	
ARB	201	205♦	115	115	246	205	
205	202		205	116	270	212	
	211	GEG	LEJ	211			
ART	230	151	212	212	PHI	SOC	
100	250	152	201	215	102	210	
280	290		202	216	120	220	
		GEO	205	223	170		
		102	210	224	180		
AST		201		266	190♦		
201			LIT	271	210		
		GER	215	272			
BIO		205♦	216		PHY		
161			217		122		
			219		202		
CHM			250		203		
122							
125			LNG				
201			105		PSC		
204			205♦		210		
205			220		260♦		
295							
296			MCM				
297			120				
			126				
			130				
			131				
			141				
			232				

*All level 100 courses.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

**Requirements for Associate in Arts in Teaching Degree
(A.A.T.) – Secondary Mathematics**

These requirements apply to students who first enrolled for spring 2010 or later.

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 2010 IAI Core Curriculum	Hours Required	Harper Courses
Group 1 Communications 3 courses. A grade of C or better is required for ENG 101 and 102.	9	ENG 101, 102 and SPE 101
Group 2 Mathematics	5	MTH 200 ¹
Group 3 Physical and Life Sciences 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 *).	7-8	Life Science: BIO 101, 103, 104*, 105, 110*, 120*, 130*, 135, 136, 140*, 150*, 160*; DIT101 Physical Sciences: AST 100, 101*, 112*, 115*, 150*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, GEG 112*; GEO 101*, 103*; PHS 101, 105*, 111*, 112*, 115*, PHY 121*, 201*
Group 4² Humanities and Fine Arts 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.	9	Humanities: FRN 202 or GER 202 or JPN 202 or SGN 210 [♦] 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, 231, 232; FRN 210 [♦] or GER 210 [♦] or SPA 210 [♦] Fine Arts: ART 105; ART 130, either 131 or 132, 133 [♦] ; ART 114; MUS 103, 104 [♦] , 120; SPE 111, SPE 121 [♦] Interdisciplinary Studies: HUM 101, 102, 103 [♦] , 110 [♦] , LIT 112
Group 5^{2,3} Social and Behavioral Sciences 3 courses with courses selected from at least 2 departments. May not choose SOC 215 and two PSY courses.	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 [♦]
Total General Education	39-40	
Group 6 Professional Education Courses 3 courses, EDU 201 is required.	9	ECE 102, 219; EDU 201, 211, 250
Group 7 Mathematics Major Courses 3 courses, all are required.	14	MTH 201, 202, 203
World Cultures and Diversity Requirement One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Group 4 or 5.		Select one course marked with a ♦ from Group 4 or 5.
Total Hours Required	62-63	

¹ 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.

² Harper College's diversity requirement must be selected from Group 4 or 5.

³ HST 111 or HST 112, PSC 101, and PSY 101 are strongly recommended as they meet the requirements for Illinois secondary certification.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

Requirements for Associate in Engineering Science Degree (A.E.S.)†, 2

These requirements apply to students who first enrolled for fall 2010 or later. Students who first enrolled prior to fall 2010 should obtain the appropriate sheet of requirements from a Student Development Center.

Fall 2010	Hours Required	Harper Courses
Group 1 Communications A grade of C or better is required for ENG 101 and 102	6	ENG 101, 102
Group 2 Mathematics	18	MTH 200, 201, 202, 212
Group 3 Computer Science³	4	CSC 121, 208
Group 4 Physical and Life Sciences	15	CHM 121; PHY 201, 202
Group 5 Humanities and Fine Arts¹ Minimum of 3 hours required from Group 6. Must have a minimum of 9 hours from Humanities and Fine Arts and Social and Behavioral Sciences combined.	3-6	Humanities: FRN 202 or GER 202 or JPN 202 or SGN 210 [♦] or SPA 202; HST 105 or HUM 105; HUM 104 [♦] , HUM 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, 231, 232; FRN 210 [♦] or GER 210 [♦] or SPA 210 Fine Arts: ART 105, 130, 131, or 132, 133 [♦] ; ART 114; MUS 103, 104 [♦] , 120; SPE 111, SPE 121 [♦] Interdisciplinary Studies: HUM 101, 102, 103 [♦] , 110 [♦] ; LIT 112
Group 6 Social and Behavioral Sciences¹ Minimum of 3 hours required from Group 5. Must have minimum of 9 hours from Humanities and Fine Arts and Social and Behavioral Sciences combined.	3-6	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 [♦]
Group 7 Engineering Specialty courses approved in consultation with the engineering department chair.	18	EGR 100, 120, 210, 211, 212, 240, 260, 262, 270; CHM 122, 204, 205; PHY 203
World Cultures and Diversity Requirement One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 5 - 6.	0-3	Select one course marked with a ♦ from the above Groups.
Total Hours Required	70	

1 Students must select at least one course in either the humanities/fine arts or the social/behavioral sciences that emphasize non-Western cultures or minority cultures within the United States. A two-semester sequence in the same discipline from either the humanities/fine arts or the social/behavioral sciences is recommended.

2 Completion of the Associate in Engineering Science degree does not fulfill the requirements of the Illinois General Education core curriculum. After transfer, A.E.S. students will need to complete the general education requirements of the institution to which they transfer.

3 Computer Science elective should be chosen based on engineering specialty and requirements of institution to which students transfer.

† No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-6.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

Requirements for Associate in Fine Arts Degree (A.F.A.): Art Emphasis†, 1, 3

These requirements apply to students who first enrolled for fall 2010 or later. Students who first enrolled prior to fall 2010 should obtain the appropriate sheet of requirements from a Student Development Center.

Fall 2010	Hours Required	Harper Courses
Group 1 Communications 3 Courses. A grade of C or better is required for ENG 101 and 102	9	ENG 101, 102 and SPE 101
Group 2 Mathematics 1 course	3	MGT 225 or MTH 165 ³ ; MTH 101, 124, 131, 134 or 200, 201, 202, 220
Group 3 Physical and Life Sciences 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	Life Science: BIO 101, 103, 104*, 105, 110*, 120*, 130*, 135, 136, 140*, 150*, 160*; DIT 101 Physical Sciences: AST 100, 101*, 112*, 115*, 150*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, GEG 112*; GEO 101*, 103*; PHS 101, 105*, 111*, 112*, 115*; PHY 121*, 201*
Group 4 Humanities	6	Humanities: FRN 202 or GER 202 or JPN 202 or SGN 210 [♦] or SPA 202; HST 105 or HUM 105; HUM 101, 102, 103 [♦] , 104 [♦] , 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, 231, 232; FRN 210 [♦] or GER 210 [♦] or SPA 210 [♦] , SPE 121 [♦]
Group 5 Social and Behavioral Sciences 2 courses, with courses selected from at least two departments	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 [♦]
Total General Education	31	
Group 6 Core Courses²	24	ART 110, 111, 121, 122, 130, 131, 132, 225
Group 7 Media Specific Courses	9	ART 206, 240, 261, 291, 296
World Cultures and Diversity Requirement One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4 - 5.	0-3	Select one course marked with a ♦ from the above Groups.
Total Hours Required	64	

1 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.

2 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.

3 Credit will not be granted for both MGT 225 and MTH 165.

† No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

Requirements for Associate in Fine Arts Degree (A.F.A.): Music Emphasis†, 1

These requirements apply to students who first enrolled for fall 2010 or later. Students who first enrolled prior to fall 2010 should obtain the appropriate sheet of requirements from a Student Development Center.

Fall 2010	Hours Required	Harper Courses
Group 1 Communications 3 Courses. A grade of C or better is required for ENG 101 and 102	9	ENG 101, 102 and SPE 101
Group 2 Mathematics 1 course. MTH 101, 124 or 134 preferred.	3	MGT 225 or MTH 165 ³ ; MTH 101, 124, 131, 134 or 200, 201, 202, 220
Group 3 Physical and Life Sciences 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	Life Science: BIO 101, 103, 104*, 105, 110*, 120*, 130*, 135, 136, 140*, 150*, 160*; DIT 101 Physical Sciences: AST 100, 101*, 112*, 115*, 150*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, 112*; GEO 101*, 103*; PHS 101, 105*, 111*, 112*, 115*; PHY 121*, 201*
Group 4 Humanities	6	Humanities: FRN 202 or GER 202 or JPN 202 or SGN 210 [♦] or SPA 202; HST 105 or HUM 105; HUM 101, 102, 103 [♦] , 104 [♦] , 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, 231, 232; FRN 210 [♦] or GER 210 [♦] or SPA 210 [♦] , SPE 121 [♦]
Group 5 Social and Behavioral Sciences 1 course	3	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 [♦]
Total General Education	28	
Group 6 Core Courses Core Music Courses: Music Theory Music Literature/History Keyboard Skills ² Aural Skills Ensemble Applied Instruction	12 3 8 4 4 8	Music Theory 111, 112, 211, 212 Music Literature/History 120 Keyboard Skills ² 165, 166, 265, 266 Aural Skills 115, 116, 215, 216 Ensemble 130, 136, 140, 145, 150 Applied Instruction 180-199, 280-299
World Cultures and Diversity Requirement One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4 - 5.	0-3	Select one course marked with a ♦ from the above Groups.
Total Hours Required	67	

1 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.

2 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.

3 Credit will not be granted for both MGT 225 and MTH 165.

† No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

Requirements for Associate in Fine Arts Degree (A.F.A.): Piano Pedagogy^{†,1}

These requirements apply to students who first enrolled for fall 2010 or later. Students who first enrolled prior to fall 2010 should obtain the appropriate sheet of requirements from a Student Development Center.

Fall 2010	Hours Required	Harper Courses
Group 1 Communications 3 courses. A grade of C or better is required for ENG 101 and 102.	9	ENG 101, 102 and SPE 101
Group 2 Mathematics 1 course. MTH 101, 124 or 134 preferred.	3	MGT 225 or MTH 165 ³ ; MTH 101, 124, 131, 134 or 200, 201, 202, 220
Group 3 Physical and Life Sciences 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	Life Science: BIO 101, 103, 104*, 105, 110*, 120*, 130*, 135, 136, 140*, 150*, 160*; DIT 101 Physical Sciences: AST 100, 101* 112*, 115*, 150*; CHM 100*, 103*, 105*, 110*, 121*; GEG 111, 112*; GEO 101*, 103*; PHS 101, 105*, 111*, 112*, 115*; PHY 121*, 201*
Group 4 Humanities	6	Humanities: FRN 202 or GER 202 or JPN 202 or SGN 210* or SPA 202; HST 105 or HUM 105; HUM 101, 102, 103*, 104*, 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, 231, 232; FRN 210* or GER 210* or SPA 210*, SPE 121*
Group 5 Social and Behavioral Sciences 1 course	3	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*
Total General Education	28	
Group 6 Core Courses Core Music Courses: Music Theory Music Literature/History Keyboard Skills ² Aural Skills Ensemble Applied Instruction Piano Pedagogy	12 3 2 4 4 8 6	Music Theory 111, 112, 211, 212 Music Literature/History 120 Keyboard Skills² 266 Aural Skills 115, 116, 215, 216 Ensemble 130, 136, 140, 145, 150 Applied Instruction 180-199, 280-299 Piano Pedagogy 271, 272
World Cultures and Diversity Requirement One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4 - 5.	0-3	Select one course marked with a ♦ from the above Groups.
Total Hours Required	67	

¹ Completion of the Associate in Fine Arts degree does not fulfill the requirements of the Illinois General Education core curriculum. After transfer, A.F.A. students will need to complete the general education requirements of the institution to which they transfer.

² All music majors must demonstrate piano proficiency; MUS 265 may be passed by proficiency exam. Music majors are also advised to take MUS 100 as part of their elective credit.

³ Credit will not be granted for both MGT 225 and MTH 165.

[†] No more than two GEG and two HST courses (except HST 105) may be used to fulfill Groups 1-5.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

Requirements for Associate in General Studies Degree (A.G.S.)

These requirements apply to students who first enrolled for fall 2010 or later. Students who enrolled prior to fall 2010 have the option of upgrading their degree plan to access the AGS degree option.

The Associate in General Studies (AGS) degree program is designed to meet the three specific intents—as a Liberal Studies program, as an individualized program meeting needs not met by other degree programs, or as a capstone for occupational certificate programs. Students can use credits earned toward the AGS degree to transfer, but options are limited to institutions that have a formal articulation agreement with Harper College or with institutions that choose to evaluate classes on a course-by-course basis.

Students must meet with a counselor to determine the appropriateness of the AGS degree option and complete a detailed Plan of Study before their decision to pursue the AGS degree is formalized. The official plan must be signed by the student and the counselor, then filed in the Advising and Counseling Center; a copy will be forwarded to the Dean of Enrollment Services. In addition to the Plan of Study, yearly communication with a counselor is required to review degree progress or amend the plan. Students who do not meet with their counselor are eligible for enrollment in courses in their plan, but may be blocked from future registration in a subsequent semester if courses outside of the plan are taken.

Fall 2010	Hours Required	Harper Courses ¹
Group 1 Communications	6	ENG 100, 101, 102, 103, 130; MCM 130, 131, 133; SPE 101
Group 2 Mathematics	3-4	MGT 150, 225 ² , MTH 101, 103, 104, 124, 130, 131, 134, 200, 140, 165 ² , 201, 202, 203, 212, 220, 265
Group 3 Physical and Life Sciences	3-4	AST 100, 101, 112, 115, 150, 201; BIO 101, 103, 104, 105, 110, 120, 130, 135, 136, 140, 150, 160, 161; CHM 100, 103, 105, 110, 121, 122, 125, 201, 204, 205, 210; DIT101; GEG 111, 112; GEO 101, 102, 103, 201, 202; PHS 101, 105, 111, 112, 115; PHY 115, 116, 121, 122, 201, 202, 203
Group 4 Humanities and Fine Arts	6	ARB 101, 102, 201, 202, 205; ART 105, 110, 111, 114, 121, 122, 130, 131, 132, 133 [♦] , 201, 206, 225, 236, 261, 291, 296; ENG 230; FRN 101, 102, 201, 202, 205 [♦] , 210 [♦] ; GER 101, 102, 201, 202, 205 [♦] , 210 [♦] ; HST 105 or HUM 105; HUM 101, 102, 103 [♦] , 104 [♦] , 110 [♦] , 115, 120, 125 [♦] ; JPN 101, 102, 201, 202, 205; LIT 105, 110, 112, 115, 206, 207, 208 [♦] , 210, 216, 217, 219, 220 [♦] , 221, 222, 223 [♦] , 224 [♦] , 231, 232, 241, 250; LNG 105; MUS 101, 102, 103, 104 [♦] , 120, 130, 136, 140, 145, 150, 165, 166, 167, 169, 180-199, 223, 224; PHI 101, 102, 105, 115, 120, 150, 160 [♦] , 170, 180, 190 [♦] , 205 [♦] , 210, 215 [♦] , 220, 231, 232; SGN 101, 102, 201, 202, 205, 210 [♦] , 212; SPA 101, 102, 112, 113, 121, 122, 201, 202, 205 [♦] , 210 [♦] ; SPE 107, 111, 121 [♦] , 212, 216
Group 5 Social and Behavioral Sciences	6	ANT 101 [♦] , 202 [♦] , 203 [♦] , 205, 206 [♦] , 207 [♦] , 208, 210, 220; ECO 115, 200, 211, 212; GEG 100 [♦] or 101 [♦] , 103 [♦] , 104, 108, 210; HST 111, 112, 121 [♦] , 141, 142, 151, 152, 153, 202, 210 [♦] , 212, 214 [♦] , 219, 231 [♦] , 232 [♦] , 241 [♦] , 242 [♦] , 243 [♦] , 245 [♦] , 270, 281, 282; LNG 205 [♦] ; PSC 101, 220, 250 [♦] , 270 [♦] , 280 [♦] ; PSY 101, 107, 108, 210, 216, 217, 218, 220, 225, 228, 230, 235, 245; SOC 101 [♦] , 120 [♦] , 205 [♦] , 210, 215 [♦] , 220, 230 [♦] , 235 [♦]
Total General Education	24-26	
Group 6 Liberal Studies, Certificates, or elective coursework	36	Courses must be selected from: <ul style="list-style-type: none"> • 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 to 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.)
World Cultures and Diversity Requirement One 3-credit hour course is required. Some courses that fulfill this requirement may also be used to fulfill requirements in Groups 4 – 5.	3-4	Select one course marked with a [♦] from Groups 4 or 5 or refer to the Degree Requirements Overview page in this catalog for a complete listing of approved World Cultures and Diversity courses.
Total Hours Required	60	

¹ Students must satisfy prerequisites for each course selected.

² Students may earn credit in either MGT 225 or MTH 165, not both.

[♦] These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

Requirements for Associate in Applied Science Degree (A.A.S.)¹

Fall 2010	Hours Required	Harper Courses
Group 1 Communications ENG 101 or 130 and a second course, as approved for your curriculum	6	ENG 100, 101, 102, 103, 130; MCM 130, 131, 133; SPE 101
Group 2 Mathematics ^{2,3} 1 course	3	MGT 150, 225; MTH 060, 061, 062, 063, 070, 080, 101, 103, 104, 120, 124, 130, 131, 134, 140, 165, 200, 201, 202, 203, 212, 220, 265
Group 3 Natural Sciences 9 hrs. 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, 120, 130, 135, 136, 140, 150, 160, 161; CHM 100, 103, 105, 110, 121, 122, 125, 201, 204, 205, 210; DIT 101; GEG 111, 112*; GEO 101, 102, 103, 201, 202; PHS 101, 105, 111, 112, 115; PHY 121, 122, 201, 202, 203
Group 4 Humanities 9 hours must be taken from a minimum of two of Groups 3, 4 and 5		ARB 101, 102, 201, 202, 205; ART 105, 110, 111, 114, 121, 122, 130, 131, 132, 133 [♦] , 201, 206, 225, 236, 261, 291, 296; ENG 230; FRN 101, 102, 201, 202, 205 [♦] , 210 [♦] ; GER 101, 102, 201, 202, 205 [♦] , 210 [♦] ; HST 105 or HUM 105; HST 111, 112, 121 [♦] , 141, 142, 151, 152, 153, 202, 210 [♦] , 212, 214 [♦] , 219, 231 [♦] , 232 [♦] , 241 [♦] , 242 [♦] , 243 [♦] , 245 [♦] , 270, 281, 282; HUM 101, 102, 103 [♦] , 104 [♦] , 110 [♦] , 115, 120, 125 [♦] ; JPN 101, 102, 201, 202, 205; HST 261; LIT 105, 110, 112, 115, 206, 207, 208 [♦] , 210, 215, 216, 217, 219, 220 [♦] , 221, 222, 223 [♦] , 224 [♦] , 231, 232, 241, 250; LNG 105; MUS 101, 103, 104 [♦] , 120, 130, 136, 140, 145, 150, 165, 166, 167, 169, 180-199; PHI 101, 105, 115, 120, 150, 160 [♦] , 170, 180, 190 [♦] , 205 [♦] , 210, 215 [♦] , 220, 231, 232; SGN 101, 102, 201, 202, 205, 210 [♦] ; SPA 101, 102, 112, 113, 201, 202, 205 [♦] , 210 [♦] , 212; SPE 107, 111, 121 [♦] , 212, 216
Group 5 Social and Behavioral Sciences 9 hours must be taken from a minimum of two of Groups 3, 4 and 5.		ANT 101 [♦] , 202 [♦] , 203 [♦] , 205, 206 [♦] , 207 [♦] , 208, 210, 220; ECO 115, 200, 211, 212; EDU 211; GEG 100 [♦] , 101 [♦] , 103 [♦] , 104, 210; LNG 205 [♦] ; PSC 101, 220, 250 [♦] , 270 [♦] , 280 [♦] ; PSY 101, 107, 108, 210, 216, 217, 218, 220, 225, 228, 230, 235, 245; SOC 101 [♦] , 120 [♦] , 205 [♦] , 210, 215 [♦] , 220, 230 [♦] , 235 [♦]
Total General Education	15-18²	
Group 6 Technical Requirements and Electives	42-45	
World Cultures and Diversity Requirement One 3-credit hour course is required. Courses that fulfill this requirement may also be used to fulfill requirements in Groups 4 – 6.	0-3	Refer to specific career program curriculum to determine which course marked with a [♦] is appropriate.
Total Hours Minimum	60⁴	

¹ Completion of the Associate in Applied Science degree does not fulfill the Illinois General Education core curriculum. After transfer, AAS students will need to complete the general education requirements of the institution to which they transfer.

² 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 a three credit hour elective with approval of the program coordinator.

³ Credit will not be granted for both MGT 225 and MTH 165.

⁴ In addition to the above requirements, 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.

♦ These courses meet the World Cultures and Diversity graduation requirement. One 3 credit-hour course is required for graduation.

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
- Advertising Design and Illustration
 - Automotive Technology
 - CISCO Internet Technician
 - Communication Art and Sciences–Multimedia Arts
 - Health Information Technology
 - Horticulture
 - Human Services
 - Library Technical Assistant
 - Manufacturing Technology
 - Media
 - Nuclear Medicine
 - Photography
 - Respiratory Therapy Technician
 - Therapeutic Massage
 - Travel and Tourism
 - Travel and Transportation
 - Web Design

College of Lake County..... 847.223.6601

- 19351 West Washington Street
 Grayslake, Illinois 60030
- Automotive Collision Repair
 - Automotive Technology
 - Civil Technology
 - Construction Management
 - Health Information Technology
 - Horticulture
 - Human Services Technology
 - Industrial Maintenance and Repair
 - Library Technical Assistant
 - Technical Communications
 - Tool and Mold Maker
 - Welding–Advanced

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
 - Histotechnology
 - Human Services Family Violence Counseling
 - Industrial Manufacturing
 - Plastics Processing and Fabricating
 - Plastics Technology
 - Surgical Technology
 - Truck Driving
 - Truck Driving Owner/Operator
 - Welding

Kishwaukee College

- 21193 Malta Road
 Malta, IL 60150-9699.....815.825.2086
- 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
 - Manufacturing Design Technology
 - Manufacturing Management
 - Manufacturing Processes
 - Manufacturing Supervision
 - Real Estate Appraisal

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
 - Health Information Technology
 - Human Services
 - Machine Technology Apprentice
 - Manufacturing Technology
 - Medical Laboratory Technology
 - Photography¹
 - Physical Therapy Assistant
 - Web Graphic Page Design

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
 - Surgical Technology²
 - Visual Communications

¹ Courses only.

² Technical courses only.

COLLEGE CREDIT PROGRAMS AND REQUIREMENTS

Harper College programs available to residents of other college districts under cooperative agreements are as follows:

Architectural Technology	McHenry County district
Bread and Pastry Arts	Lake County, McHenry County, Oakton and Rock Valley districts
Building Codes and Enforcement	DuPage, Lake County and Oakton districts
Cardiac Technology	DuPage, Elgin, Kishwaukee, Lake County, McHenry County, Oakton, Rock Valley and Triton districts
Cardiographic Technician.....	DuPage, Elgin, Kishwaukee, Lake County, McHenry County, Oakton, Rock Valley and Triton districts
Commercial Credit Management.....	DuPage, Lake County and McHenry County districts
Computer Information Systems- Computer Support Specialist.....	McHenry County district
Culinary Arts	Elgin, Lake County, McHenry County, Oakton and Rock Valley districts
Dental Hygiene	Elgin, Kishwaukee, McHenry County, Oakton and Triton districts
Diagnostic Medical Sonography	Elgin, Kishwaukee, Lake County, McHenry County, Oakton and Rock Valley districts
Dietary Manager	Oakton district
Dietetic Technician	DuPage, Elgin, Lake County, McHenry County, Oakton and Triton districts
Electronics Engineering Technology	McHenry County district
Electronics	McHenry County district
Electrical Maintenance	McHenry County district
Fashion Design	Elgin, Lake County, McHenry County, Oakton and Triton districts
Fashion Merchandising	Elgin, Lake County, McHenry County and Oakton districts
Financial Management	McHenry County district
Financial Services	DuPage, Lake County and McHenry County districts
Food Service Management	McHenry County and Oakton districts
Health Care Secretary	DuPage district
Hospitality Management.....	McHenry County and Oakton districts
Hotel Management	McHenry County and Oakton districts
Human Resource Management	DuPage district
Interior Design	Elgin, Lake County, McHenry County and Oakton districts
Law Office Administrative Assistant	Lake County district
LPN.....	McHenry County
Mammography	Elgin, Kishwaukee, McHenry County and Oakton districts
Management	DuPage district
Medical Assistant	DuPage, Elgin, Lake County, McHenry County and Oakton districts
Nanoscience Technology	Elgin, Lake County districts
Paralegal Studies	DuPage, Lake County, McHenry County, Oakton, Rock Valley and Triton districts
Phlebotomy	McHenry County
Radiologic Technology	Kishwaukee, McHenry County and Oakton districts
Refrigeration and Air Conditioning Technology	McHenry County district
Sales Management and Development ...	DuPage district
Sign Language Interpreting	DuPage, Elgin, Lake County, McHenry County and Triton districts
Supply Chain Management	DuPage, Elgin, Lake County and McHenry County districts

³ Corrections courses only.

Alternative Learning Environments

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.

Professional Advancement and Learning Center

Now more than ever, advanced training and continuing your education is essential for sustained career success. The Professional Advancement and Learning Center specializes in serving those who:

- need to fit college around their busy lifestyle
- want to reenter the workforce with updated credentials after an absence
- need their degree to earn a promotion
- have already earned a degree but need to update their credentials or re-career
- desire access to one-on-one support and career resources to successfully complete their goals

Programs available in the Professional Advancement and Learning Center:

Fast Track -Accelerated Program

Fast Track is an accelerated program to obtain a degree. Depending on the program, students can complete a degree by attending one class meeting per week over an approximate two- to two-and one-half-year period. Currently available in a Fast Track format include an Associate in Arts (A.A.) with a Business Emphasis, as well as an Associate in Applied Sciences (A.A.S.) degree in Marketing, Human Services, Management and Computer Information Systems. Various certificate programs are also available such as Medical Transcriptionist Certificate and the Health Insurance Specialist Certificate.

To qualify...

While Fast Track is typically designed for adults age 24 or older, life experience and job history are equally important components for success in the program and will be considered for acceptance into the program. To ensure that all students are ready to move forward at the same pace, we ask that everyone meet some minimum requirements, but 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. Contact us at the Professional Advancement and Learning Center at 847.925.6438

Weekend College

The Weekend College program offers students an opportunity to earn a degree, certificate or take selected coursework by taking all their courses on the weekend. This program is designed for individuals who are unable to attend classes during the week. Whether you are seeking a college degree or simply want to take selected college courses at convenient times, this program will meet your needs.

Weekend courses are offered on campus, blended and/or online format. Weekend classes are offered on Friday evenings, Saturdays and/or Sundays. If you would like more information about the Weekend College, call the Professional Advancement and Learning Center at 847.925.6438.

Career Coaching

The career coach offers a partnership, support and the tools, perspectives and knowledge needed to help students achieve their career goals. Coaching helps the student to stay focused, encourages the student to explore all possibilities open to them and assists them in making effective choices.

The career coach will also develop educational workshops and presentations on topics of interest to enrolled adult students and the community. These programs will focus on how to enhance one's life skills and how to increase one's knowledge regarding professional development.

Credit for Prior Learning Program

We know that adults bring a great deal of knowledge and expertise to the learning experience. This program provides an opportunity for the students to earn credit by the demonstration and documentation of college-level learning acquired outside the traditional college setting. This learning may come from the student's personal life, work, training and/or volunteer experience. Assessment and awarding of prior learning credit, in combination with coursework, will help the student meet his/her educational goals.

You can also take advantage of a variety of other success services

- Free math/accounting tutoring
- Career Coaching and Success Support
- Free Student Success Lecture Series

Contact the Professional Advancement and Learning Center for further information at 847.925.6438 or stop in our center located in Wojcik Conference Center, room 207.

FlexEd®

Offering alternative learning options, FlexEd® meets the changing needs of people on the go, with courses that are more accessible, flexible and convenient. Special opportunities under the FlexEd® heading include:

- Blended Courses
- Internet Courses
- Late-Start Classes
- Open Entry Classes
- Sunrise Classes
- Telecourses
- TeleWeb Classes
- XLR8 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 specific computer hardware and software, an off-campus Internet connection and a working email account. Proctored testing on campus may be necessary. Sections are coded with a 'B'.

Internet 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 e-mail 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), and a working email account then internet courses may be the perfect option for you. Campus visits for orientation sessions and/or proctored testing may be necessary for some courses. Sections are coded with a 'W'.

Late-Start Classes

The name says it all. Late-Start classes are ideal if you're not able to register on time. Or if you'd like to take two courses—one the first eight weeks of the semester and a second one the last eight weeks. So if you've missed our scheduled registration, check out our Web site at harpercollege.edu for a complete list of Late-Start classes.

Open Entry/Flexible Start Classes

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 AutoCAD (ATE), remedial Mathematics, some English as a Second Language classes and Heating, Ventilation and Air Conditioning (RAC). In addition, all Adult Educational Development classes are open entry. The Computer Information Systems department offers flexible start classes that must be completed at the end of the term. (CAS/CIS/NET)

Sunrise Classes

Harper has many classes that end before 9am to accommodate those students who want to pursue learning prior to beginning their workday. Search the course schedule for "Morning" classes.

Telecourses

Harper offers a complete range of courses, from economics to psychology, that may be viewed on cable TV within the Harper district area. Most telecourses have a mandatory, on-campus orientation session to give you an introduction to the instructor and course expectations. Proctored testing on campus may be necessary. Any missed classes can be viewed at the main campus Library or select area libraries without cost. Classes on tape or DVD may also be rented from the Bookstore for a fee. Sections are coded with a 'T'.

TeleWeb Courses

Several courses are available as a combination of both telecourse and online learning. Students enrolled in a TeleWeb Course attend class by watching cable TV broadcasts within the Harper district area or by viewing videotapes or DVDs at home, at the Harper Library or in select public libraries. (Note: Some residents of Arlington Heights and Inverness may not receive Harper cable broadcasts. Please check with your local cable provider to ensure accessibility.) Course assignments are accessed via the Web. Students interact with peers/faculty and submit course work to their instructor via several Internet-based communication tools. Proctored testing on campus may be necessary. Sections are coded with a 'T'.

XLR8 Classes

Earn credit hours and a Harper Achievement Award in just 16 weeks. The XLR8 program offers awards in several career disciplines including Architecture (ATE), Computer Applications Software (CAS), and Maintenance (MNT).

For more information on any of our FlexEd® classes, call 847.925.6707 or visit: harpercollege.edu

International Studies Program

Harper College has joined a consortium with 40 other community colleges, Western Illinois University and several colleges in Wisconsin to provide a semester abroad program for students. The Illinois Consortium for International Studies and Programs (ICISP) makes it possible for the colleges to offer a sound, viable academic program at reasonable cost, and allows qualified students to take advantage of the unique educational experience afforded through study in another country. Currently, semester programs offered each fall and spring are available in Canterbury, England; Salzburg, Austria; Seville, Spain; and Carlow, Ireland. A program is offered to Xi'an, China during the fall only. Summer programs are also available in San Jose, Costa Rica, Dijon, France; Sydney, Australia; Madrid, Spain; Kyoto, Japan; Munich, Germany; and Tangier, Morocco via other community colleges in the ICISP Consortium. Harper College summer only programs change each summer.

To be eligible, a student must have completed 15 credit hours with a 2.75 grade point average. Further information about the International Studies Program is available through Student Development in the Multicultural Learning Center, Building D, Room D142, 847.925.6522.

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.

All honors courses are noted as such on the transcript. Additionally, upon fulfilling all other degree requirements, students who complete 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. (The HUM 105/HST 105 requirement went into effect spring of 2003 and applies only to those students entering Harper in or after the fall of 2001.)

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 in the Office of Admissions, the Division offices and the Counseling Centers.

The College also offers several scholarships based primarily on academic achievement. (See Financial Aid section.)

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 seven grades completed through completion of graduate/professional programs. Students with fewer than seven 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 F, Room F340, or call 847.925.6226.

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.

Part-Time Academic ESL Program

This program 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.

Adult Educational Development

The Adult Educational Development (AED) Department provides instructional programs and services in basic skills, Pre-GED, GED, nonnative literacy, citizenship, employment skills and special topics. All programs are intended for adults 16 years old and over who are not currently enrolled in a secondary school.

The Nonnative Literacy Program (ESL literacy) serves students whose first language is not English and who have limited years of schooling in their native countries.

The basic skills program is intended to teach adults who cannot read, write or perform basic arithmetic. The Pre-GED and GED programs are designed for those who have not completed a secondary education program in the United States and who have not passed the General Educational Development (GED) Test battery (high school equivalency). The GED testing program is intended for adults 17 years of age and older. The citizenship training program focuses upon test preparation and procedures for U.S. citizenship. The employment skills program is open to students concurrently enrolled in nonnative literacy or as a separate option.

Students are tested and advised during registration for placement in classes. Basic skills, nonnative literacy and Pre-GED students are advised of their progress through achievement tests in classes, and GED students are given practice tests to measure potential success in passing the GED Test battery. Advising services are available to meet students' personal, academic and/or career/vocational needs. Specialized sections of GED instruction are available as online courses.

Daytime and evening courses are offered at the Palatine campus, Northeast Center, Harper College at Rolling Meadows, the Palatine Opportunity Center, and the Community Resource Center in Hoffman Estates. Courses include Nonnative Literacy I, II, III, IV & V; Basic

Reading Skills, Basic English Skills, Basic Mathematical Skills, Pre-GED Reading Skills, Pre-GED English Skills, Pre-GED Mathematical Skills; GED Social Studies and Science, GED Writing Skills and Literature, GED Mathematics; Adult Employment Skills; Citizenship Training; and computer classes for ESL literacy students. For more information, call the AED Department at 847.925.6223 (campus) or 847.925.6015 (Northeast Center).

Student Development Credit 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 peoples' 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.

**Alternative Credit Program/
Credit Options**

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 such means) 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. This 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 these programs are available from 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. The granting of credit and/or advanced placement will be determined following the guidelines listed in the Credit by Examination bulletin available in the Assessment and Testing Center or: harpercollege.edu/services/test/

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. A student who has previously completed CLEP tests should request that the scores be sent to the Assessment and Testing Center. Information regarding CLEP examination may be obtained by requesting a CLEP brochure from the Assessment and Testing Center. Criteria for granting credit have been determined by each academic division. 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 Assessment and 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 standard.

Transfer Options

The associate in arts, associate in science, associate in engineering science, associate in fine arts – art, and associate in fine arts – music are designed for students planning to transfer and pursue a baccalaureate degree. The following pages contain sample planning guides to assist students in their preparation to transfer into a particular major at the baccalaureate level. Sample transfer planning guides not listed in the catalog are available in the Student Development Centers and on the Harper College web site.

Harper College offers freshman and sophomore level coursework to prepare for transfer into the following majors:

Accounting
 Architecture
 Art
 Art Education
 Astronomy
 Biological Sciences
 Business Administration
 Chemistry
 Computer Science-Information Systems Emphasis
 Computer Science-Technical Emphasis
 Dietetics/Nutrition
 Education–Early Childhood
 Education–Elementary
 Education–Secondary
 Education–Special Education
 Engineering
 English
 Environmental Studies
 Geography
 Geology
 Health Education
 History
 Humanities
 Law Enforcement and Justice Administration
 Liberal Arts
 Literature
 Management
 Manufacturing Technology
 Marketing
 Mass Communication
 Mathematics
 Medical Technology
 Music
 Music Education
 Nursing
 Philosophy
 Physical Education
 Physics
 Political Science
 Pre-Chiropractic
 Pre-Dentistry
 Pre-Law
 Pre-Medical Technology
 Pre-Medicine
 Pre-Occupational Therapy
 Pre-Pharmacy
 Pre-Physical Therapy
 Pre-Physician’s Assistant
 Pre-Veterinary
 Psychology
 Sociology
 Speech Communication
 Theatre Arts
 World Languages
 Undecided

Associate in Fine Arts – Art Sample Plan^{1,2}

*This sample transfer planning guide meets the requirements of the A.F.A. – Art degree and follows the Illinois Articulation Initiative art baccalaureate major recommendations. **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.*

General Education Courses

Communications			
ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9
		Mathematics³	3
		Physical and Life Sciences⁴	7
		Humanities³	6
		Social and Behavioral Sciences³	6

Core Art Courses

ART	110	Drawing I.....	3
ART	111	Drawing II	3
ART	121	Design I.....	3
ART	122	Design II.....	3
ART	130	History of Art I	3
ART	131	History of Art II	3
ART	132	History of Art III	3
ART	225	Figure Drawing Studio	<u>3</u>
			24

Elective Art Courses⁵

ART	206	Printmaking Studio.....	3
ART	240	Computer Graphics Studio	3
ART	261	Painting Studio.....	3
ART	291	Ceramics Studio	3
ART	296	Sculpture Studio	<u>3</u>
			9

Total 64

¹ Art majors pursuing an associate in fine arts–art degree should be aware that a portfolio review with an art advisor is required 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.

² 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.

³ Approved courses are listed with the requirements for the associate in fine arts–art degree. One course must meet the world cultures and diversity requirement.

⁴ Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate in fine arts–art degree.

⁵ Select studio art courses from at least two media for a total of 9 semester hours in consultation with an art department advisor.

Associate in Arts – Art Education Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative art education baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts:

ART	130	History of Art I	3
ART	131	History of Art II	3
		Humanities elective ³	<u>3</u>
			9

Social and Behavioral Sciences⁴ 9

Special Electives

ART	110	Drawing I	3
ART	111	Drawing II	<u>3</u>
			6

Approved Electives

ART	121	Design I	3
ART	122	Design II	3
		Studio courses ⁵	3-9
		Other elective credit ¹	<u>2-8</u>
			11-23

Total 60

¹ Approved courses are listed with the requirements for the associate degrees.
² Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.
³ Select one from: HUM 103, HUM 110, LIT 208, LIT 223, LIT 224, PHI 160, PHI 205.
⁴ Recommended: HST 111 or HST 112, PSC 101, PSY 101. Approved courses are listed with the requirements for the associate degrees.
⁵ Select at least one media-specific course from the following in consultation with an art department advisor: ART 206, ART 225, ART 261, ART 291, ART 296. If two or more courses are selected, they should be from different media.

Associate in Science – Biological Sciences Sample Plan

This sample transfer planning guide meets the requirements of the A.S. 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. 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.

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MGT	225	Applied General Statistics or	
MTH	165	Elementary Statistics or	
MTH	200	Calculus with Analytic Geometry I	4-5
		Mathematics elective ^{1,3}	<u>1-2</u>
			6

Physical and Life Sciences

BIO	110	Principles of Biology	4
CHM	121	General Chemistry I	<u>5</u>
			9

Humanities and Fine Arts^{2,5}

		9
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Social and Behavioral Sciences^{3,5}

		9
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Special Electives³ 3

Approved Electives

BIO	120	General Botany	4
BIO	140	General Zoology	4
CHM	122	General Chemistry II	4
		Physics and Organic Chemistry ⁴	<u>10</u>
			22
		Total	65

¹ Students should check the curriculum of the transfer schools they are considering.
² Select at least one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
³ Approved courses are listed with the requirements for the associate degrees.
⁴ Take two courses in physics (PHY 121 and PHY 122 or PHY 201 and PHY 202) OR take two courses in organic chemistry (CHM 204 and CHM 205) OR take one course in physics and one course in organic chemistry.
⁵ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Arts – Business Administration Sample Plan

This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative business administration baccalaureate major recommendations. 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.

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MTH	134	Calculus for Social Scientists or	
MTH	200	Calculus with Analytic Geometry I	4-5

Physical and Life Sciences¹ 7

Humanities and Fine Arts² 9

Social and Behavioral Sciences

ECO	211	Microeconomics	3
ECO	212	Macroeconomics	3
		Social and Behavioral Sciences elective ³	<u>3</u>
			9

Special Electives

CIS	100	Computer Literacy or	
CIS	101	Introduction to Computer Information Systems	3
MGT	111 ⁴	Introduction to Business Organizations	<u>3</u>
			6

Approved Electives

ACC	101	Introduction to Financial Accounting	4
ACC	102	Introduction to Managerial Accounting	3
ACC	211 ⁵	Business Law I or	
ACC	213	Legal Environment of Business	3
MGT	225	Applied General Statistics	4
		Other elective credit ⁶	<u>1-2</u>
			15-16

Total 60

- 1 Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.
- 2 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 must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.
- 3 PSY 101 is recommended. Select in consultation with an advisor.
- 4 As part of the Illinois Articulation Initiative (Phase II), participating schools will accept MGT 111 as elective credit.
- 5 As part of the Illinois Articulation Initiative (Phase II), participating schools will accept ACC 211 or 213 in place of an equivalent business law or legal and social environment of business courses.
- 6 Approved courses are listed with the requirements for the associate degrees.

Associate in Science – Chemistry Sample Plan

*This sample transfer planning guide meets the requirements of the A. S. 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. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MTH	200	Calculus with Analytic Geometry I	5
MTH	201	Calculus with Analytic Geometry II	<u>5</u>
			10

Physical and Life Sciences

PHY	201	General Physics I–Mechanics	5
		Life Science elective ¹	<u>4</u>
			9

Humanities and Fine Arts^{2,3}

		9
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		9
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		9
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Special Electives¹	3
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Approved Electives Select four courses from:⁴

CHM	121	General Chemistry I	5
CHM	122	General Chemistry II	5
CHM	204	Organic Chemistry I	5
CHM	205	Organic Chemistry II	5
PHY	202	General Physics II–Heat, Electricity and Magnetism	<u>5</u>
			20

Total 69

- ¹ Approved courses are listed with the requirements for the associate degrees.
- ² Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
- ³ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.
- ⁴ Some schools may also require the completion of MTH 202 and PHY 203 as part of the math and physics sequences. Students should check with an advisor to adapt their educational plan accordingly.

**Associate in Science – Computer Science –
Information Systems Emphasis Sample Plan**

*This sample transfer planning guide meets the requirements of the A. S. degree and follows the Illinois Articulation Initiative computer science – information systems emphasis baccalaureate major recommendations. Bachelor’s degree programs in computer science encompass two distinct emphases: the information systems emphasis and the technical emphasis. The information systems emphasis focuses on the use of computer technology and information management methods to solve business problems. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MTH	124	Finite Mathematics or	
MTH	134	Calculus for Social Scientists or	
MTH	200	Calculus with Analytic Geometry I	3-5
MGT	225	Applied General Statistics	<u>4</u>
			7-9

Physical and Life Sciences¹ 8

Humanities and Fine Arts^{2,4} 9

Social and Behavioral Sciences

ECO	211	Microeconomics	3
ECO	212	Macroeconomics	3
		Social and Behavioral Science elective ^{3,4}	<u>3</u>
			9

Special Electives

CSC	121	Computer Science I	4
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Approved Electives

ACC	101	Introduction to Financial Accounting	4
ACC	102	Introduction to Managerial Accounting	3
CSC	122	Computer Science II	4
CSC	217	Assembler Programming and Machine Organization	4
MTH	220	Discrete Mathematics	<u>3</u>
			18

Total 64

¹ PHY 201 recommended for flexibility to change to the technical emphasis. Approved courses are listed with the requirements for the associate degrees.

² Select one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.

³ Approved courses are listed with the requirements for the associate degrees.

⁴ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Science – Computer Science – Technical Emphasis Sample Plan

This sample transfer planning guide meets the requirements of the A. S. 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. 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.

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MTH	200	Calculus with Analytic Geometry I	5
MTH	201	Calculus with Analytic Geometry II	<u>5</u>
			10

Physical and Life Sciences

PHY	201	General Physics I–Mechanics	5
		Life Science elective ¹	<u>4</u>
			9

Humanities and Fine Arts^{2,4}

		9
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Social and Behavioral Sciences^{3,4}

		9
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Special Electives

CSC	121	Computer Science I	4
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Approved Electives

CSC	122	Computer Science II	4
MTH	220	Discrete Mathematics	3
		Select 8 hours from: ⁵	
CSC	216	Data Structures and Algorithm Analysis	4
CSC	217	Assembler Programming and Machine Organization.....	4
PHY	202	General Physics II–Electricity and Magnetism	5
PHY	203	General Physics III–Thermal and Quantum Physics..	5
MTH	202	Calculus with Analytic Geometry III	<u>5</u>
			15

Total 65

¹ Approved courses are listed with the requirements for the associate degrees.
² Select one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
³ PSY 101 recommended. Approved courses are listed with the requirements for the associate degrees.
⁴ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.
⁵ Students should try to complete the entire course sequence in calculus and physics at the same school before transferring, since topics are covered in different orders by different schools.

Associate in Arts – Early Childhood Education Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. 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. **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.*

General Education Courses

Communications

ENG 101	Composition	3
ENG 102	Composition	3
SPE 101	Fundamentals of Speech Communication	3
		<u>9</u>

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts^{3,5} 9

Social and Behavioral Sciences

PSY 101	Introduction to Psychology	3
	Social and Behavioral Sciences elective ^{4,5}	3
		<u>6</u>
		9

Special Electives⁶ 6

Approved Electives⁷

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Child Development	3
ECE 219	Students with Disabilities in School	3
ECE 250	Health, Nutrition and Safety	3
EDU 201	Introduction to Education	3
	Other elective credit ¹	3
		<u>18</u>

Total 61

- ¹ Students should check the curriculum of the transfer school they are considering. Approved courses are listed with the requirements for the associate degrees.
- ² CHM 105 recommended. Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.
- ³ Select at least one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
- ⁴ Approved courses are listed with the requirements for the associate degrees.
- ⁵ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.
- ⁶ Some schools may require a foreign language. Approved courses are listed with the requirements for the associate degrees.
- ⁷ A grade of C or better is required in ECE 101, ECE 102, ECE 219, ECE 250, and EDU 201. It may be in the student's best interest to repeat these courses if taken more than five years before transfer. These credits, while transferable to participating institutions, may or may not substitute for upper-division professional coursework required for certification.

Associate in Arts – Elementary Education Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative teacher education baccalaureate major recommendations. **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.*

General Education Courses

Communications			
ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9
Mathematics			
MTH	131	Mathematics for Elementary Teaching II	4
Physical and Life Sciences ¹			7-8
Humanities and Fine Arts ^{2,4}			9
Social and Behavioral Sciences			
PSY	101	Introduction to Psychology	3
		Social and Behavioral Sciences elective ^{4,5}	<u>6</u>
			9
Special Electives ⁵			6
Approved Electives ⁶			
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	250	Introduction to Technology in Education	3
MTH	130	Mathematics for Elementary Teaching I	<u>4</u>
			17
Total			61

¹ CHM 105 recommended. Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.

² Select at least one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.

³ Approved courses are listed with the requirements for the associate degrees.

⁴ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

⁵ Some schools may require a foreign language. Approved courses are listed with the requirements for the associate degrees.

⁶ As part of the Illinois Articulation Initiative (Phase II), participating schools will accept ECE 102, EDU 201, EDU 211 and EDU 250 in transfer, however, they may or may not substitute for upper division professional course work required for certification.

Associate in Arts – Secondary Education Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative teacher education baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG 101	Composition	3
ENG 102	Composition	3
SPE 101	Fundamentals of Speech Communication	<u>3</u>
		9

Mathematics ¹	3-6
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Physical and Life Sciences ²	7-8
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Humanities and Fine Arts ^{3,5}	9
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Social and Behavioral Sciences

PSY 101	Introduction to Psychology	3
	Social and Behavioral Sciences elective ^{4,5}	<u>6</u>
		9

Special Electives ⁶	6
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Approved Electives⁷

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 250	Introduction to Technology in Education	3
	Area of teaching major or minor ⁸	<u>4</u>
		17

Total 60

¹ Students should check with the curriculum of the transfer school they are considering. Approved courses are listed with the requirements for the associate degrees.

² CHM 105 recommended. Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.

³ Select at least one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.

⁴ Approved courses are listed with the requirements for the associate degrees.

⁵ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

⁶ Some schools may require a foreign language. Approved courses are listed with the requirements for the associate degrees.

⁷ As part of the Illinois Articulation Initiative (Phase II), participating schools will accept ECE 102, EDU 201, EDU 211 and EDU 250 in transfer, however, they may or may not substitute for upper division professional course work required for certification.

⁸ Since secondary education is not a major at the baccalaureate level, students need to select a major and a teaching minor from among those disciplines taught in high schools. Courses in the major and minor should be selected in consultation with an advisor.

Associate in Arts – Special Education Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative teacher education baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG 101	Composition	3
ENG 102	Composition	3
SPE 101	Fundamentals of Speech Communication	<u>3</u>
		9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts^{3,5} 9

Social and Behavioral Sciences

PSY 101	Introduction to Psychology	3
	Social and Behavioral Sciences elective ^{4,5}	<u>6</u>
		9

Special Electives⁶ 6

Approved Electives⁷

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 250	Introduction to Technology in Education	3
	Other elective credit ¹	<u>4</u>
		17

Total 60

¹ Students should check with the curriculum of the transfer school they are considering. Approved courses are listed with the requirements for the associate degrees.

² CHM 105 recommended. Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.

³ Select at least one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.

⁴ Approved courses are listed with the requirements for the associate degrees.

⁵ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

⁶ Some schools may require a foreign language. Approved courses are listed with the requirements for the associate degrees.

⁷ As part of the Illinois Articulation Initiative (Phase II), participating schools will accept ECE 102, EDU 201, EDU 211 and EDU 250 in transfer, however, they may or may not substitute for upper division professional course work required for certification.

Associate in Engineering Science – Engineering Sample Plan¹

This sample transfer planning guide meets the requirements of the A. E. S. degree and follows the Illinois Articulation Initiative engineering baccalaureate major recommendations. Students should have a strong background in mathematics and the physical sciences. 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.

First Year, First Semester

CHM	121	General Chemistry I.....	5
EGR	120	Engineering Graphics I (CAD)	4
MTH	200	Calculus with Analytic Geometry I	5
			<u>14</u>

First Year, Second Semester

ENG	101	Composition	3
Select one course from:			
CSC	121 ²	Computer Science I or	
CSC	208 ²	Problem Solving for Science	
		and Engineering Using FORTRAN	4
MTH	201	Calculus with Analytic Geometry II	5
PHY	201	General Physics I–Mechanics.....	5
			<u>17</u>

Summer

ECO	211	Microeconomics.....	3
		Humanities and Fine Arts Elective ³	3
			<u>6</u>

Second Year, First Semester

		Engineering specialty ⁴	4-6
ENG	102	Composition	3
MTH	202	Calculus with Analytic Geometry III	5
PHY	202	General Physics II–Electricity	
		and Magnetism	5
			<u>17-19</u>

Second Year, Second Semester

		Engineering specialty ⁴	8-10
MTH	212	Differential Equations.....	3
		Social and Behavioral Sciences or Humanities and	
		Fine Arts Elective ³	3
			<u>14-16</u>
		Total	68-72

¹ Completion of the associate in engineering science (A.E.S) degree does not fulfill the requirements of the Illinois General Education Core Curriculum. After transfer, A.E.S. students will need to complete the general education requirements of the institution to which they transfer.

² Other computer science courses may be substituted based on requirements of specialty and transfer institution.

³ Students must select at least one course in either the humanities/fine arts or social/behavioral sciences that meets the world cultures and diversity requirement. A two-semester sequence in the same discipline from either the humanities/fine arts or the social/behavioral sciences is recommended. Approved courses are listed with the requirements for the associate degrees.

⁴ Note a minimum of 13 hours of engineering specialty courses is required in total. Specialty courses must be approved in consultation with engineering chair:

- Chemical–CHM 122, 204, 205
- Civil–EGR 121, 210, 211, 212
- Computer–CSC 122 or MTH 220; EGR 260, 262, 270
- Electrical–EGR 260, 262, 270; PHY 203
- Industrial–EGR 121, 210, 211, 212
- Mechanical–EGR 121, 210, 211, 212, 240, 260, 262

Associate in Arts – English Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative English baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts 9

Select two courses from:

LIT	221	American Literature—Colonial Days to Civil War	
LIT	222	American Literature—Civil War to Present	
LIT	231	English Literature to 1800	
LIT	232	English Literature 1800-1914.....	6
		Fine Arts electives ^{1,4}	<u>3</u>
			9

Social and Behavioral Sciences^{1,4} 9

Special Electives

		Foreign Language elective ³	4
		Other special elective.....	<u>2</u>
			6

Approved Electives

Select one course from:

LIT	105	Poetry	
LIT	110	Drama	
LIT	115	Fiction	3
		Other electives ^{1,3,5,6}	<u>14</u>
			17

Total 60

¹ Approved courses are listed with the requirements for the associate degrees.

² Select at least one physical and at least one life science. One course must include a lab. Approved courses are listed with the requirements for the associate degrees.

³ Competency in a single foreign language through the third or fourth college semester. See a Harper Student Development counseling faculty member to determine which foreign language course(s) is appropriate to take.

⁴ One course from fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

⁵ Some universities require a multicultural or human diversity course within the English major. Consult the university to which you intend to transfer and your advisor. Universities with such a requirement will accept either LIT 208 or LIT 223.

⁶Some universities offer a specialization in creative writing. Consult the university to which you intend to transfer and your advisor. Universities with such a requirement will accept either ENG 221 or ENG 222.

Associate in Arts – Environmental Studies Sample Plan

This sample transfer planning guide meets the requirements of the A. A. degree and the core general education requirements of the Illinois Articulation Initiative. **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.

General Education Courses

Communications

ENG	101 ¹	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MTH	165 ¹	Elementary Statistics	4
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Physical and Life Sciences

BIO	103	Man and Environment.....	3
GEO	103	Environmental Geology	<u>4</u>
			7

Humanities and Fine Arts

		Fine Arts or Interdisciplinary Studies elective ²	3
PHI	101	Critical Thinking	3
PHI	115	Ethics	<u>3</u>
			9

Social and Behavioral Sciences

ANT	202*	Cultural Anthropology or	
ECO	211	Microeconomics.....	3
GEG	210	Economic Geography	3
PSC	270*	Global Politics	<u>3</u>
			9

Special Electives

CAS	160	Introduction to Business Software Packages	3
MGT	111	Introduction to Business Organization	<u>3</u>
			6

Approved Electives

BIO	104	Environmental Laboratory Biology.....	4
PHS	105	Energy and Society.....	4
PHI	170	Environmental Ethics	3
		Other Approved electives ²	<u>5</u>
			16

Total 60

¹ Prerequisites must be met prior to registration for these courses.

² Approved courses are listed with the requirements for the associate degrees.

* These courses meet the World Culture and Diversity graduation requirement.

Associate in Arts – Health Education Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and the core general education requirements of the Illinois Articulation Initiative. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MTH	101	Quantitative Literacy	4
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Physical and Life Sciences¹

Humanities and Fine Arts^{2,4}

Social and Behavioral Sciences^{3,4}

Special Electives

Select six credit hours from:			
PED	100	Nutrition and Exercise	2
PED	203 ⁴	Health	3
PED	213	Wellness for Life	<u>3</u>
			6

Approved Electives

PED	201	Standard First Aid	3
PED	205	Drugs in Our Culture	3
PED	207	Human Sexuality	3
Other approved elective (non-PED courses) ³			<u>7</u>
			16

Total 60

¹ Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.
² Select at least one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
³ Approved courses are listed with the requirements for the associate degrees.
⁴ If PED 203 is not selected, then one course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Arts – History Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative history baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG 101	Composition	3
ENG 102	Composition	3
SPE 101	Fundamentals of Speech Communication	<u>3</u>
		9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts^{3,5} 9

Social and Behavioral Sciences

HST 111	The American Experience to 1877	3
HST 112	The American Experience Since 1877	3
	Social and Behavioral Sciences elective ^{1,5}	<u>3</u>
		9

Special Electives⁴ 6

Approved Electives

HST 141	History of Western Civilization to 1650	4
HST 142	History of Western Civilization Since 1650	4
	Other elective credit ⁶	<u>9</u>
		17

Total 60

- ¹ Approved courses are listed with the requirements for the associate degrees.
- ² Select at least one physical and one life science course. One must include a lab. Approved courses are listed with the requirements for the associate degrees.
- ³ Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
- ⁴ Some schools may require a foreign language. Approved courses are listed with the requirements for the associate degrees.
- ⁵ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.
- ⁶ Students should select courses in consultation with an advisor. Students who have decided upon a minor field are encouraged to complete one or more courses in that minor. Students planning to seek high school teacher certification are encouraged to complete one or more professional education courses. Approved courses are listed with the requirements for the associate degrees.

Associate in Arts – Law Enforcement and Justice Administration Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. 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. **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.***

First Year, First Semester

ENG	101	Composition	3
LEJ	101	Introduction to Criminal Justice.....	3
LEJ	210	Criminology	3
		Mathematics elective ¹	3
SOC	101	Introduction to Sociology	<u>3</u>
			15

First Year, Second Semester

LEJ	201	Criminal Law	3
LEJ	205	Juvenile Justice	3
PHI	101	Critical Thinking	3
SOC	205	Social Problems	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			15

Second Year, First Semester

ENG	102	Composition	3
LEJ	104	Corrections	3
LEJ	214	Community Policing	3
		Physical and Life Science elective ²	3
		Social and Behavioral Science elective ³	<u>3</u>
			15

Second Year, Second Semester

		Humanities and Fine Arts electives ⁴	6
		Physical and Life Science elective ²	4
		Social and Behavioral Science elective ³	3
		Special elective ⁵	<u>3</u>
			16

¹ Approved courses are listed with the requirements for the associate degrees.
² Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.
³ PSY 101 is recommended. Approved courses are listed with the requirements for the associate degrees.
⁴ Select at least one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
⁵ Choose from CIS 100, DIV 101, SGN 101, SPA 101, SPA 121, SPE 200.

Associate in Arts – Liberal Arts Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and the core general education requirements of the Illinois Articulation Initiative. **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.*

General Education Courses

Communications			
ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9
Mathematics ¹		.....	3-6
Physical and Life Sciences ²		.....	7-8
Humanities and Fine Arts ^{3,5}		.....	9
Social and Behavioral Sciences ^{1,5}		.....	9
Special Electives ⁴		.....	6
Approved Electives ¹		.....	<u>17</u>
		Total	60

- ¹ Approved courses are listed with the requirements for the associate degrees.
- ² Select at least one physical and one life science course. One course must include a lab. Approved courses are listed with the requirements for the associate degrees.
- ³ Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
Recommended: HUM 101, HUM 102 and advanced literature courses.
- ⁴ Recommended: foreign language courses. Approved courses are listed with the requirements for the associate degrees.
- ⁵ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Science – Mathematics Sample Plan

*This sample transfer planning guide meets the requirements of the A. S. degree and follows the Illinois Articulation Initiative mathematics baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MTH	200	Calculus with Analytic Geometry I	5
MTH	201	Calculus with Analytic Geometry II	<u>5</u>
			10

Physical and Life Sciences ¹	.....	8
Humanities and Fine Arts ^{2,4}	.....	9
Social and Behavioral Sciences ^{3,4}	.....	9

Special Electives

CSC	208	Problem Solving for Science and Engineering Using FORTRAN	4
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Approved Electives

MTH	202	Calculus with Analytic Geometry III	5
MTH	212	Differential Equations	3
		Other elective credit ³	<u>8</u>
			16

Total 65

¹ Select one physical and one life science course. At least one must include a lab. PHY 201 is strongly recommended. Approved courses are listed with the requirements for the associate degrees.
² Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
³ Approved courses are listed with the requirements for the associate degrees.
⁴ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Fine Arts – Music – Music Emphasis Sample Plan¹

*This sample transfer planning guide meets the requirements of the A. F. A. - Music degree and follows the Illinois Articulation Initiative music baccalaureate major recommendations. 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.***

General Education Courses

Communications

ENG 101	Composition	3
ENG 102	Composition	3
SPE 101	Fundamentals of Speech Communication	<u>3</u>
		9

Mathematics² 3

Physical and Life Sciences² 7

Humanities² 6

Social and Behavioral Sciences² 3

Core Music Courses

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 ³	Class Piano I.....	2
MUS 166 ³	Class Piano II.....	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 ³	Class Piano III.....	2
MUS 266	Class Piano IV	2
Applied Music⁴	.....	8
Ensemble⁵	.....	<u>4</u>
		39

Total 67

¹ 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.

² Approved courses are listed with the requirements for the associate in fine arts - music degree. One course from humanities or from social and behavioral sciences must meet the world cultures and diversity requirement.

³ 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.

⁴ To be selected from MUS 180 through MUS 199 and MUS 280 through MUS 299.

⁵ To be selected from MUS 130, MUS 136, MUS 140, MUS 145 and MUS 150.

Associate in Fine Arts – Music – Piano Pedagogy Emphasis Sample Plan¹

*This sample transfer planning guide meets the requirements of the A. F. A. - Music degree and follows the Illinois Articulation Initiative music baccalaureate major recommendations. The piano pedagogy emphasis is designed to provide the knowledge and skills necessary to teach beginning and intermediate piano students. It will provide opportunities for observation of individual and group instruction as well as supervised student teaching. **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.***

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics² 3

Physical and Life Sciences² 7

Humanities² 6

Social and Behavioral Sciences² 3

Core Music Courses

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	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	266 ³	Class Piano IV	2
MUS	271	Piano Pedagogy I	3
MUS	272	Piano Pedagogy II	3
		Applied Music⁴	8
		Ensemble⁵	<u>4</u>
			39

Total 67

¹ 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.

² Approved courses are listed with the requirements for the associate in fine arts - music degree. One course from humanities or from social and behavioral sciences must meet the world cultures and diversity requirement.

³ All Music majors must demonstrate piano proficiency; MUS 265 may be passed by proficiency exam. Music majors are also advised to take MUS 100 as part of their elective credit.

⁴ To be selected from MUS 180 through MUS 199 and MUS 280 through MUS 299.

⁵ To be selected from MUS 130, MUS 136, MUS 140, MUS 145, and MUS 150.

Associate in Fine Arts – Music – Music Education Sample Plan¹

This sample transfer planning guide meets the requirements of the A. F. A. - Music degree and follows the Illinois Articulation Initiative music education baccalaureate major recommendations. **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.

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	3
			<u>9</u>

Mathematics²

Physical and Life Sciences²

Humanities³

Social and Behavioral Sciences⁴

Core Music Courses

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 ⁵	Class Piano I	2
MUS	166 ⁵	Class Piano II	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 ⁵	Class Piano III	2
MUS	266	Class Piano IV	2
Applied Music ⁶		.....	8
Ensemble ⁷		.....	4
		Total	67

¹ 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.

² Approved courses are listed with the requirements for the associate in fine arts–music degree.

³ Approved courses are listed with the requirements for the associate in fine arts–music degree. Select one course from HUM 103, LIT 208, PHI 160 or PHI 205.

⁴ Recommended: PSC 101 or HST 111 or HST 112.

⁵ 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.

⁶ To be selected from MUS 180 through MUS 199 and MUS 280 through MUS 299.

⁷ To be selected from MUS 130, MUS 136, MUS 140, MUS 145 and MUS 150.

Associate in Science – Nursing Sample Plan

This sample transfer planning guide meets the requirements of the A. S. degree and follows the Illinois Articulation Initiative nursing baccalaureate major recommendations. Harper also offers an associate in applied science degree in nursing. 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.

General Education Courses

Communications			
ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9
Mathematics¹			
			6
Physical and Life Sciences			
BIO	130	Microbiology	4
CHM	121	General Chemistry I	<u>5</u>
			9
Humanities and Fine Arts^{2,4}			
			9
Social and Behavioral Sciences^{1,3,4}			
			9
Special Electives¹			
			3
Approved Electives			
BIO	160	Human Anatomy	4
BIO	161	Human Physiology	4
CHM	122	General Chemistry II	5
CHM	201	Basic Organic Chemistry	4
Approved electives¹			
			<u>2</u>
			19
		Total	64

¹ Approved courses are listed with the requirements for the associate degrees.
² Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
³ Recommended: PSY 101, PSY 228, and SOC 101.
⁴ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Arts – Physical Education Sample Plan

This sample transfer planning guide meets the requirements of the A. A. degree and the core general education requirements of the Illinois Articulation Initiative. 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.

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics

MTH	101	Quantitative Literacy	4
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Physical and Life Sciences¹ 7

Humanities and Fine Arts^{2,4} 9

Social and Behavioral Sciences^{3,4} 9

Special Electives

Select six credit hours from:

PED	100	Nutrition and Exercise	2
PED	203 ⁴	Health	3
PED	213	Wellness for Life	<u>3</u>
			6

Approved Electives

PED	200	Introduction to Physical Education.....	2
PED	201	Standard First Aid	3
PED	208	Personal Training I: Bioscientific Foundations or	
PED	219	Care and Prevention of Athletic Injuries	3

Choose at least two credit hours from:

PED 205, PED 207, PED 210, PED 212, PED 214, PED 218, PED 219,			
PED 220, PED 222, PED 224, PED 226, PED 230			2
Other approved elective (non-PED courses) ³			<u>6</u>
			16

Total 60

¹ Select one physical and one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.
² Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
³ Approved courses are listed with the requirements for the associate degrees.
⁴ If PED 203 is not selected, then one course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Arts – Political Science Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative political science baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG 101	Composition	3
ENG 102	Composition	3
SPE 101	Fundamentals of Speech Communication	<u>3</u>
		9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts³ 9

Social and Behavioral Sciences

PSC 101	American Politics and Government	3
PSC 220	State and Local Government in the United States.....	3
	Social and Behavioral Sciences elective ¹	<u>3</u>
		9

Special Electives¹ 6

Approved Electives

PSC 270	Global Politics	3
	Other elective credit ¹	<u>14</u>
		17

Total 60

¹ Approved courses are listed with the requirements for the associate degrees.

² Select at least one physical and one life science course. One course must include a lab. Approved courses are listed with the requirements for the associate degrees.

³ Select one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.

Associate in Arts – Psychology Sample Plan

This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative psychology baccalaureate major recommendations. 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.

General Education Courses

Communications

ENG 101	Composition	3
ENG 102	Composition	3
SPE 101	Fundamentals of Speech Communication	<u>3</u>
		9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts^{3,5} 9

Social and Behavioral Sciences

PSY 101	Introduction to Psychology	3
	Social and Behavioral Sciences electives ^{4,5}	<u>6</u>
		9

Special Electives⁴ 6

Approved Electives

Select three courses from:

PSY 216	Child Psychology	3
PSY 225	Theories of Personality	3
PSY 230	Abnormal Psychology	3
PSY 245	Industrial/Organizational Psychology	3
	Other elective credit ⁴	<u>8</u>
		17

Total 60

Select three courses from:

PSY 216	Child Psychology	3
PSY 225	Theories of Personality	3
PSY 230	Abnormal Psychology	3
PSY 245	Industrial/Organizational Psychology	3
and		
	Other elective credit ⁴	<u>8</u>
		17

Total 60

¹ MTH 165 or MGT 225, MTH 200 and/or MTH 124 are recommended.

² Select at least one physical and at least one life science course. At least one must include a lab. Approved courses are listed with the requirements for the associate degrees.

³ Select one course from humanities and one from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.

⁴ Approved courses are listed with the requirements for the associate degrees.

⁵ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirement for the associate degrees.

Associate in Arts – Sociology Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative sociology baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts³ 9

Social and Behavioral Sciences

ANT	101	Introduction to Anthropology or	
ANT	202	Cultural Anthropology	3
SOC	101	Introduction to Sociology	3
SOC	120	The Family in Contemporary Society	<u>3</u>
			9

Special Electives⁴ 6

Approved Electives

SOC	205	Social Problems	3
SOC	230	Sociology of Sex and Gender	3
		Other elective credit ⁴	7-11

Total 60

¹ Approved courses are listed with the requirements for the associate degrees. MTH 124 or MTH 165 or MGT 225 is recommended.

² Select at least one physical and one life science. One course must include a lab. Approved courses are listed with the requirements for the associate degrees.

³ Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.

⁴ Approved courses are listed with the requirements for the associate degrees.

Associate in Arts – Speech Communication Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative speech communication baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts^{3,4} 9

Social and Behavioral Sciences^{1,4} 9

Special Electives

Select two courses from:

SPE	107	Oral Interpretation	3
SPE	200	Interpersonal Communication	3
SPE	205	Group Discussion	<u>3</u>
			6

Approved Electives

SPE	102	Advanced Public Speaking	3
		Other elective credit ¹	<u>10-14</u>
			13-17

Total 60

¹ Approved courses are listed with the requirements for the associate degrees.

² Select at least one physical and at least one life science. One course must include a lab. Approved courses are listed with the requirements for the associate degrees.

³ Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.

⁴ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Arts – Theatre Arts Sample Plan

*This sample transfer planning guide meets the requirements of the A. A. degree and follows the Illinois Articulation Initiative theatre arts baccalaureate major recommendations. **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.*

General Education Courses

Communications

ENG	101	Composition	3
ENG	102	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			9

Mathematics¹ 3-6

Physical and Life Sciences² 7-8

Humanities and Fine Arts^{3,4} 9

Social and Behavioral Sciences^{1,4} 9

Special Electives

SPE	107	Oral Interpretation	3
SPE	212	Acting I	<u>3</u>
			6

Approved Electives

SPE	213	Acting II	3
SPE	216	Stagecraft	3
		Other elective credit ¹	<u>7-11</u>
			13-17

Total 60

- ¹ Approved courses are listed with the requirements for the associate degrees.
- ² Select at least one physical and one life science. One course must include a lab. Approved courses are listed with the requirements for the associate degrees.
- ³ Select one course from humanities and one course from fine arts. Interdisciplinary courses may count in either category. Approved courses are listed with the requirements for the associate degrees.
- ⁴ One course from humanities and fine arts or from social and behavioral sciences must meet the world cultures and diversity requirement. Approved courses are listed with the requirements for the associate degrees.

Associate in Applied Science Degree Programs

Curricula leading to the associate in applied science degree are for students planning to follow a career program to prepare for employment. In order to earn an associate in applied science degree, you must attain a minimum grade point average (GPA) of 2.0.

Certificate Programs

A certificate program is a sequence of courses in a specialized academic and/or technical area requiring approximately two or three years of part-time or one year full-time course work. Completion of the course work required for a specific program with a grade point average of 2.0 (C) or higher entitles the student to a certificate of achievement in that field of specialization.

Courses in certificate programs are offered in the evening as well as during the day to permit part-time evening students to meet their particular training needs and to reach an obtainable goal within a reasonable period of time.

ACCOUNTING ASSOCIATE

Associate in Applied Science Degree
Accounting Associate Certificate
Accounting Clerk Certificate
Accounting-Payroll, State and Local Taxes Certificate
Professional Accounting—CPA Preparation Certificate

ARCHITECTURAL STUDIES

Associate in Applied Science Degree
Architectural Studies Design Certificate
Architectural Studies Technology Certificate
Architectural 2D CAD Certificate
Architectural 3D CAD Certificate

BUILDING CODES AND ENFORCEMENT

Building Codes and Enforcement Certificate

BUSINESS

See Accounting Associate; Computer Information Systems;
Financial Services; Hospitality Management; International Business;
Management; Marketing; Mass Communication;
Supply Chain Management

CARDIAC TECHNOLOGY

Associate in Applied Science Degree
Cardiographic Technician Certificate

COMPUTER INFORMATION SYSTEMS

Associate in Applied Science Degree:
Computers in Business
Associate in Applied Science Degree:
Computer Forensics and Security
Associate in Applied Science Degree:
Software Development
Associate in Applied Science Degree: Web Development
Accessible Web Design and Compliance Certificate
Business Software Specialist Certificate
Cisco Network Administration Certificate
Cisco Network Professional Certificate
Computer Forensics Certificate
Computer Support Technician Certificate
Computers in Business Certificate
Database Management Certificate
Graphic Arts Web Design Certificate (see Graphic Arts Technology)
Linux Network Administration Certificate
Microsoft Network Administration Certificate
Network Security Certificate
Network Support Technician Certificate
Networking Fundamentals Certificate
Software Development Certificate
Web Development Certificate
Web Visual Design Certificate

COSMETOLOGY

Cosmetology Certificate

DENTAL HYGIENE

Associate in Applied Science Degree

DIAGNOSTIC MEDICAL SONOGRAPHY

Associate in Applied Science Degree

DIETETIC TECHNICIAN

Associate in Applied Science Degree
Dietary Manager Certificate

EARLY CHILDHOOD EDUCATION

Associate in Applied Science Degree
Early Childhood Education:
Before/After School Care Certificate
Early Childhood Education: Family Child Care Certificate
Early Childhood Education: Infant/Toddler Certificate
Early Childhood Education:
Special Education Paraprofessional Certificate
Early Childhood Education Administrator Certificate
Early Childhood Education Assistant Teacher Certificate
Early Childhood Education Teacher Certificate

ELECTRONICS ENGINEERING TECHNOLOGY

Associate in Applied Science Degree
Advanced Industrial Electronics Maintenance Certificate
Alternative Electrical Energy Certificate
Electrical Maintenance Certificate
Electronics Certificate
Industrial Electronics Maintenance Certificate
Radio Frequency Identification (RFID) Electronics Certificate

EMERGENCY AND DISASTER MANAGEMENT

Associate in Applied Science Degree
Emergency and Disaster Management Certificate
Public Safety Dispatcher Certificate

EMERGENCY MEDICAL SERVICES

Associate in Applied Science Degree
Emergency Medical Services: EMT Basic Certificate
Paramedic Certificate

ENERGY (ALTERNATIVE/SOLAR/WIND)

See Electronics Engineering Technology

ENVIRONMENTAL HEALTH AND SAFETY

Associate in Applied Science Degree:
Environmental Health
Associate in Applied Science Degree:
Occupational Health and Safety
Environmental Health Certificate
Occupational Health and Safety Certificate

FASHION DESIGN

Associate in Applied Science Degree
Fashion Design Certificate
Fashion Graphic Arts Certificate (see Graphic Arts Technology)

FASHION MERCHANDISING

Associate in Applied Science Degree

FINANCIAL SERVICES

Associate in Applied Science Degree
Commercial Credit Management Certificate
Financial Management Certificate
Real Estate Broker's License Preparation Certificate
Real Estate Sales Professional Certificate

FIRE SCIENCE TECHNOLOGY

Associate in Applied Science Degree

FORENSIC SCIENCE

See Law Enforcement and Justice Administration

GRAPHIC ARTS TECHNOLOGY

Associate in Applied Science Degree
Fashion Graphic Arts Certificate
Graphic Arts Certificate
Graphic Arts Design Certificate
Graphic Arts Desktop Publishing Certificate
Graphic Arts Digital Photography Certificate
Graphic Arts Variable Data Certificate
Graphic Arts Web Design Certificate

HEALTH INFORMATION TECHNOLOGY

Associate in Applied Science Degree*
Health Information Technology Certificate*

* Pending ICCB approval.

HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

Associate in Applied Science Degree: Refrigeration and Air Conditioning Technology
 Domestic Refrigeration and Heating Certificate
 Heating Services Certificate
 Refrigeration Service Certificate
 Refrigeration and Air Conditioning Service Certificate
 Residential Comfort Systems Certificate

HOMELAND SECURITY

See Emergency and Disaster Management

HOSPITALITY MANAGEMENT

Associate in Applied Science Degree
 Bread and Pastry Arts Certificate
 Culinary Arts Certificate
 Food Service Management Certificate
 Hotel Management Certificate
 ProStart Hospitality Management Certificate

HUMAN SERVICES

Associate in Applied Science Degree

INTERIOR DESIGN

Associate in Applied Science Degree
 Advanced Interior Design Certificate
 Interior Design Technology Certificate
 Kitchen and Bath Specialty Certificate
 Perspective and Rendering Certificate

INTERNATIONAL BUSINESS

Associate in Applied Science Degree
 International Business Certificate

JOURNALISM

(See Mass Communication)

LAW ENFORCEMENT AND JUSTICE ADMINISTRATION

Associate in Applied Science Degree
 Associate in Applied Science Degree:
 Forensic Science Technician
 Forensic Science Technician Certificate

MAINTENANCE

Associate in Applied Science Degree
 Basic Maintenance Certificate
 Commercial Maintenance Certificate
 Manufacturing Basic Certificate
 Supervisory Maintenance Technology Certificate
 Welding Maintenance Certificate

MANAGEMENT

Associate in Applied Science Degree: Management
 Associate in Applied Science Degree:
 Small Business Management
 Advanced Management Certificate
 General Management Certificate
 Human Resource Management Certificate
 Small Business Management Certificate

MARKETING

Associate in Applied Science Degree
 E-Commerce Business Certificate
 Marketing Certificate
 Marketing Research Certificate
 Retail Merchandising Certificate
 Sales Management and Development Certificate

MASS COMMUNICATION

Associate in Applied Science Degree: Public Relations
 Media Writing and Design Certificate
 Online Communications Certificate
 Public Relations Certificate
 Public Relations for the Web Certificate

MEDICAL OFFICE ADMINISTRATION

Associate in Applied Science Degree:
 Health Care Office Manager
 Health Care Office Assistant Certificate
 Health Insurance Specialist Certificate
 Medical Assistant Certificate
 Medical Transcriptionist Certificate

NANOSCIENCE TECHNOLOGY

Associate in Applied Science Degree

NURSING

Associate in Applied Science Degree
 Certified Nursing Assistant Certificate
 Practical Nursing Certificate

PARALEGAL STUDIES

Associate in Applied Science Degree
 Paralegal Studies Certificate

PARAPROFESSIONAL EDUCATOR

Associate in Applied Science Degree
 Paraprofessional Educator Certificate

PHLEBOTOMY

Phlebotomy Certificate

PUBLIC RELATIONS

(See Mass Communication)

RADIOLOGIC TECHNOLOGY

Associate in Applied Science Degree
 Mammography Certificate

REAL ESTATE

(See Financial Services)

REFRIGERATION AND AIR CONDITIONING TECHNOLOGY

(See Heating, Ventilation and Air Conditioning [HVAC])

SIGN LANGUAGE INTERPRETING

Sign Language Interpreting Certificate

SUPPLY CHAIN MANAGEMENT

Associate in Applied Science Degree
 Inventory/Production Control Certificate
 Physical Distribution Certificate
 Purchasing Certificate
 Supply Chain Management Certificate

WELDING

See Maintenance

ACCOUNTING ASSOCIATE

Associate in Applied Science Degree

This 61 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 YEAR

First Semester

ACC	101	Introduction to Financial Accounting.....	4
CIS	101	Introduction to Computer Information Systems.....	3
English elective ¹		.....	3
MGT	111	Introduction to Business Organization	3
Mathematics elective ²		.....	<u>3-4</u>
			16-17

Second Semester

ACC	102	Introduction to Managerial Accounting.....	3
CIS	106	Computer Logic and Programming Technology or	
WEB	240	E-Commerce Development.....	3
ECO	200	Introduction to Economics or	
ECO	211	Microeconomics	3
ENG	130 ¹	Business Writing	3
Humanities elective [♦]		<u>3</u>
			15

SECOND YEAR

First Semester

ACC or CIS elective ³		.....	3
ACC	201	Intermediate Accounting I	3
ACC	211	Business Law I	3
Business elective ⁴		.....	3
Social Science elective [♦]		<u>3</u>
			15

Second Semester

ACC	202	Intermediate Accounting II	3
ACC	203	Introductory Cost Accounting.....	3
Business electives ⁴		.....	6
CAS electives ⁵		.....	<u>3</u>
			15

¹ Students may elect ENG 100, ENG 101 or ENG 102, depending on their test scores and advice of a Student Development faculty member. ENG 130 must be taken as the second English course.

² Only MGT 150 or MTH 124 or higher will satisfy this requirement.

³ Elective (students must satisfy prerequisite for course elected): ACC 155, ACC 250, ACC 251, ACC 253, ACC 254, CIS 203

⁴ Electives (students must satisfy prerequisites for each course elected): ACC 212, ACC 213, BFC 215, MGT 218, MGT 225, MGT 270

⁵ Electives: CAS 160 or CAS 105, CAS 115, CAS 125, CAS 215.

[♦] At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

ACCOUNTING ASSOCIATE

Accounting Associate Certificate

This 19 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:

ACC	101	Introduction to Financial Accounting	4
ACC	102	Introduction to Managerial Accounting.....	3
CAS	105	Word Processing Software	1
CAS	115	Spreadsheet Software	1
CAS	215	Advanced Spreadsheet Software	1

Electives: Select any three courses from the following:

ACC	155	Tax and Payroll Accounting	4
ACC	201	Intermediate Accounting I	3
ACC	202	Intermediate Accounting II	3
ACC	203	Introductory Cost Accounting.....	3
ACC	250	Income Tax Accounting	3
ACC	251	Advanced Tax Accounting	3
ACC	253	Advanced Accounting I	3
ACC	254	Auditing	3

Accounting Clerk Certificate

This 10 credit-hour certificate program provides the student with the courses needed for an entry level position in such areas as accounts payable, accounts receivable and inventory accounting.

Required:

ACC	101	Introduction to Financial Accounting	4
ACC	102	Introduction to Managerial Accounting.....	3
CAS	105	Word Processing Software	1
CAS	115	Spreadsheet Software	1
CAS	215	Advanced Spreadsheet Software	1

ACCOUNTING ASSOCIATE

Accounting–Payroll, State and Local Taxes Certificate

This seven credit-hour certificate program will provide the student with the courses needed for an entry-level position in this particular area.

Required:

ACC	155	Tax and Payroll Accounting	4
CAS	105	Word Processing Software	1
CAS	115	Spreadsheet Software	1
CAS	215	Advanced Spreadsheet Software	1

Requirements for the Illinois CPA Certificate

To sit for the CPA examination in Illinois effective January 1, 2001, the candidate must have 150 hours of acceptable college level education including at least a bachelor's degree. Twenty-four semester hours must be in accounting; an additional 24 hours in business courses are required (business law is included here).

At William Rainey Harper College, acceptable accounting courses include: ACC 101, ACC 102, ACC 201, ACC 202, ACC 203, ACC 250, ACC 251, ACC 253 and ACC 254. A variety of business courses are offered including: ACC 211, ACC 212, ACC 213 and MGT 225.

Requirements for the 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.

Recommended courses at Harper College include: ACC 101, ACC 102, ACC 201, ACC 202, ACC 203, ACC 211, ACC 212, ACC 251, ACC 253, ACC 254, BFC 215, CIS 101, ECO 210, ECO 211, ECO 212, MGT 111, MGT 218, MGT 225, MGT 270, MTH 124 and PHI 150.

Professional Accounting–CPA Preparation Certificate

This 28 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 24 hours in accounting. (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 Business] are available.) The Illinois Board of Examiners provides more detailed information on educational requirements at www.illinois-cpa-exam.com. Harper will accept up to 14 credit hours in equivalent courses from regionally accredited institutions.

Required:

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	203	Introductory Cost Accounting.....	3
ACC	250	Income Tax Accounting	3
ACC	251	Advanced Tax Accounting	3
ACC	253	Advanced Accounting I	3
ACC	254	Auditing	3

ARCHITECTURAL STUDIES

Associate in Applied Science Degree

The curriculum emphasis is on architecture and construction but also includes general education courses. The program is available to those seeking immediate technical opportunities as well as those who desire more of a design education. The 62-64 credit-hour program graduates may be qualified for positions as architectural drafters, engineering interns in building construction, building materials and system details, specification writers and ancillary service professionals.

The degree's second year allows students to choose either technical-oriented coursework or courses with emphasis in building design and theory.

FIRST YEAR

First Semester

ART	110	Drawing I or	
ATE	elective ¹	.....	3
ATE	101	Introduction to Architecture and	
		Drawing Fundamentals	4
ATE	110	Presentation and Communication Tools	3
ENG	101	Composition	3
		Social Science elective [♦]	<u>3</u>
			16

Second Semester

ART	121 ²	Design I or	
ATE	215	Building Systems	3
ATE	103	Building Materials I	4
ATE	105	Architectural CAD I	3
ATE	106	Architectural CAD II	3
		Mathematics elective ³	<u>3</u>
			16

Second Semester (Optional)

ATE	200	Architectural Internship	3
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SECOND YEAR: Choose one of the specialized study areas:

TECHNICAL

First Semester

ATE	203	Building Materials II	4
ATE	205	Advanced Architectural CAD I	3
ATE	210	Cost Estimating	3
		Humanities elective [♦]	3
SPE	101	Fundamentals of Speech Communication ⁴	<u>3</u>
			16

Second Semester

ATE	209	Construction Studio	4
ATE	213	Construction Management Process	3
		Humanities or Social Science elective [♦]	3
IND	250	Portfolio Review	1
		Recommended elective ^{1,5}	<u>3</u>
			14

ARCHITECTURAL STUDIES

Associate in Applied Science Degree...continued

DESIGN

First Semester

ATE	130	History of Architecture.....	3
ATE	201	Architectural Design Principles	4
MTH	140	Pre-Calculus	5
SPE	101	Fundamentals of Speech Communication ⁴	<u>3</u>
			15

Second Semester

ATE	202	Architectural Design Studio.....	4
ATE	208	Structural Fundamentals.....	4
IND	250	Portfolio Review	1
PHY	121	Introductory Physics I.....	5
Recommended elective ^{5,6}			<u>3</u>
			17

- ¹ Technical students should choose a technical elective from ATE 109, ATE 206, ATE 211 or ATE 216; design students must choose ART 110
- ² Technical students must choose ATE 215; design students must choose ART 121.
- ³ A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement. Technical students must complete MTH 060 or higher; design students must complete MTH 103 as it is a prerequisite for MTH 140. Students in the program who utilize the competency test to meet the mathematics requirement must complete an additional three credit-hour ATE elective.
- ⁴ ENG 102 may be substituted in certain circumstances.
- ⁵ If ATE 200 was successfully completed, this elective is not required.
- ⁶ Recommended electives for design students: ART 122, ATE 205, ATE 209, ATE 211, ATE 215, ATE 216, ENG 102.
- ♦ At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

Architectural Studies Design Certificate

This 20 credit-hour certificate program is designed to meet the educational and training needs of the student interested in design and design theory from both the historical perspective and from hands-on design. The emphasis of this certificate provides the training necessary for an entry level position in the field of architectural design. The certificate also includes an emphasis in sustainable design to introduce the student to the building design skills and materials selection required in today's changing environment.

Required:

ART	110	Drawing I.....	3
ART	121	Design I.....	3
ATE	130	History of Architecture.....	3
ATE	201	Architectural Design Principles	4
ATE	202	Architectural Design Studio.....	4
ATE	211	Principles of Sustainability	3

ARCHITECTURAL STUDIES

Architectural Studies Technology Certificate

This 21 credit-hour certificate program contains the core courses needed to gain an understanding of the basic information required for employment with an architect, contractor, sub-contractor or engineer. Students receive coursework in presentation of project information, computer drafting on industry standard software and knowledge for selecting responsible building materials and details for all but the largest projects. Upon completion of this certificate, students would be prepared for an entry-level position in this rewarding career.

Required:

ATE	101	Introduction to Architecture and Drawing Fundamentals	4
ATE	103	Building Materials I	4
ATE	105	Architectural CAD I	3
ATE	106	Architectural CAD II	3
ATE	110	Presentation and Communication Tools	3
ATE	203	Building Materials II	4

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, 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:

ATE	105	Architectural CAD I	3
ATE	106	Architectural CAD II	3

Architectural 3D CAD Certificate

This 6 credit-hour certificate program is designed for advanced three-dimensional CAD. Courses include three-dimensional drafting and photo realistic rendering of three-dimensional computer images. Add-on rendering packages will also be explored to do three-dimensional animation. Students will learn, through hands-on experience using state of the art computer hardware, the CAD software packages in demand in today's workplace.

ATE	205	Advanced Architectural CAD I	3
ATE	206	Advanced Architectural CAD II	3

BUILDING CODES AND ENFORCEMENT

Building Codes and Enforcement Certificate

This 24 credit-hour certificate program is designed to prepare students for direct employment in the building code enforcement industry. These technical courses are intended to provide students with the basic knowledge of building codes and enforcement. This program covers the latest international construction codes and sustainable green technology incorporated in modern industry.

Required:

BCE	101	Basic Construction for Building Codes.....	3
BCE	102	Basic Code Enforcement Techniques.....	3
BCE	104	Basic Mechanical and Energy Conservation Codes..	3
BCE	105	Basic Plumbing Codes.....	3
BCE	106	Basic Electrical Codes	3
BCE	201	Basic Building Codes	3
BCE	202	International Fire Codes.....	3
BCE	203	National Green Building Codes Standards	3

CARDIAC TECHNOLOGY*

Associate in Applied Science Degree*

This 67.5 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 dynamic visual images of the heart and its circulation. They work in hospitals, clinics, and physician offices producing these echocardiograms to assist the physician in diagnosing heart disease. This is one of several specialty areas in the field of diagnostic medical sonography. This degree program prepares the graduate to secure their American Registry of Diagnostic Medical Sonography credentials and entry-level work in the adult echo specialty area. The graduate also receives instruction in carotid and peripheral vascular ultrasound and EKG-related diagnostic testing. Four hundred (400) hours of clinical education is included during this program at area hospitals.

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 CTE/DMS 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. 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.

PREREQUISITES¹

BIO	160 ²	Human Anatomy	4
BIO	161 ²	Human Physiology	4
ENG	101	Composition	3
Mathematics ³		.....	<u>0</u>
			11

FIRST YEAR¹

First Semester

CTE	101	Electrocardiography	4
CTE	106	Ultrasound Physics and Instrumentation	4
HSC	104 ⁴	Health Care Technology and Informatics.....	2
HSC	107	Basic Health Care Skills.....	1
HSC	112	Medical Terminology.....	<u>2</u>
			13

Second Semester

CTE	102	ECG Surveillance and Stress Testing.....	2
DMS	202	Introduction to Ultrasound.....	2
DMS	222	Essentials of Vascular Sonography	3
DMS	223	Art of Vascular Sonography	2
HSC	165	Basic Pharmacology	1
HSC	213	Legal and Ethical Issues in Health Care	<u>2</u>
			12

Summer Semester (Optional)

CTE	112 ⁵	Laboratory Techniques III	1
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CARDIAC TECHNOLOGY*

Associate in Applied Science Degree*...continued

SECOND YEAR¹

First Semester

	CTE 104	Cardiovascular Principles	3
	CTE 107	Diagnostics I	4
	CTE 109	Laboratory Techniques I	3
	SPE 101	Fundamentals of Speech Communication	<u>3</u>
			13

Second Semester

	CTE 105	Cardiac Pathophysiology	3
	CTE 108	Diagnostics II	4
	CTE 110	Laboratory Techniques II	3
	CTE 120	Introduction to the Cardiac Technology Internship	1.5
		Humanities or Social Science elective*	<u>3</u>
			14.5

Summer Semester

	CTE 130 ⁶	Cardiac Technology Internship	4
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* Cardiac Technology is a limited enrollment program. See the Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in all coursework is required for all students.

² Must be completed no earlier than five years prior to beginning the CTE program; time requirement may be waived for direct patient care providers with a minimum of a two-year allied health care degree.

³ Group 2 Math requirement is met by Cardiac Technology program admission requirements.

⁴ 2-3 credit hours of CAS/CIS courses successful completed within the last 5 years may be substituted.

⁵ This course is optional and not required for program completion.

⁶ Assignments will be based on site availability.

♦ Students need to choose a course to meet this requirement that also fulfills the World Cultures and Diversity graduation requirement.

CARDIAC TECHNOLOGY*

Cardiographic Technician Certificate*

This 28 credit-hour certificate is embedded in the Cardiac Technology AAS degree and prepares students as cardiographic technicians. Cardiographic technicians perform rhythm and 12 lead ECG, holter monitoring stress testing and telemetry surveillance in hospitals and cardiology offices to assist physicians in the diagnosis and monitoring of heart disease. Upon certificate completion, the student is prepared to take the Certified Cardiographic Technician (CCT) examination given through Cardiovascular Credentialing International (CCI).

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 CTE/DMS prefix. Tuition for these 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

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.

PREREQUISITES¹

BIO	160 ²	Human Anatomy	4
BIO	161 ²	Human Physiology	4
ENG	101	Composition	3
Mathematics ³		.....	<u>0</u>
			11

FIRST YEAR¹

First Semester

CTE	101	Electrocardiography	4
CTE	104	Cardiovascular Principles	3
HSC	104 ⁴	Health Care Technology and Informatics.....	2
HSC	107	Basic Health Care Skills.....	1
HSC	112	Medical Terminology.....	<u>2</u>
			12

Second Semester

CTE	102	ECG Surveillance and Stress Testing.....	2
HSC	165	Basic Pharmacology	1
HSC	213	Legal and Ethical Issues in Health Care	<u>2</u>
			5

* Cardiographic Technician is a limited enrollment program. See the Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in all coursework is required for all students.

² Must be completed no earlier than five years prior to beginning the Cardiographic Technician program; time requirement may be waived for direct patient care providers with a minimum of a two-year allied health care degree.

³ Group 2 Math requirements are met by Cardiac Technology program admission requirements.

⁴ 2-3 credit hours of CAS/CIS courses successfully completed within the last 5 years may be substituted.

COMPUTER INFORMATION SYSTEMS

Associate in Applied Science Degree: Computers in Business

The 60-61 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. The student may choose from five specialized study areas: Applications, Computer Support, Database Management, Management Information Systems, and Network Administration. Graduates of the program may find employment as desktop support technicians, database administrators, information technology supervisors, network administrators, and consultants.

Required General Education Courses:

ENG	101	Composition	3
ENG	102	Composition or	
ENG	103	Technical and Report Writing or	
SPE	101	Fundamentals of Speech Communication	3
		Humanities, Natural Science, or Social Science electives ¹	9
		Mathematics elective ²	3

Required Core Courses:

CAS	160	Introduction to Business Software Packages.....	3
CIS	101	Introduction to Computer Information Systems.....	3
NET	101	Windows or	
NET	106	Introduction to Linux.....	3

Specialized Study Areas:

APPLICATIONS

Required:

		Applications electives ³	12
CAS	110	Microsoft Word Certification	1
CAS	120	Microsoft Excel Certification	1
CAS	130	Microsoft Access Certification	1
CAS	135	Presentation Software.....	1
CAS	140	Microsoft PowerPoint Certification	1
CAS	150	Microsoft Outlook Certification	1
CAS	175	Desktop Publishing Software	1
CAS	215	Advanced Spreadsheet Software	1
CAS	225	Advanced Database Software	1
CAS	260	Office Application Development.....	3
NET	111	A+ Hardware.....	3
NET	112	A+ Operating Systems Technologies	3
NET	201	Help Desk/Soft Skills.....	3

COMPUTER SUPPORT

Required:

CAS	135	Presentation Software.....	1
CAS	215	Advanced Spreadsheet Software	1
CAS	225	Advanced Database Software	1
		Computer Support electives ⁴	9
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	Help Desk/Soft Skills.....	3
NET	211	Supporting Operating Systems	3
NET	231	Windows Scripting or	
NET	236	Linux Shell Scripting	3

COMPUTER INFORMATION SYSTEMS

Associate in Applied Science Degree: Computers in Business...continued

DATABASE MANAGEMENT

Required:

CIS	106	Computer Logic and Programming Technology	3
CIS	143	Introduction to Database Systems	3
CIS	243	Database Management	3
CIS	244	Database Design and Implementation	3
		Database Management electives ⁵	9
NET	111	A+ Hardware	3
NET	112	A+ Operating Systems Technologies	3
NET	121	Introduction to Networking	3
NET	122	Internet Protocols	3

MANAGEMENT INFORMATION SYSTEMS

Required:

ACC	101	Introduction to Financial Accounting	4
ACC	102	Introduction to Managerial Accounting	3
ACC	211	Business Law I	3
CIS	106	Computer Logic and Programming Technology	3
CIS	143	Introduction to Database Systems	3
CIS	211	IT Project Management	3
MGT	111	Introduction to Business Organization	3
MGT	270	Principles of Management	3
MKT	245	Principles of Marketing	3
NET	121	Introduction to Networking	3
WEB	240	E-Commerce Development	3

NETWORK ADMINISTRATION

Required:

NET	111	A+ Hardware	3
NET	112	A+ Operating Systems Technologies	3
NET	121	Introduction to Networking	3
NET	122	Internet Protocols	3
NET	141	Linux Administration	3
NET	201	Help Desk/Soft Skills	3
NET	231	Windows Scripting or	
NET	236	Linux Shell Scripting	3
NET	270	Cisco Networking (CCNA)	3
NET	280	Network Security Fundamentals	3
NET	299	Networking Capstone	3
		Network Administration elective ⁶	3

¹ 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 at least three credit hours in a mathematics course at the level of MTH 101 or above.

³ Applications electives: ACC 101, CAS 216, CAS 226, MGT 111, NET 121, WEB 101, WEB 150, WEB 170, WEB 180, WEB 200 or WEB 220.

⁴ Computer Support electives: CIS 143, MGT 111, NET 141, NET 161, NET 241, NET 242, NET 261, NET 262, NET 263, WEB 150, WEB 170 or WEB 190.

⁵ Database Management electives: CIS 168, CIS 181, CIS 182, CIS 203, CIS 211, CIS 268, CIS 281, MGT 111, NET 141, NET 241, NET 242, NET 261, NET 262, NET 263, WEB 150, WEB 200 or WEB 250.

⁶ Network Administration electives: NET 211, NET 221, NET 222, NET 223, NET 241, NET 242, NET 261, NET 262, NET 263

COMPUTER INFORMATION SYSTEMS

Associate in Applied Science Degree: Computer Forensics and Security

The 60-61 credit-hour technical curriculum trains students for positions in the distinct field of computer forensics and security. The curriculum includes coursework that will enable students to not only identify security threats but also take appropriate action to prevent the threats and trace/track these computer crimes. Graduates of the program may find employment as entry-level computer forensic specialists or computer security specialists.

FIRST YEAR

First Semester

	CIS 101	Introduction to Computer Information Systems.....	3
	English 101	Composition	3
	Mathematics elective ¹	.....	3-4
	NET 101	Windows or	
	NET 106	Introduction to Linux.....	3
	NET 121	Introduction to Networking	<u>3</u>
			15-16

Second Semester

	ENG 103	Technical and Report Writing.....	3
	NET 111	A+ Hardware	3
	NET 112	A+ Operating Systems Technologies	3
	NET 122	Internet Protocols.....	3
	PHI 115	Ethics or	
	PHI 150	Business Ethics.....	<u>3</u>
			15

SECOND YEAR

First Semester

	NET 182	Computer Forensics.....	3
	NET 231	Windows Scripting or	
	NET 236	Linux Shell Scripting	3
	NET 270	Cisco Networking (CCNA)	3
	NET 280	Network Security Fundamentals.....	3
	SOC 101 [♦]	Introduction to Sociology.....	<u>3</u>
			15

Second Semester

		Humanities or Natural Science elective	3
	LEJ 216 ²	Investigative Process	3
	NET 283	Ethical Hacking	3
	NET 284	Computer Security Incident Response	3
	NET 289	Security Capstone.....	<u>3</u>
			15

¹ Students must take at least three credit hours in a mathematics course at the level of MTH 101 or higher.

² The prerequisite of LEJ 101 will be waived for Computer Forensics and Security AAS students.

[♦] This course meets the World Cultures and Diversity graduation requirement.

COMPUTER INFORMATION SYSTEMS

Associate in Applied Science Degree: Software Development

The 60 credit-hour curriculum prepares students for various programming 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, systems analysis and design, and general education. Graduates of the program may find employment as software developers, systems analysts, or consultants.

FIRST YEAR

First Semester

CAS	160	Introduction to Business Software Packages.....	3
CIS	101	Introduction to Computer Information Systems.....	3
CIS	106	Computer Logic and Programming Technology	3
ENG	101	Composition	3
		Mathematics elective ¹	<u>3</u>
			15

Second Semester

CIS	143	Introduction to Database Systems	3
CIS	181	Visual Basic Software Development or	
CIS	182	Visual C# Software Development	4
ENG	102	Composition or	
ENG	103	Technical and Report Writing or	
SPE	101	Fundamentals of Speech Communication	3
NET	101	Windows or	
NET	106	Introduction to Linux.....	3
WEB	150	Web Development I	<u>3</u>
			16

SECOND YEAR

First Semester

CIS	168	Java Software Development I	4
CIS	203	Systems Analysis and Design.....	3
		Computer Information Systems elective ²	3
		Humanities, Natural Science, or Social Science elective ^{3♦}	<u>6</u>
			16

Second Semester

CIS	268	Java Software Development II or	
CIS	281	Microsoft .NET Web Development.....	4
CIS	299	Software Development Capstone	3
		Computer Information Systems elective ²	3
		Humanities, Natural Science, or Social Science electives ^{3♦}	<u>3</u>
			13

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 211, CIS 243, CIS 244, CIS 268, CIS 278, CIS 281, CIS 286, NET 121, WEB 200, WEB 240, or WEB 250.

³ 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.

COMPUTER INFORMATION SYSTEMS

Associate in Applied Science Degree: Web Development

The 61 credit-hour technical curriculum trains students for various positions in the fields of Web design, Web development and e-learning development. The student may choose from four specialized study areas: E-Learning Development, Web Application Development, Web Interactive Multimedia or Web Visual Design. Graduates of the program may find employment as Web developers, Web designers, Web multimedia specialists, Web site managers, e-learning developers and consultants.

FIRST YEAR

First Semester

CIS	101	Introduction to Computer Information Systems.....	3
ENG	101	Composition	3
GRA	101	Introduction to Graphic Arts Technology.....	3
NET	101	Windows or	
NET	106	Introduction to Linux.....	3
WEB	150	Web Development I	<u>3</u>
			15

Second Semester

CAS	125	Database Software	1
ENG	102	Composition or	
ENG	103	Technical and Report Writing or	
SPE	101	Fundamentals of Speech Communication	3
Humanities, Natural Science, or Social Science elective ¹ ♦.....			3
WEB	180	Flash Multimedia I.....	3
WEB	190	Web Authoring Tools	3
WEB	200	Web Development II	<u>3</u>
			16

SECOND YEAR: Choose one of the specialized study areas:

E-LEARNING DEVELOPMENT

First Semester

EIT	200	E-Learning Tools and Technology.....	3
EIT	220	E-Learning Instructional Systems Design.....	3
Humanities, Natural Science, or Social Science elective ¹ ♦.....			3
WEB	170	Web Graphics	3
WEB	210	Web Accessibility	<u>3</u>
			15

Second Semester

E-Learning Development electives ³			6
EIT	250	E-Learning Web Development.....	3
Humanities, Natural Science, or Social Science elective ¹ ♦.....			3
Mathematics elective ²			<u>3</u>
			15

WEB APPLICATION DEVELOPMENT

First Semester

CIS	143	Introduction to Database Systems.....	3
Humanities, Natural Science, or Social Science elective ¹ ♦.....			3
NET	121	Introduction to Networking	3
WEB	210	Web Accessibility	3
WEB	235	Interactive Scripting or	
WEB	250	Server-Side Scripting	<u>3</u>
			15

Second Semester

Humanities, Natural Science, or Social Science elective ¹ ♦.....			3
Mathematics elective ²			3
NET	122	Internet Protocols.....	3
WEB	240	E-Commerce Development.....	3
Web Application Development electives ⁴			<u>3</u>
			15

COMPUTER INFORMATION SYSTEMS

Associate in Applied Science Degree: Web Development...continued

WEB INTERACTIVE MULTIMEDIA

First Semester:

	Humanities, Natural Science, or Social Science elective ^{1♦}		3
WEB 170	Web Graphics		3
WEB 185	Motion Graphics and Effects.....		3
WEB 210	Web Accessibility		3
WEB 220	Flash Multimedia II.....		<u>3</u>
			15

Second Semester

	Humanities, Natural Science, or Social Science elective ^{1♦}		3
	Mathematics elective ²		3
MKT 245	Principles of Marketing or		
MKT 252	Internet Marketing		3
WEB 240	E-Commerce Development.....		3
WEB 260	Interactive Multimedia		<u>3</u>
			15

WEB VISUAL DESIGN

First Semester:

	Humanities, Natural Science, or Social Science elective ^{1♦}		6
MCM 120	Introduction to Mass Communication.....		3
WEB 170	Web Graphics		3
WEB 210	Web Accessibility		<u>3</u>
			15

Second Semester

	Mathematics elective ²		3
MKT 245	Principles of Marketing or		
MKT 252	Internet Marketing		3
WEB 240	E-Commerce Development.....		3
	Web Visual Design electives ⁵		<u>6</u>
			15

¹ Students must take nine (9) hours in a minimum of two of these areas; students in the Web Interactive Multimedia or Visual Design Specialization must take ART 105 and ART 121.

² Students must take at least three credit hours in a mathematics course at the level of MTH 101 or above.

³ E-Learning Development electives: ART 121, EDU 211, EDU 250, EIT 280, WEB 185, WEB 220, WEB 235, or WEB 299.

⁴ Web Application Development electives: MKT 245, MKT 252, or WEB 299.

⁵ Web Visual Design electives: GRA 103, EIT 250, NET 121, WEB 185, WEB 220, WEB 235, or WEB 299.

♦ At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

Accessible Web Design and Compliance Certificate

This 6 credit-hour certificate program provides a foundation in Web design with an emphasis on best practices in compliance with federal state, and industry accessibility standards. This program will be useful to Web developers, Web designers, graphic designers, educators and instructional technologists who need to design and modify Web sites to comply with industry and legal accessibility requirements.

Required:

WEB 150	Web Site Development I		3
WEB 210	Web Accessibility		3

COMPUTER INFORMATION SYSTEMS

Business Software Specialist Certificate

This 15 credit-hour certificate program provides students with experience in a variety of business software applications including word processing, spreadsheets, database, presentation email, desktop publishing and basic operating system concepts. These courses will help students prepare for Microsoft certification and qualify for entry-level jobs as administrative assistants and office services assistants.

Required:

CAS	105	Word Processing Software (1) and	
CAS	115	Spreadsheet Software (1) and	
CAS	125	Database Software (1) or	
CAS	160	Introduction to Business Software Packages.....	3
CAS	110	Microsoft Word Certification.....	1
CAS	120	Microsoft Excel Certification.....	1
CAS	130	Microsoft Access Certification.....	1
CAS	135	Business Graphics.....	1
CAS	140	Microsoft PowerPoint Certification.....	1
CAS	150	Microsoft Outlook Certification.....	1
CAS	175	Desktop Publishing Software.....	1
CAS	215	Advanced Spreadsheet Software.....	1
CAS	225	Advanced Database Software.....	1
NET	101	Windows or	
NET	106	Introduction to Linux.....	3

Cisco Network Administration Certificate

This 12 credit-hour certificate program is designed for those students who choose to specialize in Cisco network administration. These courses will help prepare students for the Cisco CCNA certification exam as well as qualify them for entry-level jobs as associate network specialists/technicians. Students should have CompTIA A+ certification or similar experience before specializing in Cisco network administration.

Required:

NET	171	Cisco Networking Basics.....	3
NET	172	Cisco Routing Basics.....	3
NET	173	Cisco Switching Basics.....	3
NET	174	Cisco Network Design.....	3

Cisco Network Professional Certificate

This 12 credit-hour certificate program is for those students who are Cisco CCNA certified and choose to further specialize in Cisco network training. These courses will help students prepare for the Cisco CCNP certification exam as well as qualify them for more advanced jobs as associate network specialists/technicians.

Required:

NET	271	Cisco Advanced Routing.....	3
NET	272	Cisco Remote Access.....	3
NET	273	Cisco Multilayer Switching.....	3
NET	274	Cisco Network Troubleshooting.....	3

Computer Forensics Certificate

This 12 credit-hour certificate program is designed for those students who choose to specialize in computer forensics. These courses will help students for computer forensics and security certifications. Students should have CompTIA A+ and Network+ certification or similar experience before specializing in computer forensics.

Required:

LEJ	216 ¹	Investigative Process.....	3
NET	182	Computer Forensics.....	3
NET	280	Network Security Fundamentals (Security+).....	3
NET	284	Computer Security Incident Response.....	3

¹ Prerequisite of LEJ 101 will be waived for Computer Forensics Certificate students.

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:

CAS	105	Word Processing Software (1) and	
CAS	115	Spreadsheet Software (1) and	
CAS	125	Database Software (1) or	
CAS	160	Introduction to Business Software Packages.....	3
CIS	100	Computer Fundamentals or	
CIS	101	Introduction to Computer Information Systems.....	3

Electives: Select nine credit hours from the following:¹

CAS	110	Microsoft Word Certification.....	1
CAS	120	Microsoft Excel Certification.....	1
CAS	130	Microsoft Access Certification.....	1
CAS	135	Presentation Software.....	1
CAS	140	Microsoft PowerPoint Certification.....	1
CAS	150	Microsoft Outlook Certification.....	1
CAS	175	Desktop Publishing Software.....	1
CAS	215	Advanced Spreadsheet Software.....	1
CAS	216	Spreadsheet Macros and Other Advanced Topics....	1
CAS	225	Advanced Database Software.....	1
CAS	226	Database Programming.....	3
CAS	260	Office Application Development.....	3
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	100	Windows Fundamentals.....	3
NET	101	Windows.....	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 Development I.....	3
WEB	170	Web Graphics.....	3
WEB	180	Flash Multimedia I.....	3
WEB	220	Flash Multimedia II.....	3

¹ Students must satisfy prerequisites for each course selected.

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 Comp TIA A+ certification exams and qualify for entry-level jobs as computer support technicians.

Required:

NET	111	A+ Hardware.....	3
NET	112	A+ Operating Systems Technologies.....	3

Database Management Certificate

This 10-12 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:

CAS	125	Database Software (1) or	
CAS	160	Introduction to Business Software Packages (3).....	1-3
CIS	143	Introduction to Database Systems.....	3
CIS	243	Database Management.....	3
CIS	244	Database Design and Implementaton.....	3

COMPUTER INFORMATION SYSTEMS

Linux Network Administration Certificate

This 12 credit-hour certificate program is designed for those students who choose to specialize in Linux network administration. These courses will help students prepare for Linux certification exams as well as qualify them for entry-level jobs as associate network specialists/technicians. Students should have CompTIA A+ and Network+ certification or similar experience before specializing in Linux network administration.

Required:

NET	141	Linux Administration.....	3
NET	236	Linux Shell Scripting	3
NET	241	Linux Networking	3
NET	242	Linux Security	3

Microsoft Network Administration Certificate

This 12 credit-hour certificate program is designed for those students who choose to specialize in Microsoft network administration. These courses will help students prepare for Microsoft MCTS certification exams as well as qualify them for entry-level jobs as associate network specialists/technicians. Students should have CompTIA A+ and Network+ certification or similar experience before specializing in Microsoft network administration.

Required:

NET	161	Windows Client Administration	3
NET	261	Windows Server Administration	3
NET	262	Windows Network Administration	3
NET	263	Windows Directory Services Administration	3

Network Security Certificate

This 12 credit-hour certificate program is designed for those students who choose to specialize in computer network security. These courses will help prepare students for security certifications. Students should have CompTIA A+ and Network+ certification or similar experience before specializing in network security.

Required:

NET	182	Computer Forensics.....	3
NET	280	Networking Security Fundamentals	3
NET	281	Networking Systems Security	3
NET	282	Network Defense and Countermeasures.....	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 ComTIA Network+ certification exam and qualify for entry-level jobs as network support technicians.

Required:

NET	121	Introduction to Networking	3
NET	122	Internet Protocols.....	3

COMPUTER INFORMATION SYSTEMS

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:

NET	101	Windows or	
NET	106	Introduction to Linux.....	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	Help Desk/Soft Skills.....	3

Software Development Certificate

This 24-26 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:

CAS	125	Database Software (1) or	
CAS	160	Introduction to Business Software Packages (3)	1-3
CIS	101	Introduction to Computer Information Systems.....	3
CIS	106	Computer Logic and Programming Technology	3
CIS	143	Introduction to Database Systems.....	3
		Computer Information Systems elective ¹	3
WEB	150	Web Development I	3

Electives: Choose 8 credit hours from either:

CIS	168	Java Software Development I (4) and	
CIS	268	Java Software Development III (4).....	8

or

CIS	181	Visual Basic Software Development (4) or	
CIS	182	Visual C# Software Development (4) and	
CIS	281	Microsoft .NET Web Development (4)	8

¹ Students must take at least three credit hours of electives selected from CAS 260, CIS 211, CIS 243, CIS 244, CIS 268, CIS 278, CIS 281, CIS 286, NET 121, WEB 200, WEB 240, or WEB 250.

COMPUTER INFORMATION SYSTEMS

Web Development Certificate

This 22 credit-hour certificate program provides a background in Web development with an 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:

CAS	125	Database Software	1
WEB	150	Web Development I	3
WEB	190	Web Authoring Tools	3
WEB	200	Web Development II	3
WEB	210	Web Accessibility	3
WEB	235	Interactive Scripting	3
WEB	240	E-Commerce Development.....	3
WEB	250	Server-Side Scripting	3

Web Visual Design Certificate

This 18 credit-hour certificate program provides a background in Web development with an emphasis on graphic and visual techniques. Individuals seeking entry-level positions in the field of Web development will find these skills helpful. This program will also be helpful to individuals whose job scope has expanded to include Web site responsibilities.

Required:

WEB	150	Web Development I	3
WEB	170	Web Graphics	3
WEB	180	Flash Multimedia I.....	3
WEB	190	Web Authoring Tools	3
WEB	200	Web Development II	3
WEB	210	Web Accessibility	3

COSMETOLOGY

Cosmetology Certificate

This 50-credit hour certificate program is designed specifically to meet the training/educational requirements of licensed cosmetologists, as requested by the Illinois Department of Professional Regulation. Classes include instruction on hair care and styling, skin and nail care, makeup, massage, and state law. The required coursework will ultimately prepare the student for the State Licensing Exam.

Required:

COS	101	Cosmetology Basic I	10
COS	102	Cosmetology Basic II	10
COS	111	Cosmetology Intermediate I	10
COS	112	Cosmetology Intermediate II	10
COS	121	Cosmetology Advanced	10

DENTAL HYGIENE*

Associate in Applied Science 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

- For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or check the Web site: 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 YEAR¹

Summer Semester

BIO	160 ²	Human Anatomy	4
CHM	100 ²	Chemistry for the Health Sciences or	
CHM	125 ^{2,3}	Organic and Biochemistry for the Health Sciences....	<u>4</u>
			8

First Semester

BIO	130 ²	Microbiology	4
DHY	100	Pre-Clinic	5
DHY	159	Head and Neck Anatomy	3
DHY	161	Dental Anatomy	2
DIT	101 ³	Fundamentals of Nutrition	<u>3</u>
			17

Second Semester

BIO	161 ²	Human Physiology	4
DHY	101	Clinical Dental Hygiene I	5
DHY	111	Dental Radiology.....	3
DHY	190	General and Oral Pathology	2
PSY	101	Introduction to Psychology.....	<u>3</u>
			17

Summer Semester

DHY	119	Oral Health Management of Special Needs Populations	2
DHY	151	Clinical Dental Hygiene II	2
DHY	269	Science of Dental Materials	1
DHY	270	Dental Material Laboratory Techniques	<u>1</u>
			6

DENTAL HYGIENE*

Associate in Applied Science Degree continued...

SECOND YEAR

First Semester

DHY	200	Periodontology	2
DHY	202	Radiology I	1
DHY	220	Community Dental Health I	2
DHY	240	Dental Pharmacology	2
DHY	250	Clinical Dental Hygiene III	5
ENG	101	Composition	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			18

Second Semester

DHY	201	Ethics, Jurisprudence and Practice Management.....	2
DHY	203	Radiology II	1
DHY	221	Community Dental Health II	2
DHY	251	Clinical Dental Hygiene IV	5
		Mathematics elective ⁴	0
SOC	101♦	Introduction to Sociology	<u>3</u>
			13

- * Dental Hygiene is a limited enrollment program. See the Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.
- ¹ A grade of C or better in all BIO, CHM, DHY and DIT courses is required for all students.
- ² Must be completed with a grade of C or better no earlier than five years prior to beginning the Dental Hygiene program.
- ³ Meet with the Student Development faculty member or coordinator of the Dental Hygiene program for appropriate testing and/or placement.
- ⁴ Group 2 Math requirement is met by Dental Hygiene program admission requirements.
- ♦ This course meets the World Cultures and Diversity graduation requirement.

DIAGNOSTIC MEDICAL SONOGRAPHY*

Associate in Applied Science Degree*

This 65 credit-hour program prepares the graduate to be a diagnostic medical sonographer. A diagnostic medical sonographer is a highly skilled professional who uses specialized equipment to record dynamic visual images of organs, tissue or blood flow within the body. They work in hospitals, clinics and physician offices producing these sonograms to assist the physician in diagnosing disease. There are several areas of specialization in the field of sonography. This degree program prepares the graduate to secure their American Registry of Diagnostic Medical Sonography credentials and entry-level work in the abdominal and obstetric/gynecologic specialty areas imaging the abdominal organs, the pelvis, and the pregnant uterus. The graduate also receives instruction in small parts, carotid, and peripheral vascular ultrasound. Seven hundred twenty (720) hours of clinical education is included during this program at area hospitals.

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 CTE or DMS prefix. Tuition for these courses in this program is 200 percent of the standard tuition rate.

A 920-hour clinical education rotation is included during this program at area hospitals.

Admission Requirements

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.

PREREQUISITES¹

BIO	160 ²	Human Anatomy	4
BIO	161 ²	Human Physiology	4
ENG	101	Composition	3
		Mathematics elective ³	<u>0</u>
			11

FIRST YEAR¹

First Semester

DMS	202	Introduction to Ultrasound	2
DMS	222	Essentials of Vascular Sonography	3
DMS	223	Art of Vascular Sonography	2
HSC	112	Medical Terminology	2
		Humanities or Social Science elective ⁴	<u>3</u>
			12

Second Semester

CTE	106	Ultrasound Physics and Instrumentation	4
HSC	104 ⁴	Health Care Technology and Informatics.....	2
HSC	107	Basic Health Care Skills.....	1
HSC	165	Basic Pharmacology	1
HSC	213	Legal and Ethical Issues in Health Care	2
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			13

Summer Semester (Optional)

CTE	112 ⁵	Laboratory Techniques III	1
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DIAGNOSTIC MEDICAL SONOGRAPHY*

Associate in Applied Science Degree continued...

SECOND YEAR

First Semester

DMS	204	Essentials of Abdominal and Small Parts Sonography I....	4
DMS	205	Essentials of Obstetrical and Gynecological Ultrasound I .	3
DMS	206	Ultrasound Practicum I.....	<u>2</u>
			9

Second Semester

DMS	207 ⁶	Sonography Clinical Education I.....	6
DMS	208	Essentials of Abdominal and Small Parts Sonography II...	4
DMS	209	Ultrasound Practicum II.....	2
DMS	210	Essentials of Obstetrical and Gynecological Ultrasound II	<u>3</u>
			15

Summer Semester

DMS	211 ⁶	Sonography Clinical Education II.....	5
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- * Diagnostic Medical Sonography is a limited enrollment program. See the Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.
- ¹ A grade of C or better in all coursework is required for all students.
- ² 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.
- ³ Group 2 Math requirement is met by the Diagnostic Medical Sonography program admission requirements.
- ⁴ 2-3 credit hours of CAS/CIS courses successfully completed within the last 5 years may be substituted.
- ⁵ This course is optional and not required for program completion.
- ⁶ Assignments will be based on site availability.
- ♦ Students need to choose a course to meet this requirement that also fulfills the World Cultures and Diversity graduation requirement.

DIETETIC TECHNICIAN

Associate in Applied Science Degree

This 62 credit-hour program prepares graduates to work in partnership with a Registered Dietitian in a variety of settings such as hospitals, clinicals, 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 Commission on Accreditation for Dietetics Education of the American Dietetic Association, 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 YEAR¹

First Semester

BIO	135 ²	Introduction to Human Anatomy and Physiology	4
DIT	101	Fundamentals of Nutrition	3
DIT	220	Food Systems Administration	3
FSM	114	Food Standards and Sanitation	2
HSC	105	Introduction to Health Care Today	2
HSC	112	Medical Terminology	<u>2</u>
			16

Second Semester

BIO	136 ²	Introduction to Human Disease	3
DIT	102	Medical Nutrition Therapy	3
DIT	150 ⁴	Dietetic Clinical Laboratory I	5
ENG	101	Composition	3
		Mathematics elective ³	<u>3</u>
			17

SECOND YEAR

First Semester

DIT	110	Principles of Food Preparation	3
DIT	200 ^{4,5}	Dietetic Clinical Laboratory II	5
DIT	201 ⁶	Community Nutrition	3
FSM	212	Hospitality Supervision or	
MGT	160	Principles of Supervision	<u>3</u>
			14

Second Semester

DIT	202 ⁵	Nutrition Care Seminar	2
DIT	203 ⁵	Profession of Dietetics	1
DIT	205 [♦]	World Cultures and Food	3
DIT	250 ^{4,6}	Dietetic Clinical Laboratory III	3
PSY	101	Introduction to Psychology	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			15

¹ A grade of C or better in all BIO, DIT, FSM, HSC and MGT courses is required for all students.

² BIO 160 and BIO 161 may be substituted for BIO 135 and BIO 136.

³ 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 a three credit-hour elective.

⁴ Upon presentation of a verification statement from a dietetics program, a baccalaureate graduate may take the three clinical laboratory courses, (DIT 150, DIT 200 and DIT 250) to receive a verification statement to establish eligibility and take the registration examination for Dietetic Technicians.

⁵ Course offered in odd calendar years only.

⁶ Course offered in even calendar years only.

♦ This course meets the World Cultures and Diversity graduation requirement.

DIETETIC TECHNICIAN

Dietary Manager Certificate

This 18 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.

The curriculum is approved by the Dietary Manager Association. Students who complete the 18 credit-hour certificate are eligible to take a national certification examination.

First Semester¹

DIT	101	Fundamentals of Nutrition	3
DIT	220	Food Systems Administration	3
HSC	105	Introduction to Health Care Today	2
FSM	114	Food Standards and Sanitation	<u>2</u>
			10

Second Semester

DIT	102	Medical Nutrition Therapy	3
DIT	150	Dietetic Clinical Laboratory I	<u>5</u>
			8

¹ A grade of C or better in all DIT, FSM and HSC courses is required for all students.

EARLY CHILDHOOD EDUCATION

Associate in Applied Science Degree

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.

Students must choose a basic program of study as a teacher or director. Students earning an associate in applied science degree in early childhood education must complete the following required general education courses, required core courses, and 21 credit hours from the specialized study areas.

Upon completion of courses for the specialized area of director, and in order to qualify for the Illinois Director Credential, students will need to provide proof of First Aid/CPR certification, and verification of 1200 hours of management experience.

Required General Education Courses:

ENG	101	Composition	3
ENG	103	Technical and Report Writing or	
SPE	101	Fundamentals of Speech Communication	3
		Humanities elective [♦]	3
		Mathematics elective ¹	3
		Natural Science elective ²	3
PSY	101	Introduction to Psychology	3

Required Core Courses:

ECE	101	Introduction to Early Childhood Education	3
ECE	102	Child Development	3
ECE	115	Principles of Early Childhood Curriculum	3
ECE	219	Students with Disabilities in School	3
ECE	226	Observation and Guidance of the Young Child	3
ECE	250	Health, Nutrition and Safety	3
ECE	252	Child-Family-Community	3

Specialized Study Areas:

Required:

Early Childhood Education: Teacher

ECE	111	Infant/Toddler Programs	3
ECE	209	Language Development and Activities for the Young Child	3
ECE	210	Creative Activities for Young Children	3
ECE	221	Math and Science for the Young Child	3
ECE	291	Early Childhood Practicum I	3
ECE	292	Early Childhood Practicum II	3
		ECE electives ³	3

Early Childhood Education: Director

ECE	253	Administration of Early Childhood Programs	3
ECE	254	Interpersonal Relations in Early Childhood Education	1
ECE	293	Early Childhood Director Practicum	3
		ECE electives ³	3
EDU	250	Introduction to Technology in Education	3
FSM	114	Food Standards and Sanitation	2
MGT	160	Principles of Supervision	3
MKT	245	Principles of Marketing	3

¹ 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 SOC 101 in order to have the 60 semester hours required for this degree.

² Natural Science elective: BIO 101, BIO 103, or BIO 105.

³ ECE electives: Any ECE course including ECE 140, ECE 143, ECE 144, ECE 146, ECE 149, ECE 151, ECE 152, ECE 153, ECE 154, ECE 155, ECE 156, ECE 230.

[♦] Humanities elective: HST 210, HUM 110, or MUS 104. All courses meet the World Cultures and Diversity graduation requirement.

EARLY CHILDHOOD EDUCATION

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:

ECE	226	Observation and Guidance of the Young Child.....	3
ECE	235	Principles of School Age Care	3

Early Childhood Education: Family Child Care Certificate

This nine credit-hour certificate program provides practical knowledge, including the legal requirements, for administering and running a family child care home.

Required:

ECE	140	Family Child Care Management	1
ECE	143	Safety for the Young Child	1
ECE	144	Nutrition for the Young Child.....	1
ECE	151	Communicating with Parents and Children.....	1
ECE	152	Principles of Child Growth and Development, Birth-5	1
ECE	153	Guiding Children and Managing the Classroom	1
ECE	154	Activities and Resources for Young Children I.....	1
ECE	155	Activities and Resources for Young Children II.....	1

Elective: Select one course from the following:

ECE	146	Programming for School Age Care	1
ECE	149	Topics in Early Childhood Education	1
ECE	156	Effective Teaching	1

Early Childhood Education: Infant/Toddler Certificate

This nine credit-hour certificate program provides theoretical and practical knowledge about infants and toddlers.

Required:

ECE	102	Child Development.....	3
ECE	111	Infant/Toddler Programs	3
ECE	112	Play and Assessment for the Young Child.....	3

Early Childhood Education: Special Education Paraprofessional Certificate

This six credit-hour certificate program will provide a paraprofessional in a special education facility with basic knowledge regarding characteristics of children with special needs, methods, and behavioral management techniques within the special education population.

Required:

ECE	120	Introduction to Special Education for Paraprofessionals	3
ECE	121	Behavioral Management in Special Education Setting	3

EARLY CHILDHOOD EDUCATION

Early Childhood Education: Administrator Certificate

This 19 credit-hour certificate program is designed specifically to meet the training/educational requirements of early childhood centers, as requested by the Illinois Department of Children and Family Services, Text of Adopted Rules.

Minimal education requirements for a director in a licensed child care center are two years of credit from an accredited college or university with 18 credit hours or equivalent quarter hours in courses related to child care and/or child development from birth to age six.

Required:

ECE	102	Child Development.....	3
ECE	115	Principles of Early Childhood Curriculum.....	3
ECE	226	Observation and Guidance of the Young Child.....	3
ECE	250	Health, Nutrition and Safety	3
ECE	252	Child-Family-Community.....	3
ECE	253	Administration of Early Childhood Programs	3
ECE	254	Interpersonal Relationships in Early Childhood Education.....	1

Early Childhood Education: Assistant Teacher Certificate

This six credit-hour certificate program will provide an assistant teacher in a licensed child care facility with basic knowledge regarding child growth/development and developmentally appropriate programming.

Required:

ECE	102	Child Development.....	3
ECE	115	Principles of Early Childhood Curriculum.....	3

Early Childhood Education: Teacher Certificate

This 30 credit-hour certificate program emphasizes a combination of theoretical and practical knowledge. It meets the minimal educational requirements established by the Illinois Department of Children and Family Services, for an early childhood teacher who has obtained one year's experience in a licensed center.

Required:

ECE	101	Introduction to Early Childhood Education.....	3
ECE	102	Child Development.....	3
ECE	115	Principles of Early Childhood Curriculum.....	3
ECE	209	Language Development and Activities for the Young Child.....	3
ECE	219	Students with Disabilities in School	3
ECE	226	Observation and Guidance of the Young Child.....	3
ECE	250	Health, Nutrition and Safety	3
ECE	252	Child-Family-Community.....	3
ECE	291	Early Childhood Practicum I.....	3
ENG	101	Composition	3

ELECTRONICS ENGINEERING TECHNOLOGY

Associate in Applied Science 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 YEAR

First Semester

	Communications elective ¹		3
ELT 101	DC Network Analysis		4
ELT 110	Introductory Electronics		4
	Humanities or Social Science elective ² ♦		3
MTH 103	College Algebra		<u>3</u>
			17

Second Semester

	Communications elective ¹		3
	CIS/CSC elective ³		3
ELT 102	AC Network Analysis		4
ELT 111	Semiconductor Devices and Circuits		2
MTH 140	Precalculus		<u>5</u>
			17

SECOND YEAR

First Semester

	ELT 103	RF Network Analysis.....	4
	ELT 203	Digital Electronics	4
		Humanities or Social Science elective ² ♦	3
PHY 121		Introductory Physics I.....	<u>5</u>
			16

Second Semester

	ELT 204	Analog Electronics	4
	ELT 207	Communications Systems	4
	ELT 218	Microprocessors and Microcomputers	4
PHY 122 ⁴		Introductory Physics II.....	<u>5</u>
			17

¹ Communications electives must satisfy associate in applied science degree Group 1 requirement.

² Humanities and Social Science electives must satisfy associate in applied science degree Group 4 or 5 requirements.

³ CIS/CSC elective must be approved by the program coordinator.

⁴ Students may substitute any 5-6 hour combination of ELT 125, ELT 135, ELT 140, ELT 215 courses for PHY 122.

♦ At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

ELECTRONICS ENGINEERING TECHNOLOGY

Advanced Industrial Electronics Maintenance 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:

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 8 credit hours from the following courses:

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 Identification Systems.....	2
ELT	161	Industrial Control Applications	4

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.

Required:

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

ELECTRONICS ENGINEERING TECHNOLOGY

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:

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 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.

Any combination of 16 semester hours may be selected from the following list with program coordinator approval.

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	Microprocessors and Microcomputers	4
ELT	281	Topics in Electronics Engineering Technology	1-4

ELECTRONICS ENGINEERING TECHNOLOGY

Industrial Electronics Maintenance

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:

ELT	110	Introductory Electronics	4
ELT	142	Electrical Wiring	2
ELT	215	Industrial Control Systems	4

Electives: Select six credit hours from the following:

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

Radio Frequency Identification (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 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.

Required:

ELT	110	Introductory Electronics	4
ELT	120	Introductory Industrial Electronics Maintenance	2
ELT	147	Radio Frequency Identification Systems.....	2
ELT	207	Communications Systems	4
ELT	215	Industrial Control Systems	4

EMERGENCY AND DISASTER MANAGEMENT

Associate in Applied Science Degree

This 61-63 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 Management Planner, Emergency Operations Director, Environmental Compliance Planner, and Emergency Disaster Coordinator.

Required General Education Courses:

ENG	101	Composition	3
		Humanities elective*	3
		Mathematics elective ²	3-4
		Natural Science elective	3-4
PSY	101	Introduction to Psychology	3
SPE	101	Fundamentals of Speech Communication	3

Required Core Courses:¹

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
EMG	299	Emergency Management Systems Practicum	3
FIS	260	Emergency Services Safety	3

Electives: ¹

Select at least 24 credit hours from the following courses:

EMG	103	Leadership, Influence, Decision Making and Problem Solving	3
EMG	151	Emergency Management Policy and Planning	3
EMG	153	Hazard Analysis and Planning	3
EMG	205	Crisis Exercise Design and Evaluation	3
EMG	251	Select Problems in Emergency Management	3
FIS	102	Fire Service Management I	3
FIS	103	Fire Strategies and Tactics I	3
FIS	121	Fire Behavior and Combustion	3
FIS	123	Advanced Fire Prevention Principles	3
FIS	132	Hazardous Materials I	3
FIS	230	Fire and Emergency Services Law	3
FIS	250	Industrial Fire Protection	3
LEJ	101	Introduction to Criminal Justice	3
LEJ	122	Principles of Policing	3

¹ A grade of C or better in all EMG courses is required for all students.

² Students must take at least three credit hours in a mathematics course at the level of MTH 080 or above, or MGT 150.

* Students need to choose a course to meet this requirement that also fulfills the World Cultures and Diversity graduation requirement.

EMERGENCY AND DISASTER MANAGEMENT

Emergency and Disaster Management Certificate

This 31 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 in order to enter the emergency management career field. Opportunities for graduates include Emergency Manager Specialist, Emergency Services Manager, Emergency Operations Director, Environmental Compliance Planner, and Emergency Disaster Coordinator.

Required:¹

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
EMG	299	Emergency Management Systems Practicum.....	1
FIS	260	Emergency Services Safety.....	3

Electives:¹

Select at least 12 credit hours from the following courses:

EMG	103	Leadership, Influence, Decision Making and Problem Solving.....	3
EMG	151	Emergency Management Policy and Planning	3
EMG	153	Hazard Analysis and Planning	3
EMG	205	Crisis Exercise Design and Evaluation	3
EMG	251	Select Problems in Emergency Management.....	3
FIS	102	Fire Service Management I.....	3
FIS	103	Fire Strategies and Tactics I	3
FIS	121	Fire Behavior and Combustion	3
FIS	123	Advanced Fire Prevention Principles.....	3
FIS	132	Hazardous Materials I.....	3
FIS	230	Fire and Emergency Services Law	3
FIS	250	Industrial Fire Protection	3
LEJ	101	Introduction to Criminal Justice.....	3
LEJ	122	Principles of Policing.....	3

¹ A grade of C or better in all EMG courses is required for all students.

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:¹

EMG	131	Public Safety Dispatcher I.....	3
EMG	231	Public Safety Dispatcher II.....	3

¹ A grade of C or better in all EMG courses is required for all students.

EMERGENCY MEDICAL SERVICES*

Associate in Applied Science Degree*

This 61 credit-hour program is a joint educational venture with Northwest Community Healthcare, the Emergency Medical Services (EMS) Department and Harper College. Emergency Medical Technician-Paramedic (EMT-P) program fulfills prescribed requirements by the Illinois Department of Public Health (IDPH) to practice the art and science of pre-hospital care under the direct supervision of a licensed physician or a registered professional nurse credentialed in emergency care. Where authorized, EMT-P function under the direction of an EMS medical director in an Illinois Department of Public Health approved Advanced Life Support (ALS) provider agency. EMT-P follows strict guidelines for procedures that can be performed and for those procedures that provide extensive pre-hospital care. Paramedics are accountable to medical directors, their peers, the health care team and the public.

Paramedics are professional providers whose goal is to prevent and reduce mortality and morbidity due to illness and injury. They are expected to assess and recognize medical, traumatic, emotional and psychological emergencies, as well as render basic life support care through advanced life support care in a wide variety of environmental conditions to people of all ages. They are responsible for transporting patients to medical facilities for further care and attention.

Working conditions vary. Paramedics work both indoors and outdoors. Openings occur for all working shifts including working on weekends and holidays. Many employers in this field require employees to be on call. Competition for jobs will be excellent in fire, police, or rescue squad departments, hospitals and private ambulance service due to attractive pay, benefits and job security. Many job openings occur due to replacement needs. Employment is projected to grow rapidly as paid emergency medical technician positions replace unpaid volunteers.

Admission Requirements

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or check the Web site: 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 Core Courses:¹

Emergency Medical Services: EMT Basic Certificate: ²			
EMS	110	Emergency Medical Technician Training.....	7
EMT—Paramedic: ³			
EMS	210	Paramedic I—Preparatory	6
EMS	211	Paramedic II—Medical Emergencies I.....	6
EMS	212	Paramedic II—Medical Emergencies II.....	6
EMS	213	Paramedic III—Trauma Emergencies and Special Clients	3
EMS	214	Paramedic—Hospital Internship	2
EMS	215	Paramedic—Field Internship.....	3
EMS	216	Paramedic Seminar	3

Required General Education and Support Courses:¹

BIO	160	Human Anatomy	4
BIO	161	Human Physiology	4
Electives ⁴		.....	4
ENG	101	Composition	3
HSC	112	Medical Terminology.....	2
Mathematics ⁵		.....	0
NUR	210	Physical Assessment.....	2
SOC	101♦	Introduction to Sociology.....	3
SPE	101	Fundamentals of Speech Communication	3

* Emergency Medical Services is a limited enrollment program. See the Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information. Courses with an EMS prefix are limited enrollment.

¹ A grade of C or better in all BIO, EMS, (EMS 214 and EMS 215 with a grade of P), HSC and NUR courses is required for all students.

^{2,3} Separate application and admission policies exist for both EMT-- Basic and EMT--Paramedic. Please contact the Admissions Outreach Office at 847.925.6700 or check the following Web site: harpercollege.edu for specific admission requirements.

⁴ Electives: BIO 130, CHM 100, HSC 104, or HSC 213.

⁵ Group 2 Math requirement is met by the Emergency Medical Services admission requirements.

♦ This course meets the World Cultures and Diversity graduation requirement.

EMERGENCY MEDICAL SERVICES*

Emergency Medical Services: EMT Basic Certificate*

The 7 credit-hour certificate program provides entry-level emergency medical care knowledge and skills associated with the delivery of Basic Life Support (BLS) as defined by the State of Illinois EMS Act and the EMS Rules. Meets all requirements of the Federal Department of Transportation EMT-B training curriculum and has been approved by the Illinois Department of Public Health (IDPH) Division of EMS and Highway Safety. This program is offered at Northwest Community Hospital.

Admission Requirements

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or check the Web site: 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:

EMS	110 ¹	Emergency Medical Technician Training	7
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* Emergency Medical Services: EMT Basic is a limited enrollment program. See Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in EMS 110 is required for all students.

Paramedic Certificate*

The 29 credit-hour certificate program is to be offered in two semesters starting in August (fall semester) and concluding the following May (spring semester). The program is designed to expand the entry-level knowledge and skills initially acquired through Emergency Medical Technician-Basics (EMT-B) or Emergency Medical Technician-Intermediate (EMT-I) training. Paramedics reach that status through successful completion of either EMT-B or EMT-I training that includes classroom instruction, hospital-based, and field-based clinical experiences under the direct supervision of a preceptor. The Paramedic program exposes the students to a wide variety of emergency situations, including direct patient care in one of the involved EMS system hospitals and on emergency vehicles. Instructional content and design is based on the cognitive, psychomotor, and affective standard objectives specified in the U.S. Department of Transportation, 1998 National Emergency Medical Technician-Paramedic Curriculum. The Illinois Department of Public Health, Division of EMS and Highway Safety accredits the Paramedic program.

The Paramedic program course work including the internships are administered through Northwest Community Healthcare, Emergency Medical Services Department. Hospital internships are completed at eight area-wide hospitals while the field internship is completed at the Advanced Life Support (ALS) provider agency with which the student is either employed or has a participation agreement. After completion of the program, candidates are eligible to take the EMT-Paramedic licensure exam in the State of Illinois.

Admission Requirements

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or check the Web site: 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:¹

EMS	210	Paramedic I-Preparatory	6
EMS	211	Paramedic II-Medical Emergencies I	6
EMS	212	Paramedic II-Medical Emergencies II	6
EMS	213	Paramedic III-Trauma Emergencies and Special Clients	3
EMS	214	Paramedic-Hospital Internship	2
EMS	215	Paramedic-Field Internship	3
EMS	216	Paramedic Seminar	3
			<u>29</u>

* Paramedic is a limited enrollment program. See Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in all EMS courses is required for all students.

ENERGY (ALTERNATIVE/SOLAR/WIND)

See: Electronics Engineering Technology

ENVIRONMENTAL HEALTH AND SAFETY

Associate in Applied Science Degree: Environmental Health

This 63-64 credit hour program is intended to provide students with the knowledge and skills necessary to accurately and competently guide companies and entities in environmental protection compliance. Opportunities for graduates include environmental health technician, environmental technician, and environmental services supervisor.

FIRST YEAR¹

First Semester

BIO	135	Introduction to Anatomy and Physiology.....	4
ENG	101	Composition	3
		Mathematics elective ²	3-4
SOC	101 [♦]	Introduction to Sociology.....	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			16-17

Second Semester

BIO	130	Microbiology	4
CHM	121	General Chemistry I	5
EHS	115	Health Data and Injury Trend Analysis	4
		Humanities elective	<u>3</u>
			16

SECOND YEAR¹

First Semester

CHM	122	General Chemistry II	5
EHS	110	Environmental Health Practice.....	3
EHS	200	Environmental Toxicology	4
FIS	132	Hazardous Materials I	<u>3</u>
			15

Second Semester

EMG	153	Hazard Assessment and Mitigation	3
EHS	120	Environmental Sampling and Monitoring	4
EHS	210	Waste Management.....	3
EHS	215	Air and Water Quality.....	3
FIS	133	Hazardous Materials II	<u>3</u>
			16

¹ A grade of C or better in all BIO, CHM, EHS, FIS, and MTH courses is required for all students.

² Students must take at least three credit hours in a mathematics course at the level of MTH 080 or above.

[♦] This course meets the World Cultures and Diversity graduation requirement.

ENVIRONMENTAL HEALTH AND SAFETY

Associate in Applied Science Degree: Occupational Health and Safety

This 64-65 credit hour program is intended to provide students with the knowledge and skills necessary to accurately and competently guide companies and entities in workplace safety regulations and best industry practice. Opportunities for graduates include safety representative, safety technician, and industrial hygienist.

FIRST YEAR¹

First Semester

BIO	135	Introduction to Anatomy and Physiology.....	4
ENG	101	Composition	3
		Mathematics elective ²	3-4
SOC	101 [♦]	Introduction to Sociology.....	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			16-17

Second Semester

BIO	130	Microbiology	4
CHM	121	General Chemistry I	5
EHS	115	Health Data and Injury Trend Analysis	4
		Humanities elective	<u>3</u>
			16

SECOND YEAR¹

First Semester

EHS	130	Investigation and Risk Assessment	3
EHS	150	Occupational Health Practice.....	3
FIS	122	Introduction to Fire Prevention Principles	3
FIS	132	Hazardous Materials I	3
MGT	168	OHSA Standards and Compliance Procedures	<u>3</u>
			15

Second Semester

EHS	250	Industrial Hygiene Sampling/Procedures.....	4
EHS	280	Construction Safety.....	4
EMG	101	Introduction to Emergency Management.....	3
FIS	123	Advanced Fire Prevention Principles	3
FIS	133	Hazardous Materials II	<u>3</u>
			16

¹ A grade of C or better in all BIO, EHS, FIS, and MTH courses is required for all students.

² Students must take at least three credit hours in a mathematics course at the level of MTH 080 or above.

[♦] This course meets the World Cultures and Diversity graduation requirement.

ENVIRONMENTAL HEALTH AND SAFETY

Environmental Health Certificate

This 31 credit-hour program is intended to provide students with the knowledge and skills necessary to accurately and competently guide companies in environmental protection compliance. Opportunities for graduates include environmental health technician, and environmental technician. Certificate program applicants are required to have a bachelor degree or an associate degree in a related field (biology, chemistry) prior to program acceptance.

FIRST YEAR¹

First Semester

CHM	121	General Chemistry I.....	5
EHS	110	Environmental Health Practice.....	3
EHS	200 ²	Environmental Toxicology.....	4
FIS	132	Hazardous Materials I.....	<u>3</u>
			15

Second Semester

EHS	120 ²	Environmental Sampling and Monitoring.....	4
EHS	210 ²	Waste Management.....	3
EHS	215	Air and Water Quality.....	3
EMG	153	Hazard Assessment and Mitigation.....	3
FIS	133	Hazardous Materials II.....	<u>3</u>
			16

¹ A grade of C or better in all EHS, EMG, and FIS courses is required for all students.

² Students must satisfy prerequisites for each course selected.

Occupational Health and Safety Certificate

This 32 credit-hour program is intended to provide students with the knowledge and skills necessary to accurately and competently guide companies in the management of safety regulations. Opportunities for graduates include safety technician, industrial hygienist and other industry-related positions.

FIRST YEAR¹

First Semester

EHS	130	Investigation and Risk Assessment.....	3
EHS	150 ²	Occupational Health Practice.....	4
FIS	122	Introduction to Fire Prevention Principles.....	3
FIS	132	Hazardous Materials I.....	3
MGT	168	OSHA Standards and Compliance Procedures.....	<u>3</u>
			16

Second Semester

EHS	250	Industrial Hygiene Sampling/Procedures.....	4
EHS	280	Construction Safety.....	3
EMG	101	Introduction to Emergency Management.....	3
FIS	123	Advanced Fire Prevention Principles.....	3
FIS	133	Hazardous Materials II.....	<u>3</u>
			16

¹ A grade of C or better in all EHS, EMG, and FIS courses is required for all students.

² The prerequisite for EHS 150 is MTH 080 with a grade of C or higher or a MTH 080 placement exam score (taken in the Assessment and Testing Center).

FASHION DESIGN

Associate in Applied Science Degree

This 67 credit-hour program is designed to provide students with entry level skills in apparel design, flat pattern design, draping, fashion illustrating and professional design room practices of tailoring. Facilities will simulate the professional atmosphere of the fashion industry. Students enrolled in the program need to demonstrate mastery of basic sewing. For individuals who do not possess these skills, Harper College offers the following courses: FAS 100 and FAS 113 (see Fashion Design course information).

FIRST YEAR

First Semester

English elective ¹	.....	3
FAS 101	Flat Pattern Design and Draping I.....	3
FAS 103	Apparel Design and Construction I.....	3
FAS 105	Fashion Design Illustration I.....	1
FAS 110	Costume History.....	2
FAS 112	Fashion Basics.....	3
Mathematics elective ²	.....	<u>3</u>
		18

Second Semester

English elective ¹	.....	3
FAS 102	Flat Pattern Design and Draping II.....	4
FAS 104	Apparel Design and Construction II.....	4
FAS 106	Fashion Design Illustration II.....	1
FAS 107	Textiles I.....	2
Humanities elective ^{3,♦}	.....	<u>3</u>
		17

SECOND YEAR

First Semester

FAS 201	Advanced Flat Pattern Design and Draping I.....	4
FAS 203	Advanced Diversified Apparel Design I.....	4
FAS 205	Tailoring Techniques I.....	2
FAS 209	Advanced Fashion Illustration I.....	1
FAS 212	Visual Fashion Merchandising.....	2
Social Science elective [♦]	<u>3</u>
		16

Second Semester

FAS 108	Textiles II.....	2
FAS 109	Fashion Arts and Design.....	2
FAS 202	Advanced Flat Pattern Design and Draping II.....	4
FAS 204	Advanced Diversified Apparel Design II.....	4
FAS 210	Advanced Fashion Illustration II.....	1
Humanities elective [♦]	<u>3</u>
		16

¹ Students may elect ENG 100, ENG 101 or ENG 102, depending on their test scores and advice of a Student Development faculty/counselor.

² A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics elective requirement. Students in this program who utilize the competency test to meet the mathematics requirement must complete MKT 106.

³ ART 105 is recommended.

[♦] At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

FASHION DESIGN

Fashion Design Certificate

Any combination of 15 credit hours may be selected from the courses listed below, providing the combination has coordinator approval.

FAS	100	Industrial Sewing Methods.....	3
FAS	101	Flat Pattern Design and Draping I.....	3
FAS	102	Flat Pattern Design and Draping II.....	4
FAS	103	Apparel Design and Construction I.....	3
FAS	104	Apparel Design and Construction II.....	4
FAS	105	Fashion Design Illustration I.....	1
FAS	106	Fashion Design Illustration II.....	1
FAS	107	Textiles I.....	2
FAS	108	Textiles II.....	2
FAS	109	Fashion Arts and Design.....	2
FAS	110	Costume History.....	2
FAS	112	Fashion Basics.....	3
FAS	113	Advanced Industrial Sewing Methods.....	3
FAS	201	Advanced Flat Pattern Design and Draping I.....	4
FAS	202	Advanced Flat Pattern Design and Draping II.....	4
FAS	203	Advanced Diversified Apparel Design I.....	4
FAS	204	Advanced Diversified Apparel Design II.....	4
FAS	205	Tailoring Techniques I.....	2
FAS	209	Advanced Fashion Illustration I.....	1
FAS	210	Advanced Fashion Illustration II.....	1
FAS	212	Visual Fashion Merchandising.....	2
FAS	245	Topics in Fashion Design.....	1-3

FASHION MERCHANDISING

Associate in Applied Science Degree

This 66 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 window display, fashion basics and textile. Students will study fashion history and trends as well as their influence on our lives. In addition, they will survey the development of style leading up to contemporary design. 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 advertising, fashion displaying, fashion copywriting, fashion photographing, fashion buying and store managing.

FIRST YEAR

First Semester

ENG	101	Composition	3
FAS	110	Costume History	2
FAS	112	Fashion Basics.....	3
MGT	111	Introduction to Business Organization	3
MGT	150	Business Math	3
MKT	106	Retail Merchandising	3
			17

Second Semester

ART	105	Introduction to Arts.....	3
ENG	102	Composition	3
FAS	107	Textiles I.....	2
FAS	111	20th Century Costume and Trends.....	3
PSY	101	Introduction to Psychology.....	3
SPE	101	Fundamentals of Speech Communication	3
			17

SECOND YEAR

First Semester

FAS	212	Visual Fashion Merchandising.....	2
FAS	229	Promotion of Fashion.....	3
MKT	140	Principles of Professional Selling.....	3
MKT	245	Principles of Marketing.....	3
MKT	250	Retailing	3
SOC	101♦	Introduction to Sociology.....	3
			17

Second Semester

CIS	101	Introduction to Computer Information Systems.....	3
FAS	230	Fashion Forecasting	3
FAS	116	Fashion Industries Career Practicum and Seminar or	
FAS	240	Fashion Projects	3
MKT	247	Consumer Buying Behavior	3
MKT	251	Retail Merchandise Management	3
			15

♦ This course meets the World Cultures and Diversity graduation requirement.

FINANCIAL SERVICES

Associate in Applied Science Degree

This 60 credit-hour curriculum is designed for persons interested in preparing for positions in the dynamic field of finance.

Career opportunities in finance are quite extensive and diversified. Career objectives of persons completing this program would be in the areas of banking, commercial credit and collections, finance, insurance and real estate.

Students can choose a basic program of study in finance or one of the specialized study areas. Students earning an associate in applied science degree in financial services must complete the general education courses, required core courses and course work from the specialized study areas.

Required General Education Courses:

ENG	101	Composition	3
ENG	102	Composition or	
ENG	130	Business Writing or	
SPE	101	Fundamentals of Speech Communication	3
		Humanities elective*	3
MGT	150	Business Math	3

Required Core Courses:

ACC	101	Introduction to Financial Accounting	4
ACC	102	Introduction to Managerial Accounting.....	3
ACC	211	Business Law I.....	3
CAS	160	Introduction to Business Software Packages.....	3
ECO	115	Consumer Economics or	
ECO	211	Microeconomics	3
ECO	200	Introduction to Economics or	
ECO	212	Macroeconomics.....	3
MGT	111	Introduction to Business Organization	3
MGT	218	Introduction to Finance	3

Specialized Study Area:

Depending on the student's career needs, he/she may choose from the following specialized study areas. It is recommended that students pursue one of the following specialized areas and consult with the program coordinator or a Student Development faculty/counselor.

BANKING

Required:

BFC	101	Principles of Financial Institution Operations	3
BFC	115	Advanced Principles of Financial Institution Operations.....	3
BFC	215	Financial Statements Interpretation and Analysis.....	3
BFC	225	International Finance	3
ECO	210	Money and Banking	3
		Electives ¹	5
MKT	245	Principles of Marketing.....	3

FINANCIAL SERVICES

Associate in Applied Science Degree continued...

COMMERCIAL CREDIT MANAGEMENT

Required:

BFC	101	Principles of Financial Institution Operations	3
BFC	201	Commercial Credit and Collection Principles	3
BFC	202	Advanced Commercial Credit and Collection	3
BFC	215	Financial Statement Interpretations and Analysis	3
Electives ²		.....	8
MKT	245	Principles of Marketing.....	3

FINANCE

Required:

BFC	101	Principles of Financial Institution Operations	3
BFC	200	Investment Management	3
BFC	215	Financial Statements Interpretation and Analysis	3
BFC	225	International Finance	3
ECO	210	Money and Banking	3
Electives ³		.....	8

REAL ESTATE

Required:

RES	101	Real Estate Transactions	3
Electives ⁵		.....	20

¹ Select at least five credit hours from the following: BFC 200, BFC 211, BFC 212, BFC 225, BFC 235, BFC 240, CAS 115, CAS 125, CAS 135, CAS 215, MGT 270, RES 101.

² Select at least eight credit hours from one of the following: ACC 201, BFC 200, BFC 225, BFC 240, CAS 115, CAS 125, CAS 135, CAS 215, ECO 210, MGT 225, MGT 270.

³ Select at least eight credit hours from one of the following: BFC 201, BFC 212, BFC 240, CAS 115, CAS 125, CAS 135, CAS 215, MGT 270.

⁴ Select at least 11 credit hours from one of the following: CAS 115, CAS 125, MTH 103 or MTH 134, MGT 225, NET 100, PHI 150, PSY 101, PSY 245.

⁵ Select at least 20 credit hours from the following: ATE 209, BFC 101, CAS 115, MGT 154, MKT 140, MKT 141, MKT 217, MKT 240, MKT 245, RES 105, RES 110, RES 140, RES 141, RES 142, RES 143, RES 144, RES 190, RES 192, RES 194, RES 196, RES 220, RES 221, WEB 101, WEB 150.

♦ Students need to choose a course to meet this requirement that also meets the World Cultures and Diversity graduation requirement.

Commercial Credit Management Certificate

This 16 credit-hour certificate program is designed for those currently employed in, or seeking employment in the credit and collection field. The curriculum emphasizes developing the competencies necessary to effectively implement sound collection practices. Students may apply this entire program toward the two-year associate degree in Financial Services.

Required:

ACC	101	Introduction to Financial Accounting	4
BFC	201	Commercial Credit and Collection Principles	3
BFC	202	Advanced Commercial Credit and Collection	3
BFC	215	Financial Statements Interpretation and Analysis	3
Elective ¹		.....	3

¹ Electives: BFC 200, BFC 225, ECO 210, MGT 111.

FINANCIAL SERVICES

Financial Management Certificate

This 19 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.

Required:

ACC	101	Introduction to Financial Accounting	4
BFC	101	Principles of Financial Institution Operations	3
BFC	215	Financial Statements Interpretation and Analysis.....	3
MGT	111	Introduction to Business Organization	3
MGT	218	Introduction to Finance	3
Electives ¹		.....	3

¹ Electives: BFC 200 or MGT 170, MGT 150.

Real Estate Broker's License Preparation Certificate

This eight credit-hour certificate program will provide the minimum number of hours and mandatory courses to complete the education requirements for application to take the State of Illinois Real Estate Brokers test.

Required:

RES	101	Real Estate Transactions.....	3
RES	190	Contracts and Conveyancing.....	1
RES	192	Advanced Principles of Real Estate.....	1
RES	198	Brokerage Administration.....	1
Electives ¹		.....	2

¹ Electives: RES 105, RES 110, RES 194, and RES 196.

Real Estate Sales Professional Certificate

This three credit-hour certificate program is designed to prepare students for the Illinois real estate salesperson's licensing exam.

Required:

RES	101	Real Estate Transactions.....	3
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FIRE SCIENCE TECHNOLOGY

Associate in Applied Science Degree

This 60-62 credit-hour program is applicable to both current firefighters and fire officers, as well as those wishing to enter the fire service. Some fire departments require a two-year degree in fire science before the student is eligible for entry-level positions, while other departments offer promotional and salary incentives to associate degree program graduates.

Many of the courses offered are articulated with the Office of the Illinois State Fire Marshal and count toward requirements for Instructor I, Instructor II, Fire Officer I, Fire Officer II, Fire Apparatus Engineer, Hazardous Materials First Responder and Technician. Other areas of employment for fire science graduates include fire equipment sales and service, municipal fire protection, fire prevention and inspection in industry and private insurance companies, and emergency medical services.

Students wishing to pursue a career in fire science should discuss these opportunities with the program coordinator or a Student Development faculty member before entering the program.

Required General Education Courses:

ENG	101	Composition	3
		Humanities elective [♦]	3
		Mathematics elective ¹	3-4
		Natural Science elective	3-4
PSY	101	Introduction to Psychology	3
SPE	101	Fundamentals of Speech Communication	3

Required Core Courses:

FIS	100	Fundamentals of Fire Protection	3
FIS	102	Fire Service Management I	3
FIS	103	Fire Strategies and Tactics I	3
FIS	104	Building Construction for Fire Protection	3
FIS	121	Fire Behavior and Combustion	3
FIS	122	Introduction to Fire Prevention Principles	3
FIS	132	Hazardous Materials I	3
FIS	145	Fire and Emergency Service Instructor I	3

Electives:

Select at least 18 credit hours from the following courses:

EMG	101	Introduction to Emergency Management	3
EMG	107	Incident Management Systems	3
EMG	253	Ideologies of Terrorism	3
EMS	110	Emergency Medical Technician Training	7
FIS	106	Fire Service Career Exploration Practicum	1
FIS	109	Firefighter II Certification	12
FIS	123	Advanced Fire Prevention Principles	3
FIS	133	Hazardous Materials II	3
FIS	200	Fire Service Internship	3
FIS	202	Fire Service Management II	3
FIS	203	Fire Strategies and Tactics II	3
FIS	210	Fire-Arson Investigation	3
FIS	212	Fire Protection Systems	3
FIS	220	Fire and Emergency Services Instructor II	3
FIS	230	Fire and Emergency Services Law	3
FIS	240	Fire Apparatus Engineer	3
FIS	250	Industrial Fire Protection	3
FIS	260	Emergency Services Safety	3

¹ Students must take mathematics course at the level of MTH 080 or above or MGT 150.

[♦] Students need to choose a course to meet this requirement that also meets the World Cultures and Diversity graduation requirement.

FORENSIC SCIENCE TECHNICIAN

See: Law Enforcement and Justice Administration

GRAPHIC ARTS TECHNOLOGY

Associate in Applied Science Degree

This 60-61 credit-hour program is designed to prepare students for a wide range of employment opportunities in the graphic arts industry. The program provides a well-rounded foundation of knowledge and skills to prepare students for new jobs as well as provide career advancement opportunities. This degree covers all of the latest computer software and print production techniques. Emphasis is on digital prepress and print production or graphic design for print and the fulfillment of the creative needs of the industry. All students in the program complete similar first-year sequences of classes and then select one of two specialties for the second year coursework: Print Production (Technical) or Creative Design.

FIRST YEAR

First Semester

ENG	101	Composition	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.....	<u>3</u>
			15

Second Semester

ENG	102	Composition	3
GRA	105	Color Management	3
GRA	113	Digital Imaging II	3
Humanities elective ¹			3
WEB	150	Web Development I	<u>3</u>
			15

SECOND YEAR: Choose one of the specialized study areas:

PRINT PRODUCTION

First Semester

GRA	111	Press Operations	3
GRA	211	Project Management, Scheduling and Estimating	3
GRA	229	Page Layout.....	3
Mathematics elective ²			3
Social Science elective [♦]			<u>3</u>
			15

Second Semester

GRA	202	Advanced Color Management	3
GRA	213	Bindery and Finishing Operations.....	3
GRA	230	Prepress Production	3
GRA	231	Variable Data Technologies.....	3
Social Science elective [♦]			<u>3</u>
			15

GRAPHIC ARTS TECHNOLOGY

Associate in Applied Science Degree...continued

CREATIVE DESIGN

First Semester

GRA	120	Graphic Design I	3
GRA	130	Introduction to Photography	2
GRA	229	Page Layout	3
		Mathematics elective ²	3
MKT	245	Principles of Marketing	3
		Social Science elective ⁴	<u>3</u>
			17

Second Semester

GRA	131	Digital Photography I	3
GRA	220	Graphic Design II	3
GRA	221	Graphic Portfolio Design	2
		Graphic Arts elective ⁴	3
		Social Science elective ⁴	<u>3</u>
			14

¹ ART 121 is required for the Creative Design specialization.

² 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 an additional three credit-hour graphic arts course. See program coordinator for recommended courses.

³ Graphic Arts electives: GRA 111, GRA 202, GRA 211, GRA 214, GRA 230, GRA 231, GRA 232, or MCM 136.

⁴ At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

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:

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	211	Project Management, Scheduling & Estimating	3
GRA	213	Bindery and Finishing Operations	3
GRA	229	Page Layout	3
WEB	150	Web Development I	3

GRAPHIC ARTS TECHNOLOGY

Fashion Graphic Arts Certificate

This 19 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:

FAS	105	Fashion Design Illustration I.....	1
FAS	106	Fashion Design Illustration II.....	1
FAS	209	Advanced Fashion Illustration I.....	1
FAS	210	Advanced Fashion Illustration II.....	1
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 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:

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	220	Graphic Design II	3
GRA	221	Graphic Portfolio Design	2
WEB	150	Web Development I	3

GRAPHIC ARTS TECHNOLOGY

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 program will highlight the latest software. This certificate will enhance a student's current employment position, as well as provide new employment opportunities.

Required:

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	202	Advanced Color Management	3
GRA	229	Page Layout.....	3
GRA	230	Prepress Production	3
WEB	150	Web Development I	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:

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	202	Advanced Color Management	3
GRA	232	Digital Photography II.....	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 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:

CAS	160	Introduction to Business Software	3
CIS	143	Introduction to Database Management.....	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 Operations	3
GRA	231	Variable Data Technologies.....	3
WEB	150	Web Development I	3
WEB	200	Web Development II	3

GRAPHIC ARTS TECHNOLOGY

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:

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
WEB	150	Web Development I	3
WEB	170	Web Graphics	3
WEB	180	Flash Multimedia I.....	3
WEB	190	Web Authoring Tools	3

HEALTH INFORMATION TECHNOLOGY*

*Program changes pending ICCB approval.

Associate in Applied Science 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 (RHITs) 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 YEAR¹

First Semester

BIO	135	Introduction to Human Anatomy and Physiology	4
CIS	101	Introduction to Computer Information Systems.....	3
ENG	101	Composition	3
HSC	104	Health Care Technology and Informatics.....	2
HSC	112	Medical Terminology	2
HSC	165	Basic Pharmacology	<u>1</u>
			15

Second Semester

BIO	136	Introduction to Human Disease.....	3
CAS	160	Introduction to Business Software Packages.....	3
ENG	102	Composition or	
ENG	103	Technical and Report Writing or	
SPE	101	Fundamentals of Speech Communication	3
HIT	200	Introduction to Health Care Information Systems	3
		Mathematics elective ²	<u>3</u>
			15

SECOND YEAR¹

First Semester

CIS	143	Introduction to Database Systems	3
HIT	210	Inpatient Billing and Coding	3
HIT	220	Health Care Information Management.....	3
MOA	195	Principles of Health Insurance Billing.....	3
MOA	196	Current Procedural Terminology (CPT) Coding.....	<u>3</u>
			15

Second Semester

CIS	211	IT Project Management Design	3
HIT	230	Health Care Information Analysis	3
HIT	240	Health Information Technology Externship	3
HSC	213	Legal and Ethical Issues in Health Care	2
		Humanities or Social Science elective*	<u>3</u>
MOA	197	International Classification of Diseases (ICD) Coding	<u>3</u>
			17

¹ A grade of C or better is required in all courses.

² MTH 101 or higher with a grade of C or better.

♦ This elective must also meet the World Cultures and Diversity graduation requirement.

HEALTH INFORMATION TECHNOLOGY*

**Program changes pending ICCB approval.*

Health Information Technology Certificate

This 29 credit-hour certificate program prepares the graduate to enter a career which blends two rapidly 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 work in hospitals, long-term care facilities, cancer registries, mental health facilities, managed care organizations, and physician office and as consultants.

Students electing to earn a certificate in health information technology are eligible to apply credits earned toward completion of the associate in applied science degree.

FIRST YEAR¹

First Semester

BIO	135	Introduction to Human Anatomy and Physiology	4
BIO	136	Introduction to Human Disease.....	3
CIS	101	Introduction to Computer Information Systems.....	3
HSC	112	Medical Terminology.....	2
HSC	231	Legal and Ethical Issues in Health Care	<u>2</u>
			14

Second Semester

CAS	160	Introduction to Business Software Packages.....	3
ENG	101	Composition	3
HIT	200	Introduction to Health Care Information Systems	3
HIT	220	Health Care Information Management.....	3
MOA	195	Principles of Health Insurance Billing.....	<u>3</u>
			15

¹ A grade of C or better is required in all courses.

HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

*Program changes pending ICCB approval.

Associate in Applied Science Degree: Refrigeration and Air Conditioning Technology

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 62-63 credit-hour program may be employed as engineering laboratory assistants, equipment salesmen, heating and refrigeration service people, estimators and system designers.

FIRST YEAR

First Semester

English elective ¹		.....	3
RAC 101		Refrigeration Fundamentals.....	4
RAC 102		Refrigeration Systems.....	4
RAC 103		Heating Principles.....	<u>4</u>
			15

Second Semester

ELT 145		Variable Frequency Drives.....	2
PHS 111		Introduction to Physical Science.....	4
RAC 104		Residential Comfort Systems.....	3
RAC 105		Heating and Cooling Controls.....	4
RAC 108		Domestic Refrigeration Appliances.....	<u>4</u>
			17

SECOND YEAR

First Semester

English elective ¹		.....	3
RAC 106		Advanced Controls.....	4
RAC 201		Refrigeration System Design I.....	4
RAC 203		Air Conditioning Principles.....	<u>3</u>
			14

Second Semester

ELT 215		Industrial Control Systems or	
RAC 202		Refrigeration System Design II.....	4
Humanities elective [♦]		3
Mathematics elective ²		.....	3-4
RAC 204		Air Distribution.....	3
Social Science elective [♦]		<u>3</u>
			16-17

¹ Students may take ENG 100 or ENG 101 the first semester, depending upon their test scores and the advice of a Student Development faculty/counselor. ENG 102, ENG 103, or ENG 130 are suggested second semester electives.

² 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 take ELT 144 and MNT 110.

[♦] At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

HEATING, VENTILATION AND AIR CONDITIONING (HVAC)

The following certificate programs are designed to prepare the students for servicing refrigeration and heating equipment or selling environment equipment to contractors and/or servicemen.

Domestic Refrigeration and Heating Certificate

Required:

RAC	101	Refrigeration Fundamentals.....	4
RAC	103	Heating Principles.....	4
RAC	105	Heating and Cooling Controls.....	4
RAC	108	Domestic Refrigeration Appliances.....	4

Heating Services Certificate

Required:

RAC	103	Heating Principles.....	4
RAC	105	Heating and Cooling Controls.....	4
RAC	106	Advanced Controls.....	4

Refrigeration Service Certificate

Required:

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

Required:

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

Required:

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

HOMELAND SECURITY

See: Emergency and Disaster Management

HOSPITALITY MANAGEMENT

Associate in Applied Science Degree

Emphasis is placed on the techniques and technology of the hospitality industry from a management point of view. Graduates of this 60-61 credit-hour curriculum will be qualified to assume positions as supervisors, management trainees and small unit managers. Upon successful completion of specific hospitality management courses, students may be award a ManageFirst™ certificate of completion from the Educational Foundation of the National Restaurant Association, or a certificate of completion from the Educational Institute of the American Hotel and Lodging Association. Contact the Hospitality Management coordinator for details.

Students must choose a program of study in one of the specialized areas, Food Service Operations Management or Hotel Operations Management.

Required General Education Courses:

DIT	101	Fundamentals of Nutrition	3
ENG	101	Composition	3
ENG	102	Composition	3
		Humanities elective [♦]	3
		Mathematics elective ¹	3
PSY	101	Introduction to Psychology	3

Required Core Courses:

FSM	109	Introduction to Food Preparation/Production	4
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	213	Seminar and Internship	3
FSM	214	Hospitality Operations Analysis	3

Specialized Study Areas:

It is recommended that students pursue one of the specialized study areas and consult with the program coordinator.

FOOD SERVICE OPERATIONS MANAGEMENT

Electives: Select at least 15 credit hours from the courses listed below:

CIS	100	Computer Fundamentals	3
FSM	215	Restaurant Layout and Equipment	3
FSM	216	Introduction to Wines, Spirits and Beverage Management	3
FSM	220	Hospitality Promotions	3
FSM	230	Hospitality Law and Risk Management	3
FSM	299	Topics in Hospitality Management .....	.5-3

HOTEL OPERATIONS MANAGEMENT

Electives: Select at least 15 credit hours from the courses listed below:

CIS	100	Computer Fundamentals	3
FSM	120	Front Office Operations	3
FSM	210	Hospitality Facility Maintenance	3
FSM	220	Hospitality Promotions	3
FSM	230	Hospitality Law and Risk Management	3
FSM	299	Topics in Hospitality Management .....	.5-3

¹ A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics elective 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.

[♦] Students must choose a humanities course that meets the World Cultures and Diversity graduation requirement.

HOSPITALITY MANAGEMENT

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' assistants in institutional, retail and commercial bakeries.

Required:

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 9 credit hours from the following:

FSM	109	Introduction to Food Preparation/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 Design	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 that is designed to better prepare students for entrance into the food service industry. Graduates may be able to secure positions as cooks, assistant cooks, specialty cooks, or chef's assistants.

Required:

FSM	107	Basic Quantity Bread and Pastry Arts.....	4
FSM	109	Introduction to Food Preparation/Production	4
FSM	110	Advanced Quantity Culinary Arts	4
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 9 credit hours from the following:

FSM	111	Introduction to the Hospitality Industry.....	3
FSM	113	Dining Room Operations.....	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 Design	3
FSM	216	Introduction to Wines, Spirits and Beverage Management.....	3
FSM	220	Hospitality Promotions	3

HOSPITALITY MANAGEMENT

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 successful completion of specific courses within this program, students may also be awarded a ManageFirst™ certificate of completion from the Educational Foundation of the National Restaurant Association. Contact the Hospitality Management coordinator for details.

Required:

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 successful completion of specific courses within this program, students may be awarded a certificate of completion from the Educational Institute of the American Hotel and Motel Association. Contact the Hospitality Management coordinator for details.

Required:

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:

CIS	100	Computer Fundamentals	3
FSM	111	Introduction to the Hospitality Industry.....	3
FSM	114	Food Standards and Sanitation	2
FSM	211	Purchasing and Storage	3
FSM	214	Hospitality Operations Analysis	3
FSM	216	Introduction to Wines, Spirits and Beverage Management.....	3

ProStart Hospitality Management Certificate

This 16 credit-hour certificate program is designed to give students the necessary skills for entry-level jobs in the foodservice industry as hostesses, waitstaff, and cooks. The curriculum is specifically designed for dual credit high school students and is endorsed by the National Restaurant Association.

FIRST YEAR

First Semester

FSM	121	ProStart I.....	4
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Second Semester

FSM	122	ProStart II.....	3
FSM	140	ProStart Internship I.....	1

SECOND YEAR

First Semester

FSM	123	ProStart III.....	3
FSM	141	ProStart Internship II.....	1

Second Semester

FSM	124	ProStart IV	3
FSM	142	ProStart Internship III.....	1

HUMAN SERVICES

Associate in Applied Science Degree

This 61-62 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 YEAR

First Semester

ENG	101	Composition	3
HMS	101	Introduction to Human Services	3
HMS	102	Helping Skills in Human Services	3
PSY	101	Introduction to Psychology	3
SOC	101	Introduction to Sociology	<u>3</u>
			15

Second Semester

HMS	112	Group Work in Human Services	3
HMS	121 [♦]	Multiculturalism in Human Services	3
PED	205	Drugs in Our Culture	3
PSY	230	Abnormal Psychology	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			15

SECOND YEAR

First Semester

HMS	211	Crisis Intervention	3
HMS	221	Introduction to Gerontology	3
		Humanities elective	3
		Mathematics elective ¹	3-4
PSY	228	Psychology of Human Development	<u>3</u>
			15-16

Second Semester

HMS	232	Law and Ethics in Human Services	3
HMS	241	Disabilities and Human Service	3
HMS	251	Family Issues and Interventions	3
HMS	290	Field Experience and Seminar	4
SOC	215	Introduction to Social Psychology	<u>3</u>
			16

¹A 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.

[♦]This course meets the World Cultures and Diversity graduation requirement.

INTERIOR DESIGN

Associate in Applied Science 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 and several other courses are offered online.

The associate in applied science degree in Interior Design may be used to meet the interior design education requirement for registration of Interior Designers in the State of Illinois. The program is endorsed by the National Kitchen and Bath Association (NKBA). In addition, 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.

FIRST YEAR

First Semester

ART	121	Design I.....	3
IND	100	Theory and Fundamentals of Design.....	2
IND	101	Interior Design Studio I.....	3
IND	103	History of Furniture and Interior Architecture.....	3
IND	106	Materials and Sources.....	3
IND	110	Problem Solving and Design Communication.....	<u>2</u>
			16

Second Semester

ART	130	History of Art I or	
ART	131	History of Art II or	
ART	132	History of Art III.....	3
ATE	105	Architectural CAD I.....	3
IND	102	Interior Design Studio II.....	3
IND	107	Interior Perspective and Rendering.....	3
IND	114	Codes for Interior Designers.....	2
IND	116	Interior Detailing and Construction Drawing.....	<u>3</u>
			17

Summer Semester

ENG	101 ¹	Composition.....	3
SPE	101	Fundamentals of Speech Communication.....	<u>3</u>
			6

SECOND YEAR

First Semester

IND	203	3-D Design Studio.....	3
IND	205	Historic Styles Studio.....	3
IND	206	Lighting for Interior Design.....	3
IND	220	CAD Studio.....	3
IND	230	Kitchen Design Studio.....	<u>3</u>
			15

Second Semester

IND	207	Interior Design Internship.....	3
IND	209	Contract Design Studio.....	3
IND	211	Professional Practices for Interior Design.....	3
IND	233	Bathroom Design Studio.....	2
IND	250	Portfolio Review.....	<u>1</u>
			12

Summer Semester

		Mathematics elective ²	3
		Social Science elective.....	<u>3</u>
			6

¹ An assessment test, available in the Assessment and Testing Center, must be taken before registering for ENG 101.

² A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement.

INTERIOR DESIGN

Advanced Interior Design Certificate

This 11-12 credit-hour certificate program is designed to give students the opportunity to earn credits which are applicable to the requirements for taking the interior design licensing exam (NCIDQ) in the State of Illinois. The coursework is intended for students who are highly advanced in an Interior Design program and people already working in interior design who want additional educational opportunities.

IND	215	Topics in Interior Design (.5-3) or	
IND	217	Advanced Sketching and Perspective Drawing ¹	2-3
IND	281	Environmental Design Studio.....	3
IND	283	Interior Design Studio III	3
IND	285	Contract Design Studio II	3

¹ Must complete ART 121 and IND 107 prior to enrollment in IND 217.

Interior Design Technology Certificate

This 28-credit hour certificate program is designed to give students the opportunity to specialize in the technology area of interior design. Students pursuing the Interior Design AAS degree and working designers will benefit from the technical aspects of this curriculum as computer expertise is invaluable to the interior design industry in today's market.

ATE	105	Architectural CAD I	3
GRA	103	Digital Imaging I	3
IND	100	Theory and Fundamentals of Design.....	2
IND	101	Interior Design Studio I	3
IND	114	Codes for Interior Designers	2
IND	116	Interior Detailing and Construction Drawing	3
IND	220	CAD Studio	3
IND	221	3-Dimensional CAD for Interior Designers.....	3
IND	222	3-Dimensional Presentation.....	3
IND	232	Kitchen and Bath CAD Studio.....	3

Kitchen and Bath Specialty Certificate

This 29 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.

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	110	Problem Solving and Design Communication.....	2
IND	114	Codes for Interior Designers	2
IND	116	Interior Detailing and Construction Drawing	3
IND	207	Interior Design Internship (in Kitchen and Bath)	3
IND	230	Kitchen Design Studio.....	3
IND	232	Kitchen and Bath CAD Studio.....	3
IND	233	Bath 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.

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 and Design Communication.....	2
IND	217	Advanced Sketching and Perspective Drawing	2

INTERNATIONAL BUSINESS

Associate in Applied Science Degree

Completing this 65 credit-hour program will prepare students to secure employment in the dynamic and growing field of international business. Specific vocational opportunity areas would include international marketing, finance, management and distribution. Businesses hiring graduates from this program include airlines, banks, export/import management companies, freight forwarders and the retailing industry.

FIRST YEAR

First Semester

ECO	200	Introduction to Economics.....	3
GEG	101 [♦]	World Geography.....	3
MGT	111	Introduction to Business Organization.....	3
MGT	115	Introduction to International Business.....	3
SPE	101	Fundamentals of Speech Communication.....	<u>3</u>
			15

Second Semester

ACC	101	Introduction to Financial Accounting.....	4
		Mathematics elective ¹	3
MGT	165	International Management.....	3
MKT	245	Principles of Marketing.....	3
MKT	260	International Marketing.....	<u>3</u>
			16

SECOND YEAR

First Semester

BFC	225	International Finance.....	3
CIS	100	Computer Fundamentals or	
CIS	101	Introduction to Computer Information Systems.....	3
ENG	130	Business Writing.....	3
MKT	190	Export Documentation.....	3
MKT	290	Principles of Exporting and Importing.....	3
SCM	101	Supply Chain Management.....	<u>3</u>
			18

Second Semester

		Electives ²	9
		Foreign Language elective.....	4
GEG	210	Economic Geography or	
HST	243 [♦]	The Far East in the Modern World.....	<u>3</u>
			16

¹ 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 a three credit-hour elective or must complete a three credit-hour MKT elective.

² Electives: MKT 191, MKT 193, MKT 196, MKT 252, SCM 230,

[♦] These courses meet the World Cultures and Diversity graduation requirement.

INTERNATIONAL BUSINESS

International Business Certificate

This 19 credit-hour certificate program will prepare students beginning their business careers for entry level positions in the international business field. For students who have completed their college degrees and/or who have previous business experience, this program will provide opportunities for re-assignment into the international field of their present companies or provide new employment opportunities.

The specific goal of this program is to provide students with sufficient competencies in international business to allow them to qualify for and succeed in positions with firms such as international freight forwarders, export and import management companies, insurance companies, manufacturers and financial institutions dealing with companies engaged in the business of international trade.

Required:¹

ACC	101	Introduction to Financial Accounting	4
MGT	115	Introduction to International Business.....	3
MKT	190	Export Documentation	3
MKT	260	International Marketing	3
MKT	290	Principles of Exporting and Importing	3

Electives: Select three credit hours from the following:^{1,2}

BFC	225	International Finance	3
MKT	191	Business in the European Union.....	3
MKT	193	Business in Asia.....	3
MKT	196	Business in Latin America.....	3
MKT	252	Internet Marketing	3
SCM	230	International Supply Chain Management.....	3

¹ Students are reminded that not all courses are offered each semester. In determining course selection, the student should consult with a Student Development faculty member or program coordinator.

² Students must satisfy the prerequisites for each course selected.

JOURNALISM

See: Mass Communication

LAW ENFORCEMENT AND JUSTICE ADMINISTRATION

*Program changes pending ICCB approval.

Associate in Applied Science Degree:

This 61-62 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.

Harper College also offers an Associate in Arts degree for students interested in transferring to a four-year university. A sample plan for Law Enforcement transfers is available in this catalog.

FIRST YEAR

First Semester

ENG	101	Composition	3
LEJ	101	Introduction to Criminal Justice.....	3
LEJ	122	Principles of Policing.....	3
Mathematics elective ^{1,2}			3-4
SOC	101*	Introduction to Sociology.....	<u>3</u>
			15-16

Second Semester

LEJ	201	Criminal Law	3
LEJ	205	Juvenile Justice.....	3
PHI	101	Critical Thinking	3
SOC	205	Social Problems.....	3
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			15

SECOND YEAR

First Semester

LEJ	107	Vice and Drug Control.....	3
LEJ	135	Patrol Procedures	4
LEJ	210	Criminology	3
LEJ	214	Community Policing	3
LEJ	216	Investigative Process	<u>3</u>
			16

Second Semester

LEJ	111	Traffic Enforcement and Investigation	3
LEJ	200	Leadership and Ethics for Law Enforcement	3
LEJ	202	Criminal Procedures	3
Electives ³			<u>6</u>
			15

¹ A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement (MTH 060). Students who utilize the competency test to meet the mathematics requirement must complete an additional three credit hour elective.

² Credit will not be granted for both MGT 225 and MTH 165.

³ Electives: EMG 107, LEJ 104, LEJ 116, LEJ 138, LEJ 230, LEJ 281, LEJ 299.

♦This course meets the World Cultures and Diversity graduation requirement.

LAW ENFORCEMENT AND JUSTICE ADMINISTRATION

Forensic Science Associate in Applied Science Degree

This 60-61 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 YEAR¹

First Semester

ENG	101	Composition	3
FIS	122	Introduction to Fire Prevention Principles	3
LEJ	101	Introduction to Criminal Justice	3
LEJ	116	Forensics I	3
Mathematics elective ²			<u>3-4</u>
			15-16

Second Semester

CHM	100	Chemistry for the Health Sciences or	
CHM	110	Fundamentals of Chemistry	4
ENG	103	Technical and Report Writing	3
LEJ	202	Criminal Procedures	3
LEJ	217	Forensics II	<u>4</u>
			14

SECOND YEAR¹

First Semester

ANT	215	Introduction to Forensic Anthropology	3
CIS	100	Computer Fundamentals	3
FIS	121	Fire Behavior and Combustion	3
FIS	132	Hazardous Materials I	3
LEJ	218	Forensics III	<u>4</u>
			16

Second Semester

FIS	210	Fire Arson Investigation	3
LEJ	216	Investigative Process	3
LEJ	295	Forensics IV	3
PHI	101	Critical Thinking	3
SOC	101 [♦]	Introduction to Sociology	<u>3</u>
			15

¹ A grade of C or better in all CHM, FIS, LEJ, and MTH courses is required for all students.

² Students must take at least three credit hours in a mathematics course at the level of MTH 080 or above.

[♦] This course meets the World Cultures and Diversity graduation requirement.

Forensic Science Technician Certificate

This 14 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, identifying, collecting, and preserving physical evidence to support law enforcement activities.

Required¹:

LEJ	116	Forensics I	3
LEJ	217	Forensics II	4
LEJ	218	Forensics III	4
LEJ	295	Forensics IV	3

¹ A grade of C or better in all LEJ courses is required for all students.

MAINTENANCE TECHNOLOGY

Associate in Applied Science Degree

This 65 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 YEAR

First Semester

		Communications elective	3
ELT	142	Electrical Wiring	2
		Mathematics elective ¹	4
MNT	110	Basic Welding	3
MNT	111	Prints and Schematics	2
MNT	115	Basic Carpentry	2
			<u>16</u>

Second Semester

CIS	100 ²	Computer Fundamentals	3
		Communications elective	3
MNT	125	Basic Plumbing	2
MNT	210	Advanced Welding	3
MNT	215	Commercial Carpentry	2
		Natural Science or Social Science elective [♦]	3
			<u>16</u>

SECOND YEAR

First Semester

FIS	122	Introduction to Fire Prevention Principles	3
MNT	225	Commercial Plumbing	2
MNT	255	Belts/Bearings and Mechanical Drives	2
		Natural Science or Social Science elective [♦]	3
RAC	101	Refrigeration Fundamentals	4
		Technical elective*	3
			<u>17</u>

Second Semester

		Humanities elective [♦]	3
MGT	160	Principles of Supervision	3
MNT	235	Maintenance Troubleshooting Skills	3
		Technical electives*	7
			<u>16</u>

*Technical Electives:

ACC	099	Business Recordkeeping	3
ATE	210	Cost Estimating	3
ATE	213	Construction Management Process	3
BCE	104	Basic Mechanical and Energy Conservation Codes	3
ELT	120	Introductory Industrial Electronics Maintenance	2
ELT	140	Programmable Logic Controllers	2
ELT	143	Advanced Electrical Wiring	2
ELT	144	AC and DC Motors	2
ELT	145	Variable Frequency Drives	2
MNT	105	Machining Processes I	3
MNT	120	Machining Processes II	3
MNT	210	Advanced Welding	3
MNT	211	Welding III	4
MNT	212	Welding IV	4
MNT	281	Topics in Maintenance Technology	1-6
RAC	103	Heating Principles	4
RAC	104	Residential Comfort Systems	3

¹ A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics requirement.

² A proficiency test, available in the Assessment and Testing Center, may be utilized to meet the computer requirement.

[♦] At least one of the Humanities or Social Science requirements must also meet the World Cultures and Diversity graduation requirement.

MAINTENANCE TECHNOLOGY

Basic Maintenance Certificate

This 16 credit-hour certificate program provides the basic knowledge and skill for entry-level jobs in building and residential maintenance.

Electives: Select 16 credit hours from the following courses:

CIS	100	Computer Fundamentals	3
ELT	142	Electrical Wiring	2
MNT	105	Machining Processes I	3
MNT	110	Basic Welding	3
MNT	111	Prints and Schematics	2
MNT	115	Basic Carpentry	2
MNT	125	Basic Plumbing	2
RAC	101	Refrigeration Fundamentals.....	4

Commercial Maintenance Certificate

This 16 credit-hour certificate program builds on the Basic Maintenance certificate to prepare students for more advanced maintenance jobs in commercial or industrial maintenance.

Electives: Select 16 credit hours from the following courses:

BCE	104	Basic Mechanical and Energy Conservation Codes..	3
ELT	120	Introductory Industrial Electronics Maintenance	2
ELT	143	Advanced Electrical Wiring	2
ELT	144	AC and DC Motors.....	2
MNT	120	Machining Processes II.....	3
MNT	210	Advanced Welding	3
MNT	211	Welding III	4
MNT	212	Welding IV.....	4
MNT	215	Commercial Carpentry	2
MNT	225	Commercial Plumbing.....	2
MNT	235	Maintenance Troubleshooting Skills	2
RAC	103	Heating Principles.....	4

Manufacturing Basic Certificate

This 14 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:

MNT	105	Machining Processes I.....	3
MNT	110	Basic Welding	3
MNT	111	Prints and Schematics	2
MNT	120	Machining Processes II.....	3
MNT	210	Advanced Welding.....	3

MAINTENANCE TECHNOLOGY

Supervisory Maintenance Technology Certificate

This 16 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.

Electives: Select 16 credit hours from the following courses:

ACC	099	Business Recordkeeping	3
ATE	210	Costing Estimating	3
ATE	213	Construction Management Process	3
ELT	140	Programmable Logic Controllers	2
FIS	122	Introduction to Fire Prevention Principles	3
MGT	160	Principles of Supervision	3
MNT	255	Belts/Bearings and Mechanical Drives	2
SPE	205	Group Discussion	3

Welding Maintenance Certificate

This 16 credit-hour certificate program is designed to give students entry level skills in welding repairs. The program of study will emphasize advanced welding theory, extensive practice in 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 pass welder qualification tests. Upon completion this certificate, students should be prepared to pass guided bend tests to become 'certified welders' in accordance with AWS (American Welding Society) D1.1 Structural Welding Code.

Required:

MNT	110	Basic Welding	3
MNT	111	Prints and Schematics	2
MNT	210	Advanced Welding	3
MNT	211	Welding III	4
MNT	212	Welding IV	4

MANAGEMENT

Associate in Applied Science Degree: Management

This 64 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 management skills. The program not only develops abilities to organize, coordinate and evaluate the functions of a unit, department or branch of an organization in either an industrial or an administrative management capacity, but also provides the fundamental management skills needed by the successful owner-manager of a business.

FIRST YEAR

First Semester

ACC	101	Introduction to Financial Accounting	4
ENG	101	Composition	3
MGT	111	Introduction to Business Organization	3
MGT	150 ¹	Business Math	3
MGT	160	Principles of Supervision.....	3
PSY	101	Introduction to Psychology.....	<u>3</u>
			19

Second Semester

ACC	102	Introduction to Managerial Accounting.....	3
CIS	101	Introduction to Computer Information Systems.....	3
		English elective	3
MGT	270	Principles of Management	3
PSY	245	Industrial/Organizational Psychology	<u>3</u>
			15

SECOND YEAR

First Semester

ACC	211	Business Law I.....	3
ECO	200	Introduction to Economics.....	3
		Electives ²	6
MKT	245	Principles of Marketing.....	<u>3</u>
			15

Second Semester

		Electives ²	6
		Humanities elective [♦]	3
MGT	218	Introduction to Finance	3
MGT	291	Problems in Management and Supervision	<u>3</u>
			15

¹ A proficiency test, available in the Assessment and Testing Center, may be utilized to meet the MGT 150 requirement.

² Electives: ACC 216, MGT 115, MGT 154, MGT 165, MGT 168, MGT 170, MGT 204, MGT 205, MGT 206, MGT 207, MGT 211, MGT 225, MGT 230, MGT 254, MGT 265, MGT 266, MGT 274, MGT 275, MGT 276, MGT 280.

[♦] Students need to choose a course to meet this requirement that also meets the World Cultures and Diversity graduation requirement.

MANAGEMENT

Associate in Applied Science Degree: Small Business Management

This 60 credit-hour program is designed as pre-service training for those people planning a career in small business. Additionally, the program may provide in-service training for people working in the field.

FIRST YEAR

First Semester

ACC	101	Introduction to Financial Accounting	4
ENG	101	Composition	3
MGT	111	Introduction to Business Organization	3
MGT	150	Business Math	3
PSY	101	Introduction to Psychology	<u>3</u>
			16

Second Semester

ACC	211	Business Law I	3
CAS	105	Word Processing Software	1
CAS	125	Database Software	1
Elective ¹		.....	3
ENG	130	Business Writing	3
MGT	154	Small Business Management	<u>3</u>
			14

SECOND YEAR

First Semester

CAS	215	Advanced Spreadsheet Software	1
Elective ¹		.....	3
MGT	160	Principles of Supervision.....	3
PHI	150	Business Ethics.....	3
PSY	245	Industrial/Organizational Psychology.....	3
SOC	101 [♦]	Introduction to Sociology or	
SOC	215 [♦]	Introductory Social Psychology.....	<u>3</u>
			16

Second Semester

Electives ¹		.....	8
MGT	254	Small Business Formation	3
MKT	245	Principles of Marketing.....	<u>3</u>
			14

¹ Electives: ECO 115, MGT 115, MGT 165, MGT 205, MGT 206, MGT 207, MGT 211, MGT 230, MGT 265, MGT 270, MGT 274, MGT 275, MGT 280, MKT 106, MKT 140, MKT 217, MKT 240, MKT 250, SCM 101

[♦] Select one course, both courses meet the World Cultures and Diversity graduation requirement.

Advanced Management Certificate

This 18 credit-hour certificate program continues the development of management skills learned in the General Management certificate. It is designed for those students who wish to further explore the specific qualifications and requirements necessary for mid- to upper level management positions.

Required:

MGT	111	Introduction to Business Organization	3
MGT	160	Principles of Supervision.....	3
MGT	270	Principles of Management	3

Electives: Select at least nine credit hours from the following courses:

MGT	150	Business Math	3
MGT	168	OSHA Standards and Compliance Procedures	3
MGT	205	Leadership Foundation	1
MGT	206	Leadership Skills.....	1
MGT	207	Leadership Trends	1
MGT	218	Introduction to Finance	3
MGT	225	Applied General Statistics.....	4
MGT	230	Topics in Business .....	.5-3
MGT	274	Operation Management	3
MGT	280	Organizational Behavior.....	3
MGT	291	Problems of Management and Supervision	3

MANAGEMENT

General Management Certificate

This 12 credit-hour certificate program offers the student the opportunity to receive fundamental management skills for entry-level management positions.

Required:

MGT	111	Introduction to Business Organization	3
MGT	160	Principles of Supervision.....	3
MGT	270	Principles of Management	3
Elective ¹		.....	3

¹ Electives: MGT 150, MGT 205, MGT 206, MGT 207, MGT 280, MGT 291.

Human Resource Management Certificate

This 18 credit-hour certificate program is designed for those individuals interested in employment in the human resource field.

Required:

MGT	111	Introduction to Business Organization	3
MGT	265	Human Resource Management.....	3

Electives: Select 12 credit hours from the following courses:

ACC	216	Employment Law	3
MGT	204	Training and Development.....	3
MGT	266	Wage Analysis and Administration	3
MGT	275	Labor-Management Relations.....	3
MGT	276	Collective Bargaining	3
MGT	280	Organizational Behavior.....	3

Small Business Management Certificate

This 15 credit-hour certificate program is designed for those individuals who want to develop management skills to be used in small businesses.

Required:

MGT	154	Small Business Management	3
MGT	254	Small Business Formation	3

Electives: Select a minimum of nine credit hours from the following courses:

ACC	101	Introduction to Financial Accounting.....	4
BFC	215	Financial Statements Interpretation and Analysis.....	3
MGT	211	Internship in Small Business.....	3
MKT	245	Principles of Marketing.....	3

MARKETING

Associate in Applied Science Degree

This 61-62 credit-hour program is designed for persons interested in preparing for positions in the dynamic field of marketing.

Career opportunities in marketing are quite extensive and diversified. Career objectives of persons completing this program would be in the areas of advertising, sales, sales promotion, market research, product development, pricing, wholesaling, direct marketing, retailing and merchandising.

Students can choose a basic program of study in marketing or one of the specialized study areas. Students earning an associate in applied science degree in marketing must complete the following required general education courses, required core courses and 21 credit hours of course work from the specialized study areas .

Required General Education Courses:

ENG	101	Composition	3
ENG	102	Composition or	
ENG	130	Business Writing I or	
SPE	101	Fundamentals of Speech Communication	3
		Humanities elective*	3
MGT	150	Business Math (3) or	
		Mathematics elective ² (3-4).....	3-4
PSY	101	Introduction to Psychology.....	3
PSY	245	Industrial/Organizational Psychology.....	3

Required Core Courses:

ACC	101	Introduction to Financial Accounting.....	4
ACC	102 ³	Introduction to Managerial Accounting or	
ACC	211	Business Law I.....	3
CIS	100 ³	Computer Fundamentals or	
CIS	101	Introduction to Computer Information Systems.....	3
ECO	200 ³	Introduction to Economics or	
ECO	211	Microeconomics	3
MGT	111	Introduction to Business Organization	3
MGT	270	Principles of Management	3
MKT	245	Principles of Marketing.....	3

MARKETING

Specialized Study Areas:

Depending on the student's career needs, he/she may choose courses from the following specialized study areas. It is recommended that students pursue one of the following specialized areas and consult with the program coordinator or Student Development faculty/counselor.

MARKETING

Any combination of 21 credit hours may be selected from the courses listed below.

MKT	105	Sports Marketing.....	3
MKT	106	Retail Merchandising.....	3
MKT	140	Principles of Professional Selling.....	3
MKT	202	Marketing for Non-Profit Organizations.....	3
MKT	217	Advertising.....	3
MKT	240	Advanced Sales Skills.....	3
MKT	246	Business to Business Marketing.....	3
MKT	247	Consumer Buying Behavior.....	3
MKT	248	Direct Marketing.....	3
MKT	250	Retailing.....	3
MKT	252	Internet Marketing.....	3
MKT	255	Marketing Research.....	3
MKT	260	International Marketing.....	3
MKT	280	Marketing Problems.....	3
MKT	281	Internship in Marketing.....	3
MKT	285	Topics in Marketing.....	.5-3
MKT	290	Principles of Exporting and Importing.....	3

RETAILING

Required:⁴

FAS	212	Visual Fashion Merchandising or	
MKT	110	Retail Store Layout and Imaging.....	2
MKT	106	Retail Merchandising.....	3
MKT	120	Customer Service.....	1
MKT	250	Retailing.....	3
MKT	251	Retail Merchandise Management.....	3

Electives:⁴ Select at least nine credit hours from the following:

MGT	154	Small Business Management.....	3
MGT	160	Principles of Supervision.....	3
MKT	140	Principles of Professional Selling.....	3
MKT	217	Advertising.....	3
MKT	247	Consumer Buying Behavior.....	3
MKT	252	Internet Marketing.....	3
MKT	248	Direct Marketing.....	3
MKT	281	Internship in Marketing.....	3
MKT	285	Topics in Marketing.....	.5-3

MARKETING

Associate in Applied Science Degree continued...

SALES

Required:⁴

MKT	140	Principles of Professional Selling.....	3
MKT	141	Sales Management.....	3
MKT	240	Advanced Sales Strategies.....	3
MKT	247	Consumer Buying Behavior.....	3

Electives:⁴ Select at least nine credit hours from the following:

MGT	160	Principles of Supervision.....	3
MKT	105	Sports Marketing.....	3
MKT	106	Retail Merchandising or	
SCM	125	Purchasing.....	3
MKT	120	Customer Service.....	1
MKT	202	Marketing for Non-Profit Organizations.....	3
MKT	246	Business to Business Marketing.....	3
MKT	248	Direct Marketing.....	3
MKT	252	Internet Marketing.....	3
MKT	281	Internship in Marketing.....	3
MKT	285	Topics in Marketing.....	.5-3

MARKETING COMMUNICATIONS

Required:⁴

MCM	232	Introduction to Advertising or	
MKT	217	Advertising.....	3
MCM	233	Introduction to Public Relations.....	3
MKT	255	Marketing Research.....	3

Electives:⁴ Select at least 12 credit hours from the following:

MCM	136	Broadcast Writing.....	3
MCM	235	Publications Editing and Design.....	3
MKT	105	Sports Marketing.....	3
MKT	140	Principles of Professional Selling.....	3
MKT	202	Marketing for Non-Profit Organizations.....	3
MKT	246	Business to Business Marketing.....	3
MKT	247	Consumer Buying Behavior.....	3
MKT	248	Direct Marketing.....	3
MKT	252	Internet Marketing.....	3
MKT	260	International Marketing.....	3
MKT	281	Marketing Internship.....	3

¹ Students are reminded that not all courses are offered each semester. In determining course selection, the student should consult with a Student Development faculty/counselor or program coordinator.

² Mathematics elective: MTH 103, MTH 124, MTH 134, MTH 165. Meet with Student Development faculty member or program coordinator for appropriate course.

³ Meet with Student Development faculty member or program coordinator for appropriate ACC, CIS or ECO course.

⁴ Students must satisfy the prerequisites for each course selected.

♦ Students need to choose a course to meet this requirement that also meets the World Cultures and Diversity graduation requirement.

MARKETING

E-Commerce Business Certificate

This 15 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.

Required:

MGT	154	Small Business Management	3
MKT	252	Internet Marketing	3
WEB	240	E-Commerce Development.....	3

Electives: Select six credit hours from the following:

CIS	100	Computer Fundamentals or	
CIS	101	Introduction to Computer Information Systems.....	3
MKT	245	Principles of Marketing.....	3
MKT	247	Consumer Behavior	3
MKT	255	Marketing Research.....	3
PLS	222	Intellectual Property	3
WEB	150 ¹	Web Development I	3

¹ Students must satisfy prerequisite.

Marketing Certificate

This is 12 credit-hour certificate program is designed for those interested in obtaining basic marketing skills that can be used in entry-level marketing positions.

Required:

MKT	245	Principles of Marketing.....	3
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Electives: Select nine credit hours from the following:

MKT	105	Sports Marketing	3
MKT	140	Principles of Professional Selling.....	3
MKT	202	Marketing for Non-Profit Organizations.....	3
MKT	217	Advertising	3
MKT	247	Consumer Buying Behavior	3
MKT	252	Internet Marketing	3
MKT	255	Marketing Research.....	3
MKT	281	Internship in Marketing.....	3

Marketing Research Certificate

This 6 credit-hour certificate program is designed to give individuals with little or no formal training the skills necessary to function as a market research analyst. The principles learned in these classes will help individuals efficiently target markets, design research instruments, and identify potential markets for new and existing products and services.

Required:

GEG	151	Geographic Information Systems I.....	3
MKT	255	Market Research.....	3

MARKETING

Retail Merchandising Certificate

This is a 17-18 credit-hour certificate program 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.

Required:

FAS	212	Visual Fashion Merchandising (2) or	
MKT	217	Advertising (3).....	2-3
MKT	106	Retail Merchandising	3
MKT	250	Retailing	3
MKT	251	Retail Merchandise Management	3

Electives: Select at least six credit hours from the following courses:

ACC	099	Business Recordkeeping (3) or	
ACC	101	Introduction to Financial Accounting (4).....	3-4
MGT	111	Introduction to Business Organization	3
MGT	154	Small Business Management	3
MGT	160	Principles of Supervision.....	3
MKT	140	Principles of Professional Selling.....	3
MKT	245	Principles of Marketing.....	3

Sales Management and Development Certificate

This 15 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.

Program requirements are satisfied by completing six hours from Group I and nine hours from Group II for a total minimum of 15 credit hours. To achieve an individual program designed to complement the student's industrial and educational background, the selection of courses should be made in consultation with the coordinator.

Electives: Group I (Select six credit hours from the following):

MKT	140	Principles of Professional Selling.....	3
MKT	141	Sales Management	3
MKT	240	Advanced Sales Strategies.....	3
MKT	247	Consumer Buying Behavior	3

Electives: Group II (Select nine credit hours from the following):

ACC	211	Business Law I.....	3
MAT	125	Purchasing	3
MGT	111	Introduction to Business Organization	3
MGT	160	Principles of Supervision.....	3
MKT	141	Sales Management	3
MKT	240	Advanced Sales Strategies.....	3
MKT	245	Principles of Marketing.....	3
MKT	246	Business to Business Marketing	3

MASS COMMUNICATION

Associate in Applied Science Degree: Public Relations

This 60-credit hour program is designed for persons interested in preparing for positions in the growing and dynamic field of public relations. Additionally, the program may provide in-service training for people already working in the field. Students will learn valuable marketing, advertising and journalistic knowledge and skills, including writing for various media and communication vehicles, interviewing, special event planning and public relations campaign management.

FIRST YEAR

First Semester

ENG	101	Composition	3
		Humanities elective	3
MCM	120	Introduction to Mass Communication.....	3
MCM	130	Introduction to Journalism.....	3
MGT	150	Business Math	<u>3</u>
			15

Second Semester

MCM	131	News Reporting and Writing	3
MCM	233	Introduction to Public Relations	3
MGT	111	Introduction to Business Organization	3
SOC	101 [♦]	Introduction to Sociology.....	3
		Social Science elective	<u>3</u>
			15

SECOND YEAR

First Semester

	Elective ¹	.....	3
MCM	137	Media Writing	3
MCM	250	Public Relations Writing and Production	3
MCM	251	Media Interviewing	3
MKT	245	Principles of Marketing.....	<u>3</u>
			15

Second Semester

	Electives ¹	.....	6
MCM	252	Special Events and Promotions	3
MCM	260	Campaign Communication and Message Design.....	3
MKT	217	Advertising	<u>3</u>
			15

¹ Choose 9 credit hours from MGT 280, SPE 101, or any MCM or MKT course.

[♦] This course meets the World Cultures and Diversity graduation requirement.

MASS COMMUNICATION

Media Writing and Design Certificate

This is a 21 credit-hour certificate program designed for those students obtain skills in both media writing and design. The preparation is suitable for certain entry level jobs in magazine and newsletter design, marketing, public relations and advertising as well as those interested in free-lance careers. It is also appropriate for students changing careers who have a background in another field.

Required:

MCM	120	Introduction to Mass Communication.....	3
MCM	130	Introduction to Journalism.....	3
MCM	140	Writing, Editing, and Design for the Internet.....	3
MCM	230 ¹	Graphic Design Communication.....	3
MCM	232	Introduction to Advertising.....	3

Electives: Select six credit hours from the following:

ART	121	Design I.....	3
MCM	126	Introduction to Broadcasting.....	3
MCM	131	News Reporting and Writing.....	3
MCM	133	Feature Writing.....	3
MCM	136	Broadcast Writing.....	3
MCM	141	Basic News Editing.....	3
MCM	233	Introduction to Public Relations.....	3
MCM	235	Magazine Editing and Design.....	3
MCM	240	Topics in Mass Communication.....	1-6

¹ This course is strongly recommended before taking MCM 232, MCM 233, or MCM 235.

Online Communications Certificate

This is an 18-19 credit-hour certificate program that provides a background in writing, editing, and design.

Required:

MCM	130	Introduction to Journalism.....	3
MCM	140	Writing, Editing, and Design for the Internet.....	3
MCM	230	Graphic Design Communications.....	3
MCM	241	Online Magazine Publishing.....	3
MCM	243	Communication Web Site Applications.....	3
WEB	101	Internet Fundamentals.....	1

Electives: Select one course from the following:

MCM	120	Introduction to Mass Communication.....	3
MCM	131	News Reporting and Writing.....	3
MCM	133	Feature Writing.....	3
MCM	232	Introduction to Advertising.....	3
MCM	233	Introduction to Public Relations.....	3
MCM	242	Using the Internet as a Communications Tool.....	2
WEB	150	Web Site Development I.....	2

MASS COMMUNICATION

Public Relations Certificate

This 21 credit-hour certificate program offers the student the opportunity to gain valuable knowledge and skill in mass communication with an emphasis on public relations.

Required:

MCM	120	Introduction to Mass Communications.....	3
MCM	130	Introduction to Journalism.....	3
MCM	233	Introduction to Public Relations	3
MCM	250	Public Relations Writing and Production.....	3
MCM	251	Media Interviewing	3
MCM	252	Special Events and Promotions	3
MCM	260	Campaign Communication and Message Design.....	3

Public Relations for the Web Certificate

This 22 credit-hour certificate program combines skills in two growing and dynamic areas: public relations and internet communications.

Required:

Electives ¹		.....	6
MCM	120	Introduction to Mass Communications.....	3
MCM	130	Introduction to Journalism.....	3
MCM	140	Writing, Editing and Design for the Internet	3
MCM	233	Introduction to Public Relations	3
WEB	101	Internet Fundamentals	1
WEB	150	Web Development I	3

¹ Choose two courses from MCM 241, MCM 242, MCM 243, or MKT 252.

MEDICAL OFFICE ADMINISTRATION

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.

Associate in Applied Science Degree: Health Care Office Manager

This 61-62 credit-hour program is designed for individuals interested in expanding previous general office experience or health care training in order to gain the necessary skills to supervise a health care facility. Career options are plentiful and diversified, and include employment in an extended care facility, home health care agency, pharmaceutical house, medical supply company or various departments with acute-care settings.

The student must complete the general education courses and health care core courses. Additionally, the student has the option to specialize in health care skills and in business-related course work, depending on the student's career objectives.

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 some courses are available on an evening schedule. An orientation and planning session is recommended by the coordinator; detailed information is available on the Web site.

Required:¹

BIO	135	Introduction to Anatomy and Physiology or	
BIO	160 ²	Human Anatomy	4
BIO	136	Introduction to Human Disease (3) or	
BIO	161 ²	Human Physiology (4).....	3-4
		Communications elective	3
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
HSC	165	Basic Pharmacology	1
HSC	213	Legal and Ethical Issues in Health Care	2
		Humanities or Social Science elective ⁴	3
		Mathematics elective ³	3
MGT	111	Introduction to Business Organization	3
MGT	270	Principles of Management	3
MOA	145	Health Care Records Management	2
MOA	150	Math Applications in Health Care.....	1
MOA	195	Principles of Health Insurance Billing.....	3
MOA	235 ⁶	Health Care Office Procedures	3
MOA	245 ⁷	Health Care Office Management	3
MOA	299 ^{4,7}	Medical Office Capstone.....	3

MEDICAL OFFICE ADMINISTRATION

Associate in Applied Science Degree: Health Care Office Manager continued...

Electives: ¹ Group I Select any combination of a minimum of six credit hours from the following courses:

MOA	196	Current Procedural Terminology (CPT) Coding	3
MOA	197	International Classification of Disease (ICD) Coding	3
MOA	215 ^{4,6}	Clinical Procedures	8
MOA	240	Medical Transcription I	3
MOA	242	Medical Transcription II	3

Electives: Group II Select any combination of a minimum of six credit hours from the following courses:

ACC	101	Introduction to Financial Accounting	4
CIS	101	Introduction to Computer Information Systems	3
ECO	200 ⁵	Introduction to Economics	3
HSC	106	Health Occupations Career Observation	1.5
MGT	205	Leadership Foundations	1
MGT	206	Leadership Skills	1
MGT	207	Leadership Trends	1
MGT	265	Human Resource Management	3
PSY	245 ⁴	Industrial/Organizational Psychology	3

¹ A grade of C or better in all BIO, HSC and MOA courses is required for all students.

² Students may take BIO 135 and BIO 136 or BIO 160 and BIO 161 or BIO 160 and BIO 136.

³ A competency test, available in the Assessment and Testing Center, may be utilized to meet the mathematics elective requirement.

⁴ Students must satisfy prerequisites for each course selected.

⁵ May be used to fulfill general education requirement(s); meet with program coordinator or Student Development faculty/counselor for advice on electives.

⁶ Offered during fall semester only.

⁷ Offered during spring semester only.

♦ Students need to choose a course to meet this requirement that also meets the World Cultures and Diversity graduation requirement.

MEDICAL OFFICE ADMINISTRATION*

*Program changes pending ICCB approval.

Health Care Office Assistant Certificate

This 20 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 any other health care-related facility.

Administrative duties could 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.

Students should have a keyboarding speed of at least 30 words per minute. The program may be taken full-time or part-time with courses offered during the day, in the evening, or (some) online. A 160-hour externship in a medical facility is offered during the spring semester only and is usually the student's last semester of the program. Students should attend a program information session and also arrange a planning session with the program coordinator when possible.

Required:¹

HSC	104	Health Care Technology and Informatics.....	2
HSC	105	Introduction to Health Care Today.....	2
HSC	112	Medical Terminology.....	2
MOA	145 ²	Health Care Records Management	2
MOA	195 ^{2,3}	Principles of Health Insurance Billing.....	3
MOA	235 ^{2,4}	Health Care Office Procedures	3
MOA	240 ³	Medical Transcription I.....	3
MOA	265 ⁵	Medical Office Administration Externship	3

¹ A grade of C or better in all BIO, HSC and MOA courses is required for all students.

² Students must satisfy prerequisites for each course selected.

³ Prerequisite waivers for BIO 135 or BIO 136 will be issued for Health Care Office Assistant students.

⁴ Offered during fall semester only.

⁵ Offered during spring semester only.

Health Insurance Specialist Certificate

This concentrated 32 credit-hour certificate program is designed for the individual who is interested in becoming an insurance billing specialist in a large health 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 Diseases (ICD) and Current Procedural Terminology (CPT) coding, billing reimbursement and collections procedures.

Some keyboarding skills and knowledge of computers is recommended.

Professional Certification:

Students in the Health Insurance Specialist program are encouraged to join the local chapter of the American Association of Procedural Coders (AAPC) and the American Health Information Management Association (AHIMA). An experienced coder is eligible to sit for the national examination in order to become a Certified Procedural Coder (CPC).

Required:¹

BIO	135	Introduction to Human Anatomy and Physiology.....	4
BIO	136	Introduction to Human Disease.....	3
HSC	104	Health Care Technology and Informatics.....	2
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 ²	Health Care Records Management	2
MOA	195 ²	Principles of Health Insurance Billing.....	3
MOA	196 ²	Current Procedural Terminology (CPT) Coding.....	3
MOA	197 ²	International Classification of Disease (ICD) Coding	3
MOA	235 ^{2,3}	Health Care Office Procedures	3
MOA	265 ^{2,4}	Medical Office Administration Externship	3

¹ A grade of C or better in all BIO, HSC and MOA courses is required for all students.

² Students must satisfy prerequisites for each course selected.

³ Offered during fall semester only.

⁴ Offered during spring semester only.

MEDICAL OFFICE ADMINISTRATION

Medical Assistant Certificate

This concentrated 40 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 Web site.

Professional Accreditation and Certification:

The Medical Assistant certificate and degree programs at Harper College have been accredited by the Commission on the Accreditation of Allied Health Educational Programs (CAAHEP). 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).

Required:¹

BIO	135 ²	Introduction to Human Anatomy and Physiology	4
HSC	104	Health Care Technology and Informatics.....	2
HSC	105	Introduction to Health Care Today	2
HSC	107	Basic Health Care Skills.....	1
HSC	112	Medical Terminology	2
HSC	165	Basic Pharmacology	1
HSC	213	Legal and Ethical Issues in Health Care	2
MOA	145 ²	Health Care Records Management	2
MOA	150	Math Applications in Health Care.....	1
MOA	195 ^{2,3}	Principles of Health Insurance Billing.....	3
MOA	215 ^{2,4,5}	Clinical Procedures	8
MOA	235 ⁵	Health Care Office Procedures	3
MOA	245 ^{2,6}	Health Care Office Management	3
MOA	280 ^{2,4,6}	Medical Assistant Externship	3
PSY	101	Introduction to Psychology.....	3

¹ A grade of C or better in all BIO, HSC and MOA courses is required for all students.

² Students must satisfy prerequisites for each course selected.

³ Prerequisite of BIO136 waived for Medical Assistant Certificate students.

⁴ Students must submit an American Heart Association Cardiopulmonary Resuscitation for the Health Care Provider (CPR) certificate before entering externship.

⁵ Offered during fall semester only.

⁶ Offered during spring semester only.

MEDICAL OFFICE ADMINISTRATION

Medical Transcriptionist Certificate

This concentrated 27 credit-hour certificate program is designed for the individual who is interested in expanding her/his previous health care and/or secretarial experience in order to become a medical transcriptionist. A medical transcriptionist is the health information specialist who transcribes patients' records in a hospital, large health care practice, HMO or clinic. Transcribed records are used in follow-up treatment, by insurance companies to verify claims, to authenticate legal documents, and by medical research specialists in the development of new treatment and diagnostic methods.

The curriculum provides the training needed to understand the various types of dictation utilized. Medical transcriptionists must possess excellent keyboarding skills and the ability to memorize spellings and meanings of the health care language. A minimum keyboarding speed of 50 words per minute is recommended to enter the program; however, experienced medical transcriptionists frequently reach keyboarding speeds in excess of 80-100 words per minute; 60 words per minute is expected in order to progress through externship. The program may be taken part-time and some courses are available on an evening schedule. An orientation and planning session is recommended by the coordinator; detailed information is available on the Web site.

Professional Accreditation and Certification:

Graduates of the Medical Transcriptionist program are eligible to sit for the national certification examination offered by the American Association for Medical Transcription (AAMT). The medical transcriptionist who successfully completes the national examination is credentialed as a Certified Medical Transcriptionist (CMT). Students in the Medical Transcriptionist program are encouraged to join the local chapter of the AAMT.

Required:¹

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
HSC	105	Introduction to Health Care Today	2
HSC	112	Medical Terminology.....	2
MOA	145	Health Care Records Management	2
MOA	240	Medical Transcription I.....	3
MOA	242	Medical Transcription II.....	3
MOA	265 ²	Medical Office Administration Externship	3

¹ A grade of C or better in all BIO, HSC and MOA courses is required for all students.

² Offered during spring semester only.

NANOSCIENCE TECHNOLOGY

Associate in Applied Science Degree

Nanoscience technology provides a program for students to become skilled technicians in this cutting-edge, emerging field. Nanotechnology is the science of manipulating atoms and molecules at the nanometer scale (1-100 nanometers). Graduates of this 64-66 credit hour program will be prepared to work as technicians and manufacturing and production workers within industries using nanoscience and microscience technologies, including areas of research and development, production, manufacturing, and sales.

FIRST YEAR

First Semester

CHM	121	General Chemistry I	5
ENG	101	Composition	3
MTH	140	Precalculus	5
NAN	121	Fundamentals of Nanoscience I	<u>3</u>
			16

Second Semester

BIO	110	Principles of Biology.....	4
MTH	165	Elementary Statistics	4
NAN	122	Fundamentals of Nanoscience II	3
PHY	121	Introductory Physics I.....	<u>5</u>
			16

Summer Semester

PHY	122	Introductory Physics II.....	<u>5</u>
			5

SECOND YEAR

First Semester

		Humanities or Social Science elective [♦]	3
NAN	211	Nanoelectronics	3
NAN	221	Nanobiotechnology	3
NAN	231	Nanomaterials.....	3
NAN	295	Independent Research or	
		Approved elective ¹	<u>3-5</u>
			15-17

Second Semester

NAN	241	Nanoscience Manufacturing	3
NAN	299	Nanoscience Internship	6
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			12

¹ A course from BIO, CHM, EGR, or ELT may be substituted with the consent of the program coordinator.

[♦] This elective must also meet the World Cultures and Diversity graduation requirement.

NETWORKING

See: Computer Information Systems

NURSING*

Associate in Applied Science 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 National League for Nursing Accrediting Commission.

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

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or check the Web site: 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.**

PREREQUISITES¹

BIO	160 ²	Human Anatomy	4
BIO	161 ²	Human Physiology	4
ENG	101	Composition	3
Mathematics ³		.....	0
PSY	101	Introduction to Psychology	3
			<u>14</u>

FIRST YEAR¹

First Semester

BIO	130 ²	Microbiology	4
NUR	110	Nursing Concepts and Practice	2
NUR	111	Introduction to Nursing Roles	2
NUR	112	Nursing Roles Clinical	2
NUR	180	Pathophysiology	3
PSY	228	Human Development	3
			<u>16</u>

Second Semester

HSC	201 ²	Advanced Pharmacology	2
NUR	140	Adult Health Concepts I	2
NUR	141	Adult Health Clinical I	3
NUR	150	Psychosocial Concepts	2
NUR	151	Psychosocial Concepts Clinical	2
NUR	210	Physical Assessment	2
			<u>13</u>

NURSING*

Associate in Applied Science Degree continued...

SECOND YEAR¹

First Semester

NUR	201	Child Bearing Concepts	2
NUR	202	Adult Health Concepts II	2
NUR	205	Pediatric Health Concepts	2
NUR	220	Child Bearing Clinical.....	2
NUR	240	Adult Health Clinical II.....	2
NUR	250	Pediatric Health Clinical.....	2
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			15

Second Semester

NUR	216	Adult Health Concepts III	2
NUR	218	Role Transition Seminar	1
NUR	260	Adult Health Clinical III.....	3
NUR	280	Role Transition Practicum.....	5
		Social Science or Humanities elective [‡]	<u>3</u>
			14

* Nursing is a limited enrollment program. See the Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in all coursework is required for all students.

² Must be completed no earlier than five years prior to beginning the Nursing program.

³ Group 2 Math requirement is met by Nursing program admission requirements.

[‡] Students need to choose a course to meet this requirement that also meets the World Cultures and Diversity graduation requirement.

NURSING*

Practical Nursing Certificate*

This 35 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.

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 the NUR prefix. Tuition for these 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 check the Web site: 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

ENG	101	Composition	3
CNA	101 ¹	Nursing Assistant Training	6

FIRST YEAR¹

Summer Semester

BIO	160 ³	Human Anatomy	4
PSY	101	Introduction to Psychology	<u>3</u>
			7

Fall Semester

BIO	161 ³	Human Physiology	4
NUR	101	PN Fundamentals	7
NUR	105 ²	PN Pharmacology	<u>1</u>
			12

Spring Semester

NUR	102	Lifespan Nursing for the PN	8
NUR	108	PN Mental Health Nursing	1
PSY	228	Psychology of Human Development	<u>3</u>
			12

SECOND YEAR¹

Summer Semester

NUR	104	PN Field Experience	4
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* Practical Nursing is a limited enrollment program. See Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in all BIO, CNA and NUR courses is required for all students.

² Must be taken during fall semester.

³ Must be taken within five years of the required semester.

NURSING*

Certified Nursing Assistant Certificate

This six credit-hour certificate program prepares individuals to deliver safe, competent and quality care under the supervision of a registered nurse. The course includes basic nursing skills necessary to provide direct care to patients with special emphasis on skills and knowledge required to care for residents in long term care and sub acute settings. Clinical experience is held off campus. Students are required to provide their own transportation. Students successfully completing the program are eligible to sit for the IDPH certification examination and enter the State of Illinois Nurse Aide Registry. 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 100 or 101 with a grade of C or better, ESL 073 with a grade of B or better, any RDG course with a grade of C or better, or required placement test scores.

Required:¹

CNA 101 Nursing Assistant Training 6

¹ A grade of C or better in all coursework is required for all students.

OCCUPATIONAL HEALTH AND SAFETY

See: Environmental Health

PARALEGAL STUDIES

Associate in Applied Science 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 YEAR

First Semester

ENG	101	Composition	3
		Humanities elective ¹	3
PLS	101	Introduction to Paralegal Studies	3
PSY	101	Introduction to Psychology	3
SOC	101 [♦]	Introduction to Sociology	<u>3</u>
			15

Second Semester

ENG	103	Technical and Report Writing	3
PLS	102	Fundamentals of Legal Research	3
PLS	103	Litigation	3
PLS	105	Family Law	3
PLS	123	Real Property Law	<u>3</u>
			15

SECOND YEAR

First Semester

		Mathematics elective ²	3
PLS	201	Tort and Insurance Law	3
PLS	205	Contract Law	3
PLS	210	Corporate and Securities Law	3
PSC	101	American Politics and Government	<u>3</u>
			15

Second Semester

CAS	160	Introduction to Business Software Packages	3
		Electives ³	9
PLS	208 ⁴	Internship in Paralegal Studies	3
PLS	223	Computer-Assisted Legal Research	<u>3</u>
			18

¹ Humanities electives must be chosen from the following ABA-approved humanities, listed with the requirements for AAS degrees: ART 105, any FNA, 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 SPE 111.

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 212, 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.

[♦] This course meets the World Cultures and Diversity graduation requirement.

PARALEGAL STUDIES

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 degree, or a bachelor's degree which include general education courses equivalent to those required in Harper College's associate in applied science degree in paralegal studies. Verifications 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:

PLS	101	Introduction to Paralegal Studies	3
PLS	102	Fundamentals of Legal Research	3
PLS	103	Litigation.....	3
PLS	223	Computer-Assisted Legal Research	3

Electives: Select at least 12 credit hours from the following courses, providing the combination has the approval of the coordinator or a Student Development faculty member.

LEJ	201 ¹	Criminal Law 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	208	Internship in Paralegal Studies	3
PLS	210	Corporate and Securities Law.....	3
PLS	212	Law Office Systems	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

¹ Students may take LEJ 201 or LEJ 202, but not both. Prerequisite of LEJ 101 will be waived for Paralegal Studies certificate students.

PARAMEDIC

See: Emergency Medical Services

PARAPROFESSIONAL EDUCATOR

Associate in Applied Science 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 the required courses for the program and 18 hours of approved electives.

Required General Education Courses:

ENG	101	Composition	3
		Humanities elective	3
MTH	130	Mathematics for Elementary Teaching I	4
PSC	101	American Politics and Governments	3
PSY	101	Introduction to Psychology	3
SPE	101	Fundamentals of Speech Communication	3

Required Core Courses:

DIV	101 [♦]	Exploring Diversity in the U.S.	3
ECE	102	Child Development	3
ECE	219	Students with Disabilities in School	3
EDU	201	Introduction to Education	3
EDU	202	Pre-Student Teaching Clinical Experience	1
EDU	211	Educational Psychology	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

Electives: Select 18 credit-hours from the following courses:

ANT	101	Introduction to Anthropology	3
ANT	202	Cultural Anthropology	3
ART	105	Introduction to the Arts or	
ART	130	History of Art I	3
ECE	120	Introduction to Special Education for Paraprofessionals	3
ECE	121	Behavioral Management in Special Education Setting	3
ENG	102	Composition	3
GEG	101	World/Regional Geography	3
HST	111	The American Experience to 1877	3
HST	112	The American Experience Since 1877	3
LNG	105	Introduction to Language and Linguistics	3
MTH	131	Mathematics for Elementary Teaching II	4
PHS	111	Introduction to Physical Science or	
PHS	112	Exploring the Earth and Universe	4
PSY	217	Adolescent Psychology or	
PSY	228	Psychology of Human Development	3
SGN	101	American Sign Language	4

[♦]This course meets the World Cultures and Diversity graduation requirement.

PARAPROFESSIONAL EDUCATOR

Paraprofessional Educator Certificate

This 32 credit-hour program is designed to promote the skills necessary when working with children in non-title 1 positions in K-12 public of private schools. Individuals can also use the certificate program toward completion of the Paraprofessional Education associate in applied science degree.

Required:

DIV	101	Exploring Diversity in the U.S.	3
ECE	102	Child Development.....	3
ECE	219	Students with Disabilities in School	3
EDU	201	Introduction to Education	3
EDU	202	Pre-Student Teaching Clinical Experience	1
EDU	211	Educational Psychology.....	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 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 practice 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.

Admission Requirements

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or check the Web site: 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:¹

HSC	112	Medical Terminology	2
PHB	101	Phlebotomy Principles and Practice	4
PHB	102	Phlebotomy Internship	2

* Phlebotomy is a limited enrollment program. See Limited Enrollment Programs section of this Catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in all HSC and PHB courses is required for all students.

PUBLIC RELATIONS

See: Mass Communication

RADIOLOGIC TECHNOLOGY*

Associate in Applied Science Degree*

This 76 credit-hour full-time curriculum prepares radiographers to produce X-ray films (radiographs) of parts of the human body for use in diagnosing medical problems. Additional duties may include processing film, evaluating radiology equipment, managing radiographic quality assurance programs, and providing relevant patient education. The program provides both classroom and clinical instruction in anatomy and physiology, radiobiology, pathology, medical image 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

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or check the Web site: 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 YEAR¹

First Semester

BIO	160 ¹	Human Anatomy	4
HSC	104	Health Care Technology and Informatics.....	2
HSC	105	Introduction to Health Care Today	2
HSC	107	Basic Health Care Skills.....	1
HSC	112	Medical Terminology.....	2
RAD	102	Radiologic Procedures I.....	3
RAD	103	Radiologic Principles I.....	3
Mathematics ²		.....	0
			17

Second Semester

BIO	161 ¹	Human Physiology	4
HSC	165 ¹	Basic Pharmacology	1
HSC	213	Legal and Ethical Issues in Health Care	2
RAD	105	Radiologic Procedures II.....	3
RAD	106	Radiologic Principles II.....	3
RAD	107	Radiologic Clinical Education I.....	3
			16

Summer Semester

RAD	201	Radiologic Clinical Education II.....	4
SOC	101 [♦]	Introduction to Sociology.....	3
			7

RADIOLOGIC TECHNOLOGY*

Associate in Applied Science Degree continued...

SECOND YEAR¹

First Semester

ENG	101	Composition	3
RAD	202	Radiologic Procedures III	3
RAD	203	Advanced Radiologic Principles.....	3
RAD	204	Radiobiology	3
RAD	205	Radiologic Clinical Education III.....	<u>4</u>
			16

Second Semester

RAD	206	Radiologic Pathology	3
RAD	207	Radiologic Quality Assurance	1
RAD	208	Radiologic Seminar	1
RAD	209	Radiologic Special Procedures	3
RAD	210	Radiologic Clinical Education IV	4
SPE	101	Fundamentals of Speech Communication	<u>3</u>
			15

Summer Semester

RAD	211	Radiologic Clinical Education V	5
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* Radiologic Technology Program is a limited enrollment program. See the Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in all BIO, HSC and RAD courses is required for all students. BIO 160, BIO 161 and HSC 165 must be completed no earlier than five years prior to beginning the Radiologic Technology program.

² Group 2 Math requirement is met by Radiologic Technology program admission requirements.

♦ This course meets the World Cultures and Diversity graduation requirement.

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 in 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

For admission requirements, please contact the Admissions Outreach Office at 847.925.6700 or check the Web site: 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:¹

RAD	215	Principles and Procedures in Mammography	3
RAD	216	Mammography Externship	1

* Mammography is a limited enrollment program. See the Limited Enrollment Programs section of this catalog for details. Requirements subject to change. Contact the Admissions Outreach Office for updated information.

¹ A grade of C or better in all RAD courses is required for all students.

REAL ESTATE

See: Financial Services

REFRIGERATION AND AIR CONDITIONING TECHNOLOGY

See: Heating, Ventilation and Air Conditioning (HVAC)

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.) Upon completion of the program, students are eligible to take written and performance examinations leading to state and/or national credentialing.

Required:

ITP	101	Introduction to Interpreting	3
ITP	110 ¹	Consecutive Interpreting: English to ASL	3
ITP	111 ¹	Consecutive Interpreting: ASL to English	3
ITP	120	Simultaneous Interpreting: English to ASL	3
ITP	121	Simultaneous Interpreting: ASL to English I	3
ITP	200	Transliteration and Educational Interpreting	3
ITP	211	Simultaneous Interpreting: ASL to English II	3
ITP	215	Interpreting Dialogic Discourse	4
ITP	216	Interpreting Monologic Discourse	3
ITP	220 ²	Sign Language Interpreting Practicum.....	5
SGN	205 ³	American Sign Language V	3
SGN	210 ⁴	American Sign Language Community: A Cultural Perspective	4

Electives:

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 Prerequisite is SGN 202 with a grade of C or better.

⁴ Prerequisite is SGN 201 with a grade of C or better.

SUPPLY CHAIN MANAGEMENT

Associate in Applied Science Degree

This 61 credit-hour program is designed to provide in-service education for those persons working directly in, or in fields allied to, supply chain management. Additionally, the program may provide pre-service training for those who may seek or be transferred into jobs within these fields.

FIRST YEAR

First Semester

ACC	101	Introduction to Financial Accounting	4
CAS	115	Database Software	1
CAS	125	Spreadsheet Software	1
CAS	215	Advanced Spreadsheet Software	1
ENG	101	Composition	3
MGT	111	Introduction to Business Organization	3
SCM	101	Supply Chain Management.....	<u>3</u>
			16

Second Semester

ACC	102	Introduction to Managerial Accounting.....	3
ENG	130	Business Writing	3
SCM	elective ¹	.....	3
MGT	270	Principles of Management	3
PSY	245 ²	Industrial/Organizational Psychology.....	<u>3</u>
			15

SECOND YEAR

First Semester

ACC	211	Business Law I.....	3
ECO	200	Introduction to Economics.....	3
SCM	electives ¹	.....	6
MGT	150 ³	Business Math	<u>3</u>
			15

Second Semester

PHI	150	Business Ethics.....	3
SCM	elective ¹	.....	3
SCM	230 ⁴	International Supply Chain Management.....	3
MGT/SCM	electives ⁴	.....	<u>6</u>
			15

¹ SCM electives: SCM 120, SCM 121, SCM 122, SCM 123, SCM 124, SCM 125.

² Prerequisite waived for Supply Chain Management students.

³ 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 select an additional 200 level SCM course.

⁴ Supply Chain Management electives: MGT 274, SCM 226, SCM 227, SCM 259, SCM 281.

◆ This course meets the World Cultures and Diversity graduation requirement.

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 or production control. The course work is specific to those jobs and issues that deal with all aspects of maintaining inventory for increasing production levels.

Required:

SCM	101	Supply Chain Management.....	3
SCM	120	Production Control Concepts	3
SCM	122	Inventory Control.....	3
SCM	226	Material Requirements Planning (MRP)	3

SUPPLY CHAIN MANAGEMENT

Supply Chain Management Certificate

This 18 credit-hour certificate program is designed to provide in-service 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. Additionally, the program may provide pre-service training for those who may seek or be transferred into jobs within these fields.

Required:

SCM	101	Supply Chain Management.....	3
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Electives: Group I (Select 12 credit hours from the following):

SCM	120	Production Control Concepts.....	3
SCM	121	Principles of Physical Distribution.....	3
SCM	122	Inventory Control.....	3
SCM	123	Traffic and Transportation.....	3
SCM	124	Material Handling and Packaging.....	3
SCM	125	Purchasing.....	3

Electives: Group II (Select one course):

SCM	226	Material Requirements Planning (MRP).....	3
SCM	227	Just-In-Time (JIT).....	3
SCM	230	International Supply Chain Management.....	3
SCM	259	Advanced Purchasing.....	3

Physical Distribution Certificate

This 12 credit-hour certificate program is designed for those currently employed in or seeking employment in physical distribution positions. Topics covered will provide the graduate with knowledge of distributing, warehousing, stocking and shipping materials for various industries.

Required:

SCM	101	Supply Chain Management.....	3
SCM	121	Principles of Physical Distribution.....	3
SCM	122	Inventory Control.....	3
SCM	227	Just-In-Time (JIT).....	3

Purchasing Certificate

This 12 credit-hour certificate program is designed for those currently employed in or seeking employment in purchasing positions in various industries. The curriculum emphasizes developing the competencies necessary for on-the-job purchasing management expertise.

Required:

SCM	101	Supply Chain Management.....	3
SCM	122	Inventory Control.....	3
SCM	125	Purchasing.....	3
SCM	259	Advanced Purchasing.....	3

WEB DEVELOPMENT

See: Computer Information Systems

WELDING

See: Maintenance

Discipline/Prefix

Illinois Articulation Initiative (IAI)

Course Numbering System

Courses Offered at Harper College

Discipline/Prefix

Below is an alphabetized list of disciplines followed by a prefix. (Course descriptions contained on the following pages are in alphabetical order by prefix.)

Discipline	Prefix	Discipline	Prefix
Accounting.....	ACC	Heating, Ventilation and Air Conditioning (HVAC)	RAC
Adult Educational Development	AED	History	HST
Anthropology	ANT	Hospitality Management	FSM
Arabic	ARB	Human Services.....	HMS
Architectural Studies	ATE	Humanities.....	HUM
Art	ART	Independent Study	IDS
Astronomy	AST	Interior Design	IND
Biology.....	BIO	Japanese	JPN
Building Codes and Enforcement.....	BCE	Journalism	MCM
Cardiac Technology	CTE	Law Enforcement and Justice Administration.....	LEJ
Career Development	CDV	Linguistics.....	LNG
Career Foundations.....	OCC	Literature	LIT
Certified Nursing Assistant	CNA	Maintenance	MNT
Chemistry	CHM	Management.....	MGT
Computer Applications Software	CAS	Marketing.....	MKT
Computer Information Systems	CIS	Mass Communication	MCM
Computer Science	CSC	Mathematics	MTH
Cosmetology	COS	Medical Office Administration	MOA
Dental Hygiene	DHY	Music	MUS
Diagnostic Medical Sonography.....	DMS	Nanoscience Technology	NAN
Dietetic Technician	DIT	Networking.....	NET
Diversity.....	DIV	Nursing	NUR
Early Childhood Education	ECE	Paralegal Studies	PLS
Economics	ECO	Philosophy	PHI
Education	EDU	Phlebotomy.....	PHB
E-Learning Instructional Technology	EIT	Physical Education	PED
Electronics Engineering Technology	ELT	Physical Science	PHS
Emergency and Disaster Management	EMG	Physics	PHY
Emergency Medical Services	EMS	Political Science	PSC
Engineering	EGR	Psychology	PSY
English.....	ENG	Radiologic Technology	RAD
English as a Second Language.....	ESL	Reading	RDG
ESL: English for Special Purposes.....	ESP	Real Estate	RES
Environmental Health	EHS	Sign Language	SGN
Fashion Design/Merchandising	FAS	Sign Language Interpreting	ITP
Financial Services	BFC	Sociology	SOC
Fire Science.....	FIS	Spanish.....	SPA
First Year Experience	FYE	Speech	SPE
French	FRN	Supply Chain Management	SCM
Geography.....	GEG	Web Development.....	WEB
Geology	GEO		
German.....	GER		
Graphic Arts.....	GRA		
Health Information Technology	HIT		
Health Science Core	HSC		

Illinois Articulation Initiative (IAI) General Education Core Curriculum Codes

To assist students with identifying qualifying general education core courses, the following coding system will appear after the course description:

<i>Discipline</i>	<i>Prefix</i>
Communications.....	IAI C
Social and Behavioral Sciences ...	IAI S
Humanities	IAI H
Humanities/Fine Arts	IAI HF
Fine Arts	IAI F
Mathematics	IAI M
Physical Sciences	IAI P
Life Sciences	IAI L

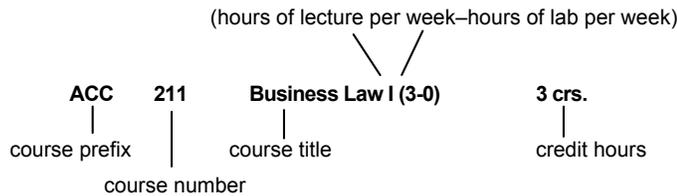
Course Numbering System

In general, courses numbered below 100 are not intended for transfer credit. These courses may be counted toward the A.A.S. degree, but not the A.A., A.S., A.E.S., A.F.A.—Art, or A.F.A.—Music degrees.

Courses numbered 100 or above may be expected to fulfill transfer requirements. In some cases the courses designed primarily for vocational programs may not be acceptable to transfer to all four-year institutions. Students should see a Student Development faculty/counselor for clarification of the transferability of these courses.

Courses numbered 200 and above are intended for the sophomore level.

Sample Course Listing



The following outlines of courses offered at Harper College describe the content of each course at the time of publication of the Catalog. Harper College reserves the right to revise course content to reflect changing conditions, trends and information within the discipline.

Course Outlines

In accordance with Illinois law, Harper College maintains a file of course outlines for all courses listed in the Catalog. Complete information is given on course content, methodology and objectives. The outlines are available for student review in the division offices or in the Office of the Associate Vice President of Academic Affairs.

Prerequisites

Many course descriptions state that a prerequisite (for example—satisfactory completion of a specific course or instructor consent) is necessary for enrollment in such a course. Students are advised that enrolling in a course without satisfying the prerequisite may result in the student being withdrawn from such course at the request of the instructor. Refer carefully to Catalog course descriptions.

ACC Accounting

ACC 099 Business Recordkeeping (3-0) 3 crs.
Presents standard bookkeeping procedures for small firms, both business and professional. The material covers journalizing, posting, preparing a work sheet, financial statements, bank reconciliation, petty cash and payroll.

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.
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 155 Tax and Payroll Accounting (4-0) 4 crs.
Explains the federal tax structure and instruction in the application of tax principles to specific problems. Also, the preparation of payroll records, including tax returns for old age benefits and employment insurance.

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 212 Business Law II (3-0) 3 crs.
Presents business organizational concepts, commercial transactions, basic legal concepts of commercial paper, sales, secured transactions, creditors' rights and related topics. Problems and case materials are used.

Prerequisite: ACC 211 with a grade of C or better.
(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 Income Tax Accounting (3-0) 3 crs.
Offers a practical study of current federal and Illinois taxes as they relate to business and 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 Advanced 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 nonprofit 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 202 with a grade of C or better.

AED Adult Educational Program

AED 001 Nonnative Literacy Skills I (1-0 to 4-0) 1-4 crs.
Introduces basic English conversation and literacy skills. Develops the listening, speaking, reading, and writing skills necessary to basic survival needs. Topics may include personal data, general information, social skills/American culture, health, housing, civics, consumer skills, employment skills, and transportation. Grammar points are integrated as appropriate. Focuses on vocabulary acquisition and beginning listening and literacy skills. This course is the first in a sequence of five 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.

COURSE DESCRIPTIONS

AED 002 Nonnative Literacy Skills II (1-0 to 4-0) 1-4 crs.
Continues to introduce basic English conversation and literacy skills. Develops the listening, speaking, reading and writing skills necessary to basic survival needs. Topics may include personal data, social skills/American culture, health, housing, civics, consumer skills, and employment skills. Grammar points are integrated as appropriate. Focuses on using basic vocabulary and literacy skills in daily routine situations. This course is the second in a sequence of five 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 003 Nonnative Literacy Skills III (1-0 to 4-0) 1-4 crs.
Extends basic English conversation and literacy skills. Develops the listening, speaking, reading and writing skills necessary to basic survival needs. Topics may include general information, social skills/American culture, civics, health, housing, community skills, consumer skills, employment skills and transportation. Grammar points are integrated as appropriate. This course is the third in a sequence of five 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 004 Nonnative Literacy Skills IV (1-0 to 4-0) 1-4 crs.
Reviews basic English conversation and literacy skills. Develops the listening, speaking, reading and writing skills necessary to basic survival skills and pre-academic preparation. Introduces pre-academic reading, writing and study skills in preparation for academic ESL or the workplace. Topics may include social skills/American culture, health, civics, housing, consumer skills/financial literacy, employment, transportation and education/U.S. school system. Grammar points are integrated as appropriate. Introduces study skills, test-taking and other pre-academic skills necessary for success in college. This course is the fourth in a sequence of five 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 005 Transition to ABE/GED/ESL (1-0 to 4-0) 1-4 crs.
Develops the listening, speaking, reading and writing skills necessary to prepare students for GED preparation, academic ESL, the workplace and career programs. Focuses on study skills, test-taking and other pre-academic skills necessary for success in college. Topics may include life skills, employment, current events, civics, U.S. History and government, geography and literature. Grammar points are integrated as appropriate. This is the fifth in a sequence of five courses. Student must take a language skills test which identifies the Nonnative Literacy student before enrolling. Carries no transfer credit.

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 021 Basic Reading Skills (1-0 to 6-0) 1-6 crs.
Introduces basic word recognition and word attack skills including pre-reading skills, sight words, phonics skills and structural analysis skills; comprehension and advanced reading skills in relation to words, sentences, selections and sequence; and specialized skills in locating and organizing information, reading maps, interpreting graphs, tables or diagrams, and developing personal reading skills. Introduces skills of application, analysis and evaluation of reading materials. Prepares the student for AED 023. Carries no transfer credit.

AED 023 Pre-GED Reading Skills (1-0 to 3-0) 1-3 crs.
Reinforces and reviews word recognition and word attack skills of structural analysis; comprehension and advanced reading skills including deriving meaning from words, sentences, selections and identifying sequence; specialized reading skills including locating and organizing information, reading maps and interpreting graphs, tables or diagrams; and personal reading skills. Introduces skills of application, analysis and evaluation. Prepares the student for AED 025. Carries no transfer credit.

AED 025 GED Social Studies and Science (1-0 to 6-0) 1-6 crs.
Reviews specific social studies, science and U.S./Illinois Constitution content areas and skills. Emphasis is upon review of comprehension, application, analysis and evaluation levels of cognitive skills. Prepares the student for the GED Social Studies, Science and U.S./Illinois Constitution tests. Carries no transfer credit.

AED 031 Basic English Skills (1-0 to 6-0) 1-6 crs.
Presents basic English grammar and usage, spelling rules, vocabulary/dictionary use, capitalization and punctuation. Develops skills in producing short, clear writing examples. Prepares the student for AED 033. Carries no transfer credit.

AED 033 Pre-GED English Skills (1-0 to 3-0) 1-3 crs.
Reinforces basic English grammar and usage, spelling rules, vocabulary/dictionary use, capitalization, punctuation and sentence/paragraph development. Introduces skills of application, analysis and evaluation. Prepares the student for AED 035. Carries no transfer credit.

AED 035 GED Writing Skills and Literature (1-0 to 3-0) 1-3 crs.
Reviews basic grammar and usage; sentence structure, style, logic and paragraph organization, punctuation, capitalization and spelling. Produces writing samples that require the writer to take a position and defend it with appropriate evidence, detail and argumentative strategies. Prepares students for the GED Writing Skills Test. Reviews literacy types, terms, techniques, interpretation and commentary to prepare the student for the GED Interpreting Literature and the Arts Test. Carries no transfer credit.

AED 041 Basic Mathematical Skills (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 and measurement systems. Prepares the student for AED 043. Carries no transfer credit.

AED 043 Pre-GED Mathematical Skills (1-0 to 3-0) 1-3 crs.
Reinforces arithmetic skills including the fundamental operations with decimals, fractions, mixed numbers, verbal reasoning and measurement systems. Introduces percents, ratio and proportion and charts and graphs. Introduces comprehension, application, analysis and evaluation levels of cognitive skills. Prepares the student for AED 045. Carries no transfer credit.

AED 045 GED Mathematics (1-0 to 3-0) 1-3 crs.
Reviews arithmetic skills including decimals, fractions, numbers, verbal reasoning, measurement, percents, ratio and proportion and charts and graphs. Introduces algebra and geometry concepts, multi-step problem solving, using formulas and numeration statistics. Emphasizes review of comprehension, application, analysis and evaluation levels of cognitive skills. Prepares the student for the GED Mathematics Test. Carries no transfer credit.

AED 053 Bridge to Manufacturing/Intermediate (5-0 to 3-0) 5-3 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 Manufacturing/Advanced (5-0 to 3-0) 5-3 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 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 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/ABE (5-0 to 3-0) 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.

COURSE DESCRIPTIONS

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.

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 tissue 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 six 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.

ARB Arabic

ARB 101 Elementary Arabic I (4-0) 4 crs.
Introduces the Arabic alphabet, basic vocabulary, syntax and grammar. Includes basic conversational patterns, an introduction to Arabic culture, customs and sociolinguistic aspects of the language.

ARB 102 Elementary Arabic II (4-0) 4 crs.
Continues ARB 101. Situational conversations in Arabic; reading and writing stressed. One year or equivalent of high school Arabic is recommended.

Prerequisite: ARB 101 with a grade of C or better, or consent of instructor.

ARB 201 Intermediate Arabic I (4-0) 4 crs.

Continues ARB 102. Continues the study of Arabic grammar. Emphasizes vocabulary development, reading, writing and conversational speaking. Guides students to a broader understanding of the Arabic language. Fosters expanded knowledge and appreciation of the Arabic cultural heritage. One year or equivalent of high school Arabic is recommended.

Prerequisite: ARB 102 with a grade of C or better, or consent of instructor.

ARB 202 Intermediate Arabic II (4-0) 4 crs.

Continues ARB 201. Continues the study of Arabic grammar. Emphasizes vocabulary development, reading, writing and conversational speaking. Guides the students to a broader understanding of the Arabic language. Fosters expanded knowledge and appreciation of the Arabic cultural heritage. One year or equivalent of high school Arabic is recommended.

Prerequisite: ARB 201 with a grade of C or better, or consent of instructor.

ARB 205 Arabic Intensive Oral Practice (3-0) 3 crs.

Develops oral facility with the Arabic language using specially designed exercises in pronunciation, stress, and rhythm. Discusses individual readings of modern Arabic 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 Arabic language with fluency of expression that is achieved by extensive oral conversations in class.

Prerequisite: ARB 202 with a grade of C or better, or consent of instructor.

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 of credit.

ART 105 Introduction to Arts (3-0) 3 crs.

Introduces the visual arts with an emphasis on building the student's awareness of aesthetic concepts, theory and criticism. Also, developing sensitivity to works of art and acquainting the student with vocabulary applicable to describe visual situations. IAI F2 900

ART 110 Drawing I (0-6) 3 crs.

Emphasizes the design elements and principles as applied to visual imagery.

ART 111 Drawing II (0-6) 3 crs.

Emphasizes the interaction between design abilities, image and content.

Prerequisite: ART 110 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 technique and process filmmaking. Between 10 and 15 films will be examined. IAI F2 908

ART 121 Design I (0-6) 3 crs.

Emphasizes the use of design elements and principles as applied to concepts of second dimension.

ART 122 Design II (0-6) 3 crs.

Emphasizes the use of design elements and principles as applied to concepts of third dimension.

Prerequisite: ART 121 with a grade of C or better, or consent of instructor.

ART 130 History of Art I (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 History of Art II (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 History of Art III (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 the Africa, China, India, Japan, Middle East, Oceania, and art of the Americas. IAI F2 903N

ART 201 Drawing Studio (0-6) 3 crs.

Emphasizes drawing as visual idea. May be repeated up to six hours credit.

Prerequisite: ART 111 with a grade of C or better, or consent of instructor.

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.

Emphasizes drawing the human figure in action and from still poses. Rapid sketching, long poses, memory work, studio and lecture. May be repeated up to six hours credit.

Prerequisite: ART 111 with a grade of C or better, or consent of instructor.

ART 236 Composition (0-6) 3 crs.

Emphasizes pictorial composition in line, value, pattern and color. May be repeated up to six hours credit.

Prerequisite: ART 111 and ART 121 with grades of C or better.

ART 240 Computer Graphics Studio (0-6) 3 crs.

Presents a computer software-based approach to visual image manipulation and generation. Includes the integration of computer hardware, software and peripheral devices as tools to manufacture, capture and combine traditional and contemporary visual ideas as applied to art and design.

Prerequisite: ART 111 and ART 121 with grades 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.

COURSE DESCRIPTIONS

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 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.
IAI P1 906L

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 proper math placement exam score) with grades of C or better.

ATE Architectural Studies

ATE 101 Introduction to Architecture and Drawing Fundamentals (3-4) 4 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. Manual drafting techniques are used to create standard drawings including plans, sections, elevations and perspectives. Design development-level drawings are based on framed residential and light commercial building types.

ATE 103 Building Materials I (3-3) 4 crs.
Introduces masonry, wood and non-fireproofed steel construction as applied to applications in architecture, interior design and other details, wall and building sections are covered as well as construction details.

ATE 105 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 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.

ATE 106 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 detailing issues.

Prerequisite: ATE 105 with a grade of C or better, or consent of instructor.

ATE 109 Chicago's Great Architectural Tradition (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.

ATE 110 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.

ATE 130 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.

ATE 200 Architectural Internship (1-15) 2 crs.
Credits those students meeting the rigorous requirements of working in an approved architecture or construction-related position. Periodic meetings with the faculty advisor will discuss such items as workplace etiquette, appropriate workplace attire, etc. Students must make an oral presentation at the completion of the internship to receive credit. (Offered summer semester only.)
Prerequisite: Successful completion of all first-year courses as indicated in the current college catalog for the architecture program, 3.0 cumulative GPA or better for all Harper classes, 3.75 cumulative GPA for all ATE classes, and consent of coordinator.

ATE 201 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 110 and ART 121 with grades of C or better, or consent of instructor.

ATE 202 Architectural Design Studio (2-6) 4 crs.
Applies and advances design principles and processes gained in ATE 201. 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: ATE 201 with a grade of C or better, or consent of instructor.

ATE 203 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: ATE 103 with a grade of C or better, or consent of instructor.

ATE 205 Advanced Architectural CAD I (2-2) 3 crs.
Introduces three-dimensional architectural computer graphic techniques and applications. Covers the transition from two-dimensional to three-dimensional drawings, creation and manipulation of wire frame and solid modeling techniques.
Prerequisite: ATE 106 with a grade of C or better, or consent of instructor.

ATE 206 Advanced Architectural CAD II (2-2) 3 crs.
Provides in-depth exposure to advanced three-dimensional representations of architectural forms. A variety of post-processing programs introduces advanced three-dimensional representations to include modeling, shades and shadows, texture applications, walk-throughs, and photorealistic rendering. Special problems are investigated.
Prerequisite: ATE 205 with a grade of C or better, or consent of instructor.

ATE 208 Structural Fundamentals (4-0) 4 crs.
Introduces architectural statics and covers concepts of force systems in equilibrium: parallel forces, perpendicular forces, analysis of concentrated and distributed loads in live and dead-load applications resulting in tension and compression members, and members subjected to combined forces. The class will introduce strength of materials. It will apply principles of design analysis to steel, concrete and wood construction materials in slab, beam, column, and foundation configurations.
Prerequisite: MTH 140 with a grade of C or better, or equivalent.

ATE 209 Construction Studio (2-5) 4 crs.
Develops and applies the content from the ATE 103 and ATE 203 sequence in a hands-on studio course. Students will gain fundamental skills in various trades such as rough framing, finish carpentry, and masonry to build architectural assemblies. Drawings will be created as a preliminary step. The intent is to gain an understanding of actual materials and assemblies and how that should influence the design and construction detailing process.
Prerequisite: ATE 105 and ATE 203 with grades of C or better, or consent of instructor.

ATE 210 Cost Estimating (3-0) 3 crs.
Introduces development of preliminary estimates. Covers building plan take-offs and unit costs applied to residential and small scale construction projects.

ATE 211 Principles of Sustainability (3-0) 3 crs.
Covers aspects of building construction relating to sustainable or "green" design which can include material selection, detailing, energy and water conservation, lifecycle, environmental impact of choices of building materials, or location. This class will also explore the LEED rating system.

ATE 213 Construction Management Process (3-0) 3 crs.
Presents an overview of standard practices as they relate to the building construction industry. Includes the study of overall project sequence and participants, management tools, scheduling, project controls, and dispute avoidance and resolution. The focus is primarily on commercial projects.

ATE 214 Architectural Models (1-4) 3 crs.
Introduces variety of materials, methods and techniques for various types of architectural presentation models: site contour models, building enclosure models and interior space models. Covers scale, selection of landscape materials, colors and details.

ATE 215 Building Systems (2-2) 3 crs.
Introduces the internal systems of a building and how they function. Focuses on and fire protection systems. Covers drawing types and conventions as well as the importance of inter-system coordination.
Prerequisite: ATE 101 with a grade of C or better.

ATE 216 Introduction to Revit Software and Object CAD (2-2) 3 crs.
Introduces architectural document preparation techniques via advanced computer software systems. Covers the transition from graphical representations found in standard CAD packages to the mass-model concept found in an object-based CAD package and ultimately to an integrated Building Information Modeling approach.
Prerequisite: ATE 106 with a grade of C or better, or consent of instructor.

BCE Building Codes and Enforcement

BCE 101 Basic Construction for Building Codes (3-0) 3 crs.
Introduces materials used in building construction, their growth or manufacture, preparation and application. Emphasizes frame and masonry construction types, working drawings and structural details for code compliance.

BCE 102 Basic Code Enforcement Techniques (3-0) 3 crs.
Introduces building inspection principles. Includes application of building codes to structures in the inspection process. Covers application of zoning restrictions and regulations, code interpretation using reference documents, components of field inspection and report requirements. Emphasizes plan and specification review, permit processes and issuance, legal ramifications in inspection law.

COURSE DESCRIPTIONS**BCE 104 Basic Mechanical and Energy Conservation Codes (3-0) 3 crs.**

Introduces the theory and code requirements for mechanical and energy conservation systems. Covers procedures, layouts and safety principles for heating, cooling and ventilation systems; application of HVAC code requirements for residential units (up to six dwelling units) and light commercial buildings. Includes application of energy conservation code requirements to principles of building inspection and identification of components in heating, ventilating and air conditioning systems to discern code violations.

BCE 105 Basic Plumbing Codes (3-0) 3 crs.

Introduces basic theory and code requirements for plumbing systems and their installation. Concentrates on procedures, practices and layouts, and codes inspection problems for residential, commercial and industrial installations.

BCE 106 Basic Electrical Codes (3-0) 3 crs.

Introduces basic theory and code requirements for electrical systems and their installation. Concentrates on procedures, practices and layouts, and code inspection problems for residential, commercial and industrial installations.

BCE 201 Basic Building Codes (3-0) 3 crs.

Covers the latest edition of the International Building Code. Explains its use, intent, rationale and interpretation. Includes enforcement and administration, liability, plan review and permit process definitions, use groups, types of construction, general building limits, special uses, means of egress, materials and tests, fire resistive construction, mechanical equipment and systems, fire protection systems, electric wiring and equipment, elevators, plumbing systems and use of reference standards.

BCE 202 International Fire Codes (3-0) 3 crs.

Introduces up-to-date international fire codes, addressing conditions hazardous to life and property from fire, explosion, handling of hazardous materials and the use and occupancy of building and premises. Emphasizes model code regulations that safeguard the public health and safety in all communities both large and small.

BCE 203 National Green Building Code Standards (3-0) 3 crs.

Introduces current practices for the design and construction of green buildings that will create a positive impact on the environment, establishing specific conformance criteria, innovative approaches, and techniques intended to enhance sustainability in safety, health and the environment. Emphasizes understanding and applying green building code practices and standards as established by the International Code Council and the United States Environmental Protection Agency.

BFC Financial Services**BFC 101 Principles of Financial Institution Operations (3-0) 3 crs.**

Surveys the internal operations of a bank and of a savings and loan association. Emphasizes the general principles of operations applicable to institutions of all sizes. Provides a sound foundation for newcomers to the industry regardless of age or prior academic experience.

BFC 115 Advanced Principles of Financial Institution Operations (3-0) 3 crs.

Continues the study of financial institution operations by analyzing banking products and services. Topics include checking accounts, N.O.W. accounts, time deposits, money market accounts and the contractual nature of these accounts. Also includes ownership methods, insurance coverage and an introduction to consumer lending. Recommended preparation: BFC 101.

BFC 200 Investment Management (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.)

BFC 201 Commercial Credit and Collection Principles (3-0) 3 crs.

Provides the principles of commercial credit management. Emphasizes analysis and control of funds advanced to customers through sales (accounts receivable management). Topics include credit associations, asset management, credit policies, basic principles of credit analysis and collection principles. Completion of ACC 101 or interview with coordinator prior to enrollment helpful.

BFC 202 Advanced Commercial Credit and Collection (3-0) 3 crs.

Continues study of commercial credit management. Emphasis is placed on Accounts Receivable Management. Topics include financial statement analysis, budgeting, bad debts and receivables cash flow and a detailed study of bankruptcy proceedings and international credit transactions.

Prerequisite: BFC 201 with a grade of C or better.

BFC 211 Accounting for Financial Institutions (3-0) 3 crs.

Studies basic accounting procedures, techniques and systems used in banks, savings and loans and other financial institutions. Emphasis on the components of the Statement of Condition and Income Statement.

Prerequisite: ACC 101 and BFC 101 with grades of C or better.

BFC 212 Home Mortgage Lending (3-0) 3 crs.

Emphasizes the role of the mortgage loan officer seeking to develop a sound mortgage portfolio. The mortgage market is described, followed by the acquisition of a mortgage portfolio, mortgage plans and procedures, mortgage loan processing and servicing and finally the obligations of the mortgage loan officer in overall portfolio management.

BFC 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. Also addressed are 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.

BFC 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.

BFC 235 Banking Internship (1-15) 3 crs.

Provides cooperative work experience as a banking trainee. Credit for this course will be given for participation in supervised cooperative work experience. The experience must be provided through an organized training plan in a college-approved training station. One lecture hour per week will be devoted to job analysis and banking issues.

Prerequisite: Consent of program coordinator.

BFC 240 Topics in Finance (.5-0 to 3-0) .5 - 3 crs.

Studies selected problems or topics in finance. 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 up to a maximum of three credit hours.

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 interaction with, those kingdoms.

IAI L1 900

(NOTE: Not science lab credit.)

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.

IAI L1 905

(NOTE: Not science lab credit.)

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.

IAI L1 905L

(NOTE: Lab science credit.)

BIO 105 Heredity, Evolution and Culture (3-0) 3 crs.

Examines life and the evolutionary record with emphasis on humans and the gene pool. Factors such as social and environmental entities and the problems of the 20th century are considered.

IAI L1 906

(NOTE: Not science lab credit.)

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 ultrastructure, 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.

IAI L1 900L, IAI BIO 910

(NOTE: Lab science credit.)

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. Knowledge of high school biology assumed.

IAI L1 901L, IAI BIO 910

(NOTE: Lab science credit.)

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. Prerequisite: Required reading placement test scores: Compass Reading 77 or ACT Reading 20.

IAI L1 903L

(NOTE: Lab science credit.)

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.

IAI L1 904

(NOTE: Not science lab 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 is assumed.

IAI L1 904

(NOTE: Not science lab 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.

IAI L1 902L, IAI BIO 910

(NOTE: Lab science credit.)

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.

IAI L1 905L

(NOTE: Lab science credit.)

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.

Prerequisite: Required reading placement test scores: Compass Reading 77 or ACT Reading 20.

IAI L1 904L

(NOTE: Lab science credit.)

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.

Prerequisite: BIO 160 with a grade of C or better, or consent of instructor.

(NOTE: Lab science credit.)

CAS Computer Applications Software

- CAS 105 Word Processing Software (.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 110 Microsoft Word Certification (.5-1)** 1 cr.
Continues development of Word skills and focuses on the review of these skills in preparation for a current Microsoft Office Word certification exam. Recommended preparation: CAS 105 or equivalent experience.
- CAS 115 Spreadsheet Software (.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 120 Microsoft Excel Certification (.5-1)** 1 cr.
Continues development of Excel skills and focuses on the review of these skills in preparation for a current Microsoft Office Excel certification exam. Recommended preparation: CAS 115 or equivalent experience.
- CAS 125 Database Software (.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 130 Microsoft Access Certification (.5-1)** 1 cr.
Continues development of Access skills and focuses on the review of these skills in preparation for a current Microsoft Office Access certification exam. Recommended preparation: CAS 125 or equivalent experience.
- CAS 135 Presentation Software (.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 140 Microsoft PowerPoint Certification (.5-1)** 1 cr.
Continues development of PowerPoint skills and focuses on the review of these skills in preparation for a current Microsoft Office PowerPoint certification exam. Recommended preparation: CAS 135 or equivalent experience.
- CAS 150 Microsoft Outlook Certification (.5-1)** 1 cr.
Continues development of Outlook skills and focuses on the review of these skills in preparation for a current Microsoft Office Outlook certification exam. Recommended preparation: WEB 101 or equivalent experience.
- 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 (.5-1)** 1 cr.
Provides an opportunity to become proficient in the use of a currently popular desktop publishing package. Includes editing, formatting, page layout creating newsletters and brochures.
- CAS 215 Advanced Spreadsheet Software (.5-1)** 1 cr.
Provides an opportunity to become proficient in the use of a currently popular advanced spreadsheet package. Includes conditional formatting, data importing, filtering, charting, pivot tables and macros.
Prerequisite: CAS 115 or CAS 160 with a grade of C or better.

- CAS 216 Spreadsheet Macros and Other Advanced Topics (.5-1)** 1 cr.
Provides an opportunity to become proficient in the use of spreadsheet macros and other advanced topics used with a currently popular spreadsheet package. Includes variables and arrays, conditional logic, looping, functions and procedures.
Prerequisite: CAS 215 with a grade of C or better.
- CAS 225 Advanced Database Software (.5-1)** 1 cr.
Provides the student with knowledge and practice of utilizing the advanced capabilities of a currently popular database application. Includes advanced queries, forms and reports. Designed for the non-programmer to make better use of the software package to solve common information requirements.
Prerequisite: CAS 125 or CAS 160 with a grade of C or better.
- CAS 226 Database Programming (2-2)** 3 crs.
Uses the command language from a currently popular data base package for computers. A set of business-oriented programs will be developed making extensive use of the command language. Recommended preparation: CAS 125 or CAS 160 or equivalent experience.
- CAS 260 Office Application Development (2-2)** 3 crs.
Provides students with an opportunity to build productivity applications using a currently popular applications suite and macro language. Advanced word processing, spreadsheet, and database features are included, with a focus on integrating applications and automating everyday tasks. Recommended preparation: CAS 160 and CIS 101 or equivalent experience.

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.

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 902L

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 and MTH 080 or higher with grades 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 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 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 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. The 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.

COURSE DESCRIPTIONS

CHM 297 Independent Research In Chemistry III (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 296 with a grade B or better, prior consultation with instructor, completed contract, and consent of Department Chair

CIS Computer Information Systems

CIS 100 Computer Fundamentals (2-2) 3 crs.

Provides the student with an understanding of computers and software as they are used in the business environment. Laboratory time will be used to understand basic computer fundamentals. An overview of application software packages (word processing, spreadsheets, database and presentation programs) is included. This course is not intended for computer information majors and does not include programming. IAI BUS 902

CIS 101 Introduction to Computer Information Systems (2-2) 3 crs.

Introduces a student to the computer through lecture and laboratory assignments. No prior knowledge of computers is necessary. The student will learn the fundamentals of computers and how computers are used in a business environment, including learning how to use a word processor, data base manager, spreadsheet, and other packages. The student will also learn to write simple programs using the BASIC language. IAI BUS 902

(NOTE: Transfer students should check with the school they will be transferring to regarding the transferability of this course.)

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: CIS 101 or concurrent enrollment and MTH 080 or higher (or required math placement exam score) with a grade of C or better.

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. Recommended preparation: CAS 125, CAS 160 or CIS 101 or equivalent experience.

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 181 Visual Basic Software Development (3-2) 4 crs.

Introduces students to Visual Basic software development using the Microsoft .NET Framework. Includes the Visual Studio development environment, variables and constants, decision and repetition structures, debugging and error handling, procedures, arrays, file processing, classes, the .NET Framework and ADO.NET.

Prerequisite: CIS 106 with a grade of C or better.

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 203 Systems Analysis and Design (2-2) 3 crs.

Introduces students to the role of the systems analyst and the functions and techniques of business systems' analysis and design. Includes business systems analysis, requirements modeling, data and process modeling, object modeling, development strategies, user interface design, and systems implementation. Practical analysis and design skills are achieved through hands-on projects and interactive case studies.

Prerequisite: CIS 143 and prior or concurrent enrollment in CIS 168, CIS 181 or CIS 182 with grades 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. Recommended preparation: CAS 160, CIS 100 or CIS 101.

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 a 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. Recommended preparation: CIS 143 or equivalent experience.

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. Recommended preparation: CIS 143 or equivalent experience.

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 278 Java Software Development III (3-2) 4 crs.

Expands upon CIS 178 by introducing students to printing, the JTable class, applets, servlets, XML, JavaBeans, and use of an Integrated Development Environment (IDE). Students will develop advanced client/server and three-tier applications in Java.

Prerequisite: CIS 268 with a grade of C or better.

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: WEB 150 and either CIS 181 or CIS 182 with grades of C or better.

CIS 286 Microsoft .NET Framework (3-2) 4 crs.

Provides in-depth coverage of the Microsoft .NET Framework using Visual Basic or Visual C#. Topics include system types and collections, services, threading, application configuration, input/output, security, interoperability, globalization, drawing and text manipulation.

Prerequisite: CIS 281 with a grade 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 203 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. 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: Online registration not available in summer semesters.

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 exam score.

COS Cosmetology**COS 101 Cosmetology Basic I (3-19) 10 crs.**

Introduces basic cosmetology with emphasis on roller control, pin curls, finger waves, permanent waving, and hair shaping. Includes hair product analysis that will help in meeting the needs of clients. Meets State of Illinois licensing standard.

COS 102 Cosmetology Basic II (3-19) 10 crs.

Includes basic cosmetology, level two skills: orientation, hair properties, shampooing and conditioning, thermal styling, bacteriology, sanitation and sterilization, permanent waving, hair coloring, hair lightening, wet hair styling, finger waving, and customer service. Students attend lectures, demonstrations, and workshops. Meets State of Illinois licensing requirements.

Prerequisite: COS 101 with a grade of C or better.

COS 111 Cosmetology Intermediate I (3-19) 10 crs.

Continues the cosmetology program in clinical practice with emphasis on skin care. Classes correlate the anatomy of the head, face and neck with current skin care practice. Meets State of Illinois licensing requirements.

Prerequisite: COS 102 with a grade of C or better.

COS 112 Cosmetology Intermediate II (3-19) 10 crs.

Continues the cosmetology program in clinical practice with emphasis on nail care and disorders, manicure/pedicure, skin care and disorders, massage, facial treatments, make-up and hair removal. Meets state licensing standards.

Prerequisite: COS 111 with a grade of C or better.

COS 121 Cosmetology Advanced (3-19) 10 crs.

Completes the cosmetology program with the following topics: wigs and hairpieces, electricity, disorders of the hair and scalp, scalp treatment, chemical relaxers and recurling, hair pressing, anatomy, chemistry, advanced perm waving and hair color, salon management and Illinois law. Provides students with the opportunity to prepare for the State Licensing Examination through review and testing in the theoretical and practical aspects of their training.

Prerequisite: COS 112 with a grade of C or better.

CSC Computer Science**CSC 121 Computer Science I (3-2) 4 crs.**

Introduces a disciplined approach to problem solving and algorithm development. Introduces procedural approach; data abstraction; selection, repetition and sequence control structures; arrays, records and files; and an introduction to recursion. Emphasizes program design, testing and documentation using good programming style in a block-structured, high-level programming language. 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 103 and MTH 104 or MTH 140 with grades of C or better; or required math placement test score; or consent of instructor.

CSC 122 Computer Science II (3-2) 4 crs.

Introduces the design and implementation of large scale problems. Introduces data structures: files, sets, pointers, lists, stacks, queues, trees and graphs. Introduces program verification and complexity. Builds previous knowledge of recursion, text processing, and searching and sorting algorithms. 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.

COURSE DESCRIPTIONS

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.

CTE Cardiac Technology

CTE 101 Electrocardiography (4-0) 4 crs.

Provides instruction and practice in the performance and comprehensive interpretation of rhythm and 12 lead ECGs. NOTE: Students must be admitted into the CTE or DMS programs to register for this course.

CTE 102 ECG Surveillance and Stress Testing (1-2) 2 crs.

Provides instruction in the performance of ECG surveillance type testing such as telemetry monitoring, holter monitoring, and maximal stress testing. Discusses other types of ECG monitoring as well as guidelines specific to the performance of each type of testing. Gives students considerable practice in the laboratory performing each type of testing using sophisticated ECG surveillance equipment, blood pressure monitoring equipment, and exercise ergometers.

Prerequisite: CTE 101 with a grade of C or better.

CTE 104 Cardiovascular Principles (3-0) 3 crs.

Provides students preparing for cardiac diagnostic work with an overview of important cardiovascular principles. Reviews cardiac anatomy, physiology, and pharmacology. Discusses cardiac embryology, cardiac hemodynamic principles, and cardiovascular and cerebrovascular disease. Also provides an overview of clinical cardiology. NOTE: Students must be admitted into the CTE or DMS programs to register for this course.

CTE 105 Cardiac Pathophysiology (3-0) 3 crs.

Provides an in-depth study of cardiac pathophysiology. All types of cardiac disease are covered. Disease states, etiologies, signs, symptoms, diagnostic findings, associated findings, and treatment options are discussed.

Prerequisite: CTE 101 and CTE 104 with grades of C or better.

CTE 106 Ultrasound Physics and Instrumentation (4-0) 4 crs.

Instructs students in the ultrasound imaging programs in the principles of ultrasound physics and instrumentation. Covers the elementary principles of sound and sound propagation, transducers and instrumentation, principles of pulse echo imaging, hemodynamics, Doppler and color flow imaging, artifacts, quality assurance, bioeffects and safety. Discusses research design, professional organizations and continuing medical education. NOTE: Students must be admitted into the CTE or DMS programs to register for this course.

CTE 107 Diagnostics I (4-0) 4 crs.

Introduces standard two dimensional, M-mode and color flow imaging, and continuous wave and pulsed wave Doppler didactics. Tomographic anatomy, flow patterns, measurements, and norms are covered. The course teaches the student to systematically interpret, recognize, and quantify basic valvular and wall motion abnormalities through lecture and patient case study review.

Prerequisite: BIO 161, CTE 106, HSC 104, HSC 105, HSC 107 and HSC 213 with grades of C or better.

Corequisite: CTE 101, CTE 104 and CTE 109.

CTE 108 Diagnostics II (4-0) 4 crs.

Instructs the student, through lecture and patient case study review, on how to recognize and interrogate not only valvular and wall motion abnormalities but a comprehensive list of those pathologies diagnosed via echo. Advanced imaging topics are also introduced and include: interventional echo, stress and pharmacologic echo, harmonics and contrast echo, transesophageal echo, intravascular echo, and three dimensional echo.

Prerequisite: CTE 101, CTE 104, CTE 107 and CTE 109 with grades of C or better.

Corequisite: CTE 110 and CTE 120.

CTE 109 Laboratory Techniques I (1.5-3) 3 crs.

Instructs the student, through an extensive instructional laboratory experience, on how to perform a basic echocardiogram including two dimensional, M-mode, and color flow imaging on an adult subject using current ultrasound equipment. Pulsed wave and continuous wave Doppler are briefly introduced. The students are also taught the professional skills deemed necessary to work in a clinical ultrasound environment.

Corequisite: CTE 107.

- CTE 110 Laboratory Techniques II (1.5-3)** 3 crs.
Develops, through an extensive instructional laboratory experience, the student's ability to perform a complete echocardiogram including two dimensional, M-mode, and color flow imaging, and pulsed wave and continuous wave Doppler on adult subjects using current ultrasound equipment. The student is taught Doppler measurements and imaging protocols suitable for the interrogation of cardiac pathologies diagnosed by echo. Advanced modalities are introduced such as stress, contrast, three dimensional imaging, and digital echo. The student continues to groom professional skills deemed necessary to work in a clinical ultrasound environment.
Corequisite: CTE 108 and CTE 120.
- CTE 112 Laboratory Techniques III (0-2)** 1 cr.
Provides the student with an opportunity to practice and expand upon clinical skills taught in previous laboratory classes. This course is not required for graduation or certificate completion. Pass/fail grade.
Prerequisite: CTE 102 with grade of C or better.
- CTE 120 Introduction to the Cardiac Technology Internship (1-2.5)** 1.5 crs.
Prepares students for the cardiac technology internship by detailing the role of the cardiac sonographer in the hospital setting. Special hospital procedures and considerations will be presented. Essential non-imaging clinical skills will be reviewed and practiced. An overview of clinical sites will be presented. Preclinical requirements will be completed. The student will participate in a 40 hour hospital observational experience.
Corequisite: CTE 108 and CTE 110.
- CTE 130 Cardiac Technology Internship (0-20)** 4 crs.
Provides students with practical experience in performing cardiac diagnostic procedures (mainly adult echocardiograms) in a hospital or other clinical diagnostic setting.
Prerequisite: CTE 108, CTE 110 and CTE 120 with grades of C or better.

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.
Prerequisite: Admission into the Dental Hygiene program, BIO 160 and CHM 100 with grades of C or better.
- 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: Admission into the Dental Hygiene program, BIO 130 and DIT 101 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 manikins and selected patients.
Prerequisite: Consent of program coordinator.
- 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 100 and DHY 101 with grades of C or better, or consent of program coordinator.
- 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 100 and DHY 101 with grades of C or better, or consent of program coordinator.
- 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.
Prerequisite: Admission into the Dental Hygiene program, BIO 160 and CHM 100 with grades of C or better.
- 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.
Prerequisite: Admission into the Dental Hygiene program, BIO 160 and CHM 100 with grades of C or better.
- 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: Consent of program coordinator.
- 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 100 and DHY 101 with grades of C or better, or consent of program coordinator.
- 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: Consent of program coordinator.
- DHY 202 Radiology I (0-2)** 1 cr.
Continues practice in the techniques of exposing, processing, mounting and evaluating dental radiographs.
Prerequisite: DHY 111 with a grade of C or better and DHY 151 with a grade of P or consent of program coordinator.
- DHY 203 Radiology II (0-2)** 1 cr.
Continues DHY 202.
Prerequisite: DHY 202 with a grade of C or better, or consent of program coordinator.
- 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 with a grade of C or better and sophomore standing, or consent of program coordinator.
- 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 119 and DHY 220 with grades of C or better and sophomore standing, or consent of program coordinator.

COURSE DESCRIPTIONS

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: Consent of program coordinator.

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 151 with a grade of P or consent of program coordinator.

DHY 251 Clinical Dental Hygiene IV (1-12) 5 crs.
Continues DHY 250.

Prerequisite: DHY 250 with a grade of C or better, or consent of program coordinator.

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: Consent of program coordinator.

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: Consent of program coordinator.

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 in 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.
IAI L1 904

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 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 220 and HSC 105 with grades of C or better and prior or concurrent enrollment in DIT 102 with a grade of C or better.

DIT 200 Dietetic Clinical Laboratory II (1-12) 5 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.

DIT 201 Community Nutrition (3-0) 3 crs.
Studies federal, state and local programs which assist the community in meeting the nutrition needs of its population. Introduces the principles of population assessment, program planning, implementation and evaluation. Emphasis will be placed on developing appropriate nutrition education strategies, techniques and materials for culturally and economically diverse populations.

Prerequisite: DIT 101 with a grade of C or better.

DIT 202 Nutrition Care Seminar (2-0) 2 crs.
Reviews planning, implementing and evaluating nutrition care given to individuals and groups of people having specific disease conditions, both acute and chronic.

Prerequisite: BIO 135, BIO 136, and DIT 102 with grades C or better.

DIT 203 Profession of Dietetics (1-0) 1 cr.
Covers issues related to the dietetics profession including standards of practice, ethics, credentialing and development of a professional portfolio. Preparation for the workplace is also discussed.

Prerequisite: DIT 202 with a grade of C or better and prior or concurrent enrollment in DIT 150 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 250 Dietetic Clinical Laboratory III (1-6) 3 crs.
Offers student assigned clinical laboratory experience in approved health care and community agencies. Opportunity to reach entry-level competence under supervision of a registered dietitian will be provided.

Prerequisite: DIT 200 with a grade of C or better.

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 202 Introduction to Ultrasound (1.5-1) 2 crs.
Provides the student with an introduction to diagnostic medical sonography. Students will cover topics to include origin of ultrasound, roles of student sonographers, and medico-legal aspects of sonography. Introduces use and care of equipment, as well as common procedures and protocols performed in the ultrasound department. Allows the student to get comfortable by handling the ultrasound transducers prior to entering into their clinical rotations. Patient-Sonographer interactions related to medical techniques and patient care will be covered. Patient and sonographer related safety issues will be discussed. An overview of critical thinking skills and communication will also be covered.
NOTE: Students must be admitted into the CTE or DMS programs to register for this course.

DMS 204 Essentials of Abdominal and Small Parts Sonography I (4-0) 4 crs.
 Investigates abdominal anatomy in the transverse, longitudinal, and coronal planes. Covers the normal and pathological sonographic appearances of abdominal structures related to sonography. Also includes normal variants, congenital anomalies, in depth coverage of specific organ physiology, related laboratory tests and scanning protocols.
Prerequisite: CTE 106, DMS 222 and DMS 223 with grades of C or better.
Corequisite: DMS 205 and DMS 206.

DMS 205 Essentials of Obstetrical and Gynecological Ultrasound I (3-0) 3 crs.
 Investigates female pelvis anatomy in the transverse, longitudinal, and coronal planes. Covers the normal and pathological sonographic appearances of the female pelvis. Includes normal variants, congenital anomalies, review of physiology, related laboratory tests and scanning protocols. Discusses clinical applications and sonographic protocol and procedures. Introduces embryogenesis, the reproductive cycle and ectopic pregnancy.
Corequisite: DMS 204 and DMS 206.

DMS 206 Ultrasound Practicum I (0-4) 2 crs.
 Introduces, through supervised lab instruction and patient film critique, the processes that go into obtaining and interpreting sonographic images. Focuses on sonographic terminology, image quality factors, scanning protocols and techniques, and the normal/ pathological sonographic appearances of abdominal, and gynecology structures. Discusses abnormal sonographic images and correlation of clinical data to develop diagnostic criteria.
Corequisite: DMS 204 and DMS 205.

DMS 207 Sonography Clinical Education I (1-25) 6 crs.
 Provides the student a hospital-based clinical experience under the supervision of faculty, sonography staff and a clinical instructor. Emphasis is placed on how to take complete patient histories. Sonography of the abdomen and female pelvis are the major areas of focus. Provides the student with exposure to a wide variety of general and vascular studies which will be covered in later coursework.
Prerequisite: DMS 204, DMS 205 and DMS 206 with grades of C or better.
Corequisite: DMS 208, DMS 209 and DMS 210.

DMS 208 Essentials of Abdominal and Small Parts Sonography II (4-0) 4 crs.
 Covers the normal and pathological sonographic appearances of additional abdominal structures including urinary bladder, spleen, adrenals, lymphatics and appendix. Includes review of the normal pediatric abdomen and associated pathology. Emphasizes small parts scanning and includes the thyroid, parathyroid, breast, prostate, scrotum and superficial structures. Covers invasive procedures and introduces neonatal sonography. Includes normal variants, congenital anomalies, review of physiology, related laboratory tests and scanning procedures.
Corequisite: DMS 207, DMS 209 and DMS 210.

DMS 209 Ultrasound Practicum II (0-4) 2 crs.
 Continues to develop, through supervised lab instruction and patient film critique, the student's ability to obtain and interpret sonographic images. Focuses on sonographic terminology, image quality factors, scanning protocols and techniques, and normal/pathological sonographic appearances of abdominal/small parts, obstetrics, vascular structures and specialty procedures. Discusses abnormal sonographic images and correlation of clinical data to develop diagnostic criteria. Integrates clinical history and sonographic images in the interpretation of imaging and Doppler data.
Corequisite: DMS 207, DMS 208 and DMS 210.

DMS 210 Essentials of Obstetrical and Gynecological Ultrasound II (3-0) 3 crs.
 Emphasizes imaging of the first, second, and third trimester of pregnancy. Includes the normal structural survey, fetal measurements, complications of pregnancy, and fetal anomalies. Introduces fertility studies including invasive procedures and biophysical profiles.
Corequisite: DMS 207, DMS 208 and DMS 209.

DMS 211 Sonography Clinical Education II (1-20) 5 crs.
 Continues the student's hospital-based clinical experience under the supervision of faculty, sonography staff and a clinical instructor. Emphasizes first, second and third trimester obstetrical exams. Continues to provide practice in the clinical application of abdominal and small parts sonography. Covers effective communication, operation of equipment, patient care and technical skills development. Introduces the student to venous duplex sonography.
Prerequisite: DMS 207, DMS 208, DMS 209 and DMS 210 with grades of C or better.

DMS 222 Essentials of Vascular Sonography (3-0) 3 crs.
 Instructs the student in essential aspects of vascular sonography including carotid, peripheral arterial and peripheral venous exams. Covers associated anatomy, hemodynamics, and common pathologies diagnosed by vascular sonography. Evaluates abnormalities of the carotid, peripheral arterial and venous circulations through lecture and case study review.
NOTE: Students must be admitted into the CTE or DMS programs to register for this course.

DMS 223 Art of Vascular Sonography (1-2) 2 crs.
 Instructs the student, through a supervised laboratory experience, on how to perform common vascular sonographic examinations using B mode, color flow, and Doppler modalities on current ultrasound equipment. Covers carotid, peripheral arterial, peripheral venous sonographic examinations. Presents non-imaging physiological arterial examination techniques.
NOTE: Students must be admitted into the CTE or DMS programs to register for this course.

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 of 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. Observation of infants/toddlers and related programs.

COURSE DESCRIPTIONS

- 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: ECE 102 and ECE 111 with grades 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.
Prerequisite: ECE 102 with a grade of C or better.
- ECE 120 Introduction to Special Education for Paraprofessionals (3-0)** 3 crs.
Examines characteristics of children with special needs and the methods used in special education. The role of the special education teacher's aide will be studied with a focus on implementing educational plans, family issues, legal rights and responsibilities.
- ECE 121 Behavioral Management in Special Education Setting (3-0)** 3 crs.
Studies the role of behavioral management within the special education population and provides understanding of rationale, terminology and methods used when working with special needs children and their families.
- ECE 140 Family Child Care Management (1-0)** 1 cr.
Provides guidelines and responsibilities in providing home day care for infants and young children.
- ECE 143 Safety for the Young Child (1-0)** 1 cr.
Focuses on safety for the young child in group settings.
- ECE 144 Nutrition for the Young Child (1-0)** 1 cr.
Focuses on nutrition for the young child in group settings.
- ECE 146 Programming for School Age Care (1-0)** 1 cr.
Relates theory and practice of school age programming. Emphasizes daily program planning, implication and assessment.
- 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 151 Communicating with Parents and Children (1-0)** 1 cr.
Establishes parent relationships through effective listening, speaking, writing. Develops communication skills in relation to children and co-workers.
- ECE 152 Principles of Child Growth and Development, Birth-5 (1-0)** 1 cr.
Discusses principles of child growth and development from birth through age five. Emphasis on developmental milestones and cultural influences.
- ECE 153 Guiding Children and Managing the Classroom (1-0)** 1 cr.
Provides methods of guiding children's behavior, encouraging pro-social behavior and dealing with common problems. Emphasis on principles and skills in classroom management.
- ECE 154 Activities and Resources 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.

- ECE 155 Activities and Resources 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.
- ECE 156 Effective Teaching (1-0)** 1 cr.
Provides methods for maintaining and increasing effective teaching behaviors. Also includes relations with parents and co-workers, teacher behaviors, burnout and professional growth.
- 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.
- 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.
- ECE 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 characteristics of individuals with disabilities, the programs that serve them under the Individuals with Disabilities Education Act, and the diversity of the populations of individuals with disabilities. There is a mandatory thirty (30) hour clinical component in this course; therefore, the student must pass a criminal background check for successful completion of this course.
Prerequisite: ECE 102 with a grade of C or better, or consent of instructor.
- 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.
- ECE 226 Observation and Guidance of the Young Child (3-0)** 3 crs.
Studies of guidance practices which support the development of the young child. Emphasizes theories and practices that support the caregiver's analysis of child behavior as well as the development of guidance skills. Students will develop and understand the relationship between careful observation, communication and effective interaction with children.
Prerequisite: 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.
- 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.

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.

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 Childhood 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.
Prerequisite: Completion of 18 credit hours in ECE prefix courses with grades of C or better, or consent of program 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.
 (NOTE: The program's health requirements 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. The student will be supervised by a qualified professional for 160 documented hours at an approved site.
 (NOTE: The program's health requirements and CPR Basic Rescuer certification must be completed prior to placement in practicum.)
Prerequisite: ECE 291 with a grade 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: Consent of program 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 affecting 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 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.

COURSE DESCRIPTIONS

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 (.5-0 to 3-0) .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 to a maximum of three credit hours.

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 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 view 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) (3-0) 3 crs.
Emphasis 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 with a grade of C or better, or consent of instructor.

EGR 211 Analytical Mechanics (Dynamics) (3-0) 3 crs.
Emphasis 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 (3-0) 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 loading, transformation of stress and strain (Mohr's Circle), design of beams and shafts for strength, shear and moments 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 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, equivalent and superposition), transient analysis, and sinusoidal steady state (analysis and power).
IAI EGR 931L

Prerequisite: MTH 202 and PHY 202 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 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.

EHS Environmental Health

EHS 110 Environmental Health Practice (3-0) 3 crs.
Provides the student with an overview of the variety and extent of environmental issues affecting human health. Students will be introduced to ecosystem interactions, biological and chemical toxins in the general environment and relevant environmental regulations. Critical thinking and risk assessment strategies will be emphasized. A review of career opportunities is also included.

EHS 115 Health Data and Injury Trend Analysis (3-2) 4 crs.
Studies the application and techniques of statistical analysis in analyzing injury and illness trends in a discreet population group. This includes injury and incident trends in industrial employee populations as well as illness trends in geographically or environmentally bound populations.

Prerequisite: MTH 080 or higher (or proper math placement exam score) with a grade of C or better.

EHS 120 Environmental Sampling and Monitoring (2-4) 4 crs.

Provides students with the skill set needed to perform environmental sampling and monitoring using various instrumentation, methods and protocols. The focus of the course is to develop applied sampling skills and familiarity with sampling equipment and methods to accurately perform field sampling of environmental conditions.

Prerequisite: EHS 110 and MTH 080 or higher with grades of C or better.

EHS 130 Investigation and Risk Assessment (2-2) 3 crs.

Prepares students to complete an investigation following an accident/incident in the workplace. Students will learn the basics of the investigation and the tools that are used to assess the situation.

EHS 150 Occupational Health Practice (4-0) 4 crs.

Provides students with an overview of government agencies, departments, and legislation regulating employee exposure to conditions involving the risk of illness or injury. Covers the legal obligations of employers and the major non-governmental sources for standards and best practices.

Prerequisite: MTH 080 or higher (or required math placement exam score) with a grade of C or better.

EHS 200 Environmental Toxicology (3-2) 4 crs.

Provides students with an overview of various environmental and industrial toxicants and their effects on the body. Introduces the history of toxicity and basic tenets of the science such as routes of exposure, dose-response curves, tolerance as well as general effects and lethal doses.

Prerequisite: BIO 130 and BIO 135 with grades of C or better.

EHS 210 Waste Management (3-0) 3 crs.

Provides students with a review of waste generation sources, the means to evaluate discharge quantities, financial loss associated, specific environmental hazards, and a review of government bodies regulating waste discharge and production. Specific reporting requirements for certain waste types and the major laws associated with various types of waste are covered as well as hazardous waste storage and transport.

Prerequisite: BIO 130 and CHM 122 with grades of C or better.

EHS 215 Air and Water Quality (2-2) 3 crs.

Provides an overview of current regulations of air and water quality for both public and private sources. This includes a review of methodologies and techniques for ensuring and determining air/water quality for the purpose of protecting the environment and the public.

Prerequisite: EHS 110 with a grade of C or better.

EHS 250 Industrial Hygiene Sampling and Procedures (2-4) 4 crs.

Provides a basic overview of industrial hygiene and its application in the workplace. Students will learn the basics to recognize and evaluate occupational hazards. They will also learn the tools to control for those hazards.

Prerequisite: EHS 150 with a grade of C or better.

EHS 280 Construction Safety (3-0) 3 crs.

Prepares the student for the recordkeeping, inspections, and planning needed in the construction industry. Employee safety training as well as hazard recognition will also be covered.

Prerequisite: EHS 150 with a grade of C or better.

EIT E-Learning Instructional Technology

EIT 200 E-Learning Tools and Technology (2-2) 3 crs.

Provides the student with a foundation in the tools and technologies used to develop and support e-learning in business and education environments. Recommended preparation: CIS 100, CIS 101 or equivalent experience.

EIT 220 E-Learning Instructional Systems Design (2-2) 3 crs.

Provides the student with a foundation in instructional design principles utilized to create e-learning content for adult learners. Recommended preparation: EIT 200 or equivalent experience.

EIT 250 E-Learning Web Development (2-2) 3 crs.

Provides experience building demonstration and simulation instructional modules for the Web. Emphasizes design, presentation and interactivity to create engaging e-learning experiences for adult learners.

Prerequisite: WEB 150 with a grade of C or better.

EIT 280 E-Learning Development and Management (2-2) 3 crs.

Applies and integrates instructional design skills from previous e-learning courses. E-learning and instructional technology management issues and instructional system development lifecycle methodologies are discussed and practiced.

Prerequisite: EIT 220 and WEB 150 with grades of C or better.

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.

COURSE DESCRIPTIONS

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 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 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 (VFD's) as they pertain to residential and commercial motor control applications. A safety review followed by terminology, principles, test and measurement equipment use associated with VFD's and typical applications are examined. Emphasis is placed on the practical application, operation, installation and maintenance of VFD's.

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 the building blocks of digital circuits. These elements are then blended into topics and applications. Topics include Boolean algebra, Karnaugh mapping, counters and microprocessors.

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 communication 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 Microprocessors and Microcomputers (3-3) 4 crs.
 Examines basic microprocessor and microcomputer applications, operation and analysis.
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.
Prerequisite: Prior or concurrent enrollment in EMG 101 with a grade of C or better.

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 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 student 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.

COURSE DESCRIPTIONS

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 (4-6) 7 crs. Provides entry-level emergency medical care knowledge and skills associated with the delivery of Basic Life Support (BLS) as defined by the State of Illinois EMS Act and the EMS Rules. Meets all requirements of the Federal Department of Transportation EMT-B training curriculum and has been approved by the Illinois Department of Public Health (IDPH) Division of EMS and Highway Safety. **Prerequisite:** Admission into either the Emergency Medical Services program or the Paramedic program.

EMS 210 Paramedic I—Preparatory (5-2) 6 crs. Provides classroom training to enable students to become state-certified paramedics. Examines the role and responsibility of the paramedic in the health care delivery system, review of medical terminology, and medical, legal, ethical and regulatory issues. Includes an overview of the human body systems, in-depth study of the respiratory system, principles of physiology, pathophysiology and pharmacology. Concludes with techniques for performing comprehensive physical examinations. (NOTE: Student must submit documentation of: (1) valid Illinois driver's license, (2) EMT Basic certification, including Cardiopulmonary Resuscitation (CPR), (3) EMT-B/I work experience of six months, (4) field experience agreement.) **Prerequisite:** EMS 110 with a grade of C or better and admission into the Paramedic program.

EMS 211 Paramedic II—Medical Emergencies I (5-2) 6 crs. Provides an in-depth study of the pulmonary and cardiac anatomy and physiology with an emphasis on the structure, function and electrical conduction system of the heart, pathophysiology, and emergency management of acute cardiac syndromes. Mastery of 3-lead electrocardiography (ECG) interpretation and drugs and interventions used during emergency cardiac care including transcutaneous pacing, cardioversion, and defibrillation. An introduction of 12-lead ECG monitoring and interpretation is presented. **Prerequisite:** EMS 210 with a grade of C or better.

EMS 212 Paramedic II—Medical Emergencies II (5-8) 6 crs. Presents acute and chronic disorders of the endocrine, gastrointestinal, genitourinary, neurological, and hematopoietic systems and their emergency management. Covers the anatomy and physiology of the female reproductive system, gynecological emergencies, sexual assaults, and emergency childbirth, complications of pregnancy and delivery, and care/resuscitation of the neonates. Includes pediatric medical and traumatic emergencies with emphasis on the variations in pediatric presentations of the same disorders studied in adults. Also included are toxicology and substance abuse, environmental emergencies, and infectious and communicable diseases. **Prerequisite:** EMS 211 with a grade of C or better.

EMS 213 Paramedic III—Trauma Emergencies and Special Clients (2-11) 3 crs.

Introduces students to the forces that produce injury on each body system and to related assessment of Basic Life Support (BLS) techniques. Establishes the identification and management techniques of various medical emergencies including pediatric and neonatal transport, special patient populations, extrication-rescue techniques, and transport techniques used in various settings including Advanced Life Support (ALS) response to home care patients. Introduces students to behavioral and psychiatric emergencies. Demonstrates concepts related to medical incident command and disaster management for mass casualty incidents and crime scene responses. **Prerequisite:** EMS 212 with a grade of C or better.

EMS 214 Paramedic—Hospital Internship (0-13) 2 crs. Provides a minimum of 232 hospital clinical rotation hours with a variety of experiences and situations that challenge and encourage the student to achieve a safe, entry-level mastery of EMS skills in a controlled environment and under the direct supervision of a hospital assigned preceptor. Rotations include the following areas: emergency room, critical care units, labor and delivery rooms, operating rooms, pediatric units, psychiatric units/mental health unit, IV therapy, and respiratory therapy. **Prerequisite:** EMS 210 with a grade of C or better.

EMS 215 Paramedic—Field Internship (0-20) 3 crs. Integrates the contextual, integrative and adaptive theoretical concepts and practical skills using critical judgment skills acquired during the didactic and hospital clinical rotation. The 384 hours of actual ambulance service is under the direct supervision of a certified paramedic, and is divided into two phases of ascending mastery and accountability with each phase having a minimum number of patient care contacts and competencies. **Prerequisite:** EMS 214 with a grade of P.

EMS 216 Paramedic Seminar (3-0) 3 crs. Explores current issues in emergency medical technology and the emergency medical system. Weekly seminars allow the provisional paramedic to integrate and apply all didactic concepts to actual studies; to exchange experiences with other provisional paramedics; and to gain insight into the actual responsibilities of working on a paramedic ambulance. Prepares students to challenge the final written and practical examinations as well as the State of Illinois Licensure examination for paramedics. **Prerequisite:** EMS 214 with a grade of P.

ENG English

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:** English 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 sentencing. This course does not meet the General Education requirements for the A.A. and A.S. degree.

Prerequisite: Satisfactory score in English placement test or grade of C or better in ENG 098.

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, or required scores on the writing and reading placement tests. ESL students need one of the following options: ESL 073 and ESL 074 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 (3-0) 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 (.5-0 to 4-0) 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 Laboratory Instruction (0-2) 1 cr.
Develops English 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 (.5-0 to 4-0) 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.

COURSE DESCRIPTIONS**ESL 008 ESL: Grammar Review I (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 ESL: Grammar Review II (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 form. 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 students. Emphasizes communicative activities. Includes listening, speaking, reading and writing skills. Carries no transfer credit.

Prerequisite: Required placement test scores.

ESL 015 ESL: Listening and Speaking I (1-0) 1 cr.

Focuses on listening and speaking skills for high beginning English as a Second Language students who read and write proficiently in their native languages. Includes pronunciation skills. Carries no transfer credit.

Prerequisite: 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 students. 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 students 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 025 ESL: Listening and Speaking II (1-0) 1 cr.

Continues listening and speaking skills for high beginning English as a Second Language students who read and write proficiently in their native languages. Includes pronunciation skills. Carries no transfer credit.

Prerequisite: ESL 015 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 028 ESL: Conversation II (2-0) 2 crs.

Continues 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: 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 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 035 ESL: Listening and Speaking III (1-0) 1 cr.

Develops listening and speaking skills for low-intermediate English as a Second Language students. Includes pronunciation skills. Carries no transfer credit.

Prerequisite: ESL 020 or ESL 025 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 and Speaking IV (1-0) 1 cr.
Continues the development of listening and speaking skills for low-intermediate English as a Second Language students. Includes pronunciation skills. Carries no transfer credit.
Prerequisite: ESL 025, ESL 030 or ESL 035 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: ESL 026 or ESL 030 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 Languages Skills V (1-0 to 6-0) 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 055 ESL: Listening and Speaking V (1-0) 1 cr.
Develops listening and speaking skills for intermediate English as a Second Language students. Includes pronunciation skills. Carries no transfer credit.
Prerequisite: ESL 040 or ESL 045 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 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 work processing 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 065 ESL: Listening and Speaking VI (1-0) 1 cr.
Develops listening and speaking skills for high-intermediate English as a Second Language students. Includes pronunciation skills. Carries no transfer credit.
Prerequisite: ESL 050 or ESL 055 with a grade of C or better, **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 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 discussions 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.

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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* ESL: Independent 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.

*This course is pending ICCB approval.

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 074 with a grade of C or better.

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* ESL: 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 053, ESL 056 or ESL 063 with a grade of C or better, **OR** required placement test scores.

*This course is pending ICCB approval.

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.

ESL: English for Special Purposes

ESP 061 ESL: Skills for the Health Care Field (4-0) 4 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 health care 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 email and business letters, and using business phrases, idioms, and vocabulary in both written and spoken English. Carries no transfer credit.

Prerequisite: ESL 053 and ESL 063 with grades of C or better, **OR** required placement test scores.

FAS Fashion Design

FAS 100 Industrial Sewing Methods (1-4) 3 crs.
Introduces students to the use and care of industrial sewing equipment, notions 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 (bodies, skirts, sleeves, etc.) developed. Accuracy and professional standards stressed. Patterns tested in muslin for fit.

Prerequisite: FAS 113 with a grade of C or mastery of basic sewing as demonstrated through Fashion Department testing. Contact program coordinator for additional information.

FAS 102 Flat Pattern Design and Draping II (2-4) 4 crs.

Continues development of basic sloper set. Manipulates basic sloper set to create original design. Patterns tested in muslin for fit. Garment is construction from corrected patterns.

Prerequisite: FAS 101 and FAS 103 with a grade of C or better.

FAS 103 Apparel Design and Construction I (1-4) 3 crs.

Introduces principles of using the basic sloper set to develop patterns for original designs. Professional design room techniques.

Corequisite: FAS 101 or consent of instructor.

FAS 104 Apparel Design and Construction II (2-4) 4 crs.

Develops patterns from basic sloper set. Actual construction of finished garments. Emphasis on styling, fit and professional finishing.

Prerequisite: FAS 103 with a grade of C or better.

Corequisite: FAS 102.

FAS 105 Fashion Design and Illustration I (0-2) 1 cr.

Introduces basic fashion sketching — front, back and side views. Relationship of figure and garment. Sketching of original design.

FAS 106 Fashion Design and Illustration II (0-2) 1 cr.

Focuses on advanced fashion sketching and fabric rendering. Emphasis on development of individual style. Basic layout and presentation.

Prerequisite: FAS 105 with a grade of C or better.

FAS 107 Textiles I (1-2) 2 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 (1-2) 2 crs.

Continues FAS 107. Contemporary fabrics analyzed and studied.

Prerequisite: FAS 107 with a grade of C or better.

Corequisite: FAS 109.

FAS 109 Fashion Arts and Design (2-0) 2 crs.

Focuses on theory and principles of design for fashion. The elements of design and color are covered. Develops the perception and awareness to judge good design and to analyze potential trends. Studies the influence of present-day cultural trends on the field of design.

Corequisite: FAS 108.

FAS 110 Costume History (2-0) 2 crs.

Introduces the elements of design and color in historical perspective. A survey of historical periods of design focusing on costumes. Examines the influences of social, political and economic forces on these periods.

FAS 111 Twentieth Century Costume and Trends (3-0) 3 crs.

Presents an overview of fashion history and current trends in the 20th century. Includes fashion design, merchandising and factors which influence fashion from the merchandiser's point of view such as arts, technology and socioeconomic aspects. Students participate in video production.

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 (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 material 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 201 Advanced Flat Pattern Design and Draping I (2-4) 4 crs.

Continues advanced development of basic sloper set, including coat and suit slopers, basics of grading (sizing). Patterns tested in muslin for fit and accuracy.

Prerequisite: FAS 101 and FAS 102 with a grade of C or better.

Corequisite: FAS 203.

FAS 202 Advanced Flat Pattern Design and Draping II (2-4) 4 crs.

Continues FAS 201. Studies advanced techniques of pattern making and draping, such as trend jacket and coat. Actual construction of jacket and coat will be involved.

Prerequisite: FAS 201 with a grade of C or better.

Corequisite: FAS 204.

FAS 203 Advanced Diversified Apparel Design I (2-4) 4 crs.

Develops patterns for the translation of original designs into completed garments. Includes visits to manufacturers and speakers from industry.

Prerequisite: FAS 103 and FAS 104 with grades of C or better.

Corequisite: FAS 201.

FAS 204 Advanced Diversified Apparel Design II (2-4) 4 crs.

Continues FAS 203. Works on collection of individual design and actual construction of coordinated garments.

Prerequisite: FAS 203 with a grade of C or better.

Corequisite: FAS 202.

FAS 205 Tailoring Techniques I (0-4) 2 crs.

Introduces professional assembling procedures, details and finishes. Particular emphasis on coats and suits.

Prerequisite: FAS 102 and FAS 104 with grades of C or better, or consent of coordinator.

FAS 209 Advanced Fashion Illustration I (0-2) 1 cr.

Emphasizes work on a professional studio level. Focuses on work sketches as well as finished art. Fashion illustration as advertising, publicity, promotion and display.

Prerequisite: FAS 106 with a grade of C or better, or consent of coordinator.

FAS 210 Advanced Fashion Illustration II (0-2) 1 cr.

Continues FAS 209. Preparation of professional portfolio.

Prerequisite: FAS 209 with a grade of C or better.

FAS 212 Visual Fashion Merchandising (2-0) 2 crs.

Studies the communications of design and methods of interpreting consumer needs and motivations. Explores the techniques of educating the consumer and promoting good design through advertising, publicity, display, fashion shows, special events, employee development, etc.

Prerequisite: FAS 110 with a grade of C or better.

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FAS 229 Promotion of Fashion (3-0) 3 crs.
Introduces various techniques and media for methods to sell fashion. Emphasis on advertising: newspapers, magazines, direct mail, catalogs, radio and television. Includes sales promotion in window displays, interior displays, shops; special events, fashion shows and publicity. Analysis of practical creative assignments developed by the students.

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. Also, practice in effective speaking in small groups or to individuals; effect of grooming and etiquette on communication; style and technique in getting a job; and performing effectively in the fashion industry.

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 the course is offered. The course may be repeated two times to a maximum of three credit hours.

Prerequisite: FAS 107 with a grade of C or better, or consent of instructor.

FIS Fire Science

FIS 100 Fundamental of Fire Protection (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 governmental; 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 I (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, or consent of program coordinator.

FIS 103 Fire Strategies and Tactics I (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, or consent of program coordinator.

FIS 104 Building Construction for Fire Protection (3-0) 3 crs.
Studies the components of building construction that relate to fire and life safety. The focus of this course is on firefighter safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations and operating at emergencies.
Prerequisite: FIS 100 with a grade of C or better, or consent of program coordinator.

FIS 106 Fire Service Career Exploration Practicum (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 student to look at their values, interests, and skills as they relate to a career in the fire service.

FIS 109 Firefighter II 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 Firefighter II. Satisfies the didactic and manipulative requirements for the Illinois Office of State Fire Marshall Firefighter II Certification Course.
(NOTE: Student must be a member of a fire department who has entered into a training agreement with Harper College. Sponsoring department must provide proof of student's recent completion of physical examination that satisfies Illinois Department of Labor requirements and includes respiratory fitness.)

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 Introduction to 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 123 Advanced Fire Prevention Principles (3-0) 3 crs.
Provides the theories of fundamental fire prevention principles including the various techniques that can be utilized to prevent the occurrence of or reduce the impact from a fire. Emphasis will be placed on plan reviews, code interpretation, and built-in fire protection systems.
Prerequisite: FIS 122 with a grade of C or better.

FIS 132 Hazardous Materials I (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 133 Hazardous Materials II (3-0) 3 crs.
Continues FIS 132. Provides those personnel who are, or will be, operating at the technician level of a hazardous materials response team with the advanced skills needed to evaluate and mitigate an incident involving direct release of hazardous materials. Students who wish to satisfy the Illinois Office of the State Fire Marshal 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.).
Prerequisite: FIS 132 with a grade of C or better.

FIS 145 Fire and Emergency Services Instructor I (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 contract hours to earn 3 semester 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 and consent of program coordinator.

FIS 202 Fire Service Management II (3-0) 3 crs.
 Examines and discusses supervisory and various forms of communications that occur in the work setting. Examines work group dynamics and assists the fire officer to understand and function within the work group. Introduces health and safety within the work setting.
Prerequisite: FIS 102 with a grade of C or better, or consent of program coordinator.

FIS 203 Fire Strategies and Tactics II (3-0) 3 crs.
 Examines the tactical deployment of manpower and equipment for extra alarm fires, high-rise fires and extraordinary incidents. Studies manpower and equipment necessary for large-scale fireground operations.
Prerequisite: FIS 103 with a grade of C or better and consent of program coordinator.

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 220 Fire and Emergency Services Instructor II (3-0) 3 crs.
 Provides advanced instruction to individuals in the fire and emergency services. This course introduces advanced instructional skills necessary to teach fire and emergency services personnel. It will familiarize the student with behavioral objectives, cognitive, psychomotor skills, different teaching methods and applications in training sessions. This course will also familiarize the student with training records, reports, and in the development and administration of evaluation instruments.
Prerequisite: FIS 145 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 Associate 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.

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. Increases knowledge of the language and focuses on the culture of the French speaking countries. Continues grammar study. 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.

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FRN 210 Introduction to Modern French Literature (3-0) 3 crs.
Reading of selected 20th century masterpieces. Introduction to poetry and "analyze de texte." Oral readings stressing pronunciation and diction. Speaking based on discussion 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: 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 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, reservation systems, property management systems, and cash controls are discussed.

FSM 121 ProStart I (4-0) 4 crs.
Introduces students to fundamentals of professional foodservice management. Explores careers within the hospitality industry and basic knowledge of kitchen activities, safety and equipment. Students will earn their ServSafe Sanitation Certificate and the Illinois State Sanitation Certification. Students must be currently enrolled in high school, must have completed one foods class, and be at least 16 years old.

Prerequisite: High school students only.

FSM 122 ProStart II (2-2) 3 crs.
Continues FSM 121 with additional fundamentals of professional foodservice management. Students will broaden their basic kitchen knowledge of foods and managerial skills and integrate work experience gained in corequisite FSM 140. Preparation for the Year One comprehensive final from the National Restaurant Association's Educational Foundation is included. Students taking this course must be currently enrolled in high school.

Prerequisite: FSM 121 with a grade of C or better.

Corequisite: FSM 140.

FSM 123 ProStart III (2-2) 3 crs.
Prepares students for the Illinois Restaurant Association's Knowledge Bowl competition. Includes menu development and food costing and introduces managerial skills required by the lodging and restaurant industries. Students taking this course must be currently enrolled in high school.

Prerequisite: FSM 122 with a grade of C or better.

Corequisite: FSM 141.

FSM 124 ProStart IV (2-2) 3 crs.
Integrates the previous three semesters of class work and internships. Students prepare for the National ProStart Certification Test, complete their skills portfolio, and finalize their résumé. Students taking this course must be currently enrolled in high school.

Prerequisite: FSM 123 with a grade of C or better.

Corequisite: FSM 142.

FSM 140 ProStart Internship I (0-15) 1 cr.
Applies knowledge, skills and abilities developed in FSM 121 with work experience in assigned employment opportunities. Trained mentors will help develop skills, knowledge and abilities for entry level supervisory employment at the end of the two-year ProStart program. Students will work 12-15 hours weekly.
(NOTE: Second semester, first year ProStart students only.)

Prerequisite: FSM 121 with a grade of C or better, and recommendation of the program coordinator.

Corequisite: FSM 122.

FSM 141 ProStart Internship II (0-15) 1 cr.
Applies knowledge and abilities developed in FSM 121, FSM 122 and FSM 140. Students will be assigned a work experience in a different industry component than that of FSM 140. Students will work 12-15 hours weekly.
(NOTE: First semester, second year ProStart students only with recommendation of the program coordinator.)

Prerequisite: FSM 122 and FSM 140 with grades of C or better.

Corequisite: FSM 123.

FSM 142 ProStart Internship III (0-15) 1 cr.
 Applies knowledge, skills and abilities developed in the ProStart curriculum. Students will be assigned a work experience in a different industry component than that of FSM 140 and FSM 141. Students will work 12-15 hours weekly. (NOTE: Second semester, second year ProStart students only with the recommendation of the program coordinator.
Prerequisite: FSM 123 and FSM 141 with grades of C or better.
Corequisite: FSM 124.

FSM 162 Classical Cuisines (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 Wines, 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 (.5-0 to 3-0) .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. (Formerly ORN 101)

GEG Geography

GEG 100 Cultural Geography (3-0) 3 crs.
 Surveys the contemporary topics of human geography; population, migration, language, religion, ethnicity, and political, economics 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

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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 and 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 151 Geographic Information Systems I (2-2) 3 crs.
Introduces the theory and problem solving capabilities of Geographic Information Systems (GIS). Examines underlying fundamental concept of cartography, including the concepts of map projection, the Cartesian coordinate system, spatial data collection, and data generalization. Students will acquire spatial data in the field and from published sources, and will learn basic functions of GIS software and creating GIS databases and maps.

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 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 down slope 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 Historical Geology (3-2) 4 crs.
Geological history of the earth including principles employed to reconstruct this history. One-day field trip required.
Prerequisite: GEO 101 with a grade of C or better, high school earth science or consent of instructor.

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

GEO 201 Rocks and Minerals (3-2) 4 crs.
Physical description of minerals and rocks. Introduction to crystallography, economic minerals, natural resources. Field trip required.
Prerequisite: GEO 101 and CHM 121 with grades of C or better, or consent of instructor.

GEO 202 Paleontology (3-2) 4 crs.
Fossil record of life, principles of evolution and ecology. One-day field trip required.
Prerequisite: GEO 102, BIO 101, BIO 140 with grades of C or better, or consent of instructor.

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 conversations 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 people. 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 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.

GRA Graphic Arts

GRA 101 Introduction to Graphic Arts Technology (2-2) 3 crs.
Gives students and 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 image-editing software (Adobe Photoshop). Emphasizes skills to manipulate photos using current software tools and special effects filters. Explores program tools, color correct photos, channels, layers and color separation.

Prerequisite: ATE 105 or prior or concurrent enrollment in GRA 101 with a grade of C or better.

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 102 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.

Prerequisite: Prior or concurrent enrollment in GRA 101.

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 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 as well as 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.

Prerequisite: GRA 103 and GRA 130 with grades of C or better.

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 Bindery and Finishing Operations (2-2) 3 crs.
Covers fundamentals of binding and finishing. Provides knowledge of safety and the planning of a printed piece to be bound, which includes binding, cutting, folding, padding and saddle stitching.

Prerequisite: GRA 102 with a grade of C or better.

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.

COURSE DESCRIPTIONS

GRA 229 Page Layout (2-2) 3 crs.
Explores advanced desktop publishing focusing on page assembly in QuarkXpress, transitioning to InDesign. Projects focus on creating documents that follow industry standards and best practice for print production. 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 230 with a grade of C or better or consent of 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.

Prerequisite: GRA 105 and GRA 131 with grades of C or better.

Heating, Ventilation and Air Conditioning (HVAC)

See: RAC Heating, Ventilation and Air Conditioning (HVAC)

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, better evaluate relationships and resolve conflicts. Designed for persons in helping roles, professional and paraprofessional, or volunteers in human services.
Prerequisite: HMS 101 with a grade of C or better, or concurrent enrollment.

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 Human Services (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 will be stressed.
Prerequisite: HMS 102 with a grade 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 systems 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 (.5-2) 1.5 crs.

Provides students an opportunity to observe selected occupations within a health care setting. The student will attend 16 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 (.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). Reviews pharmacokinetics and pharmacodynamics. Discusses the mechanism of action of the major medication groups at an advanced level in order to understand the pharmacological activity with each group. Addresses areas of drug action, clinical application, and adverse events for each medication discussed as well as nursing implications for safe medication administration and assessment of medication effects.

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.

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/multi-cultural 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.
Surveys 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.

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.

COURSE DESCRIPTIONS

HST 212 Recent American History 1945-1980 (3-0) 3 crs.
Provides students with a comprehensive analysis of the critical period 1945-1980 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 '60's, the social and political history of the Vietnam War, the counterculture, Watergate, the personalization of political activism in the '70's, the women's movement, and the resurgence of conservatism. 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 group—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 From 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 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 twentieth century.

HST 282 World War II (3-0) 3 crs.
Surveys the history of World War II, the most destructive conflict of the twentieth 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 world from the Stone Age(s) through the Middle Ages. 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 103 Asia and African Humanities (3-0) 3 crs.
Examines the arts and worldviews of Asian and African cultures from ancient times to the present. Studies examples of the visual arts, music, dance and literature from selected civilizations in South Asia, East Asia, Southeast Asia, and Africa.
IAI HF 904N

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 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: the shaping of social attitudes, domestic arts and religious experiences.
IAI HF 907D

HUM 115 International and 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 course 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 media 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, and material characteristics.
Prerequisite: ART 121, IND 100 and IND 101 with grades of C or better.

IND 110 Problem Solving and 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.
Recommended Corequisite: IND 100 and IND 101.

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.

COURSE DESCRIPTIONS

- IND 116 Interior Detailing and 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: 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 205 Historic Styles Studio (2-2) 3 crs.**
Reviews furniture history. Recreates historic interior designs. Explores creation of interior design through the mixing and stylizing of furniture and finishes.
Prerequisite: IND 102, IND 103 and IND 106 with grades of C or better.
- IND 206 Lighting for Interior Design (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. Recommend preparation: ENG 101 or ESL coursework, or testing equivalency.
Prerequisite: IND 203, IND 205, IND 206 and IND 230 with grades of C or better.
- 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: ATE 105, IND 116, IND 203, IND 205, 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 (.5-0 to 3-0) .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: ATE 105 with a grade of C or better.
- IND 221 3D CAD Studio for Interior Designers (2-2) 3 crs.**
Develops conceptual and schematic designs for interior design projects by utilizing the tools and techniques of 3D CAD. This studio-level course will explore the basics of AutoCAD 3D and how to draw models for various types of spaces utilizing different modeling techniques. The use of cameras, applying materials to objects will be explored. Using AutoCAD Architectural (ADT), students will learn how to use advanced 3D object types such as mass elements, walls, doors, and windows and applying them to design projects. The course will also address what to draw, and how much to draw for conceptual design and visual presentation.
Prerequisite: IND 220 with a grade of C or better.
- IND 222 3D Design Studio Presentation (2-2) 3 crs.**
Develops the skills and techniques for creating photo-realistic renderings suitable for client presentations. This is an advanced level computer-assisted design (CAD) course covering all the basics of the Autodesk 3D Studio Max/Viz program which produces realistic renderings of still images and animations of interior space.
Prerequisite: IND 221 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 Review (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: ATE 105, IND 203, IND 205 and IND 230 with grades of C or better OR ATE 105 and ATE 201 or ATE 203 with grades of C or better, or consent of program coordinator.

IND 281 Environmental Design Studio (2-2) 3 crs.
 Studies building systems and their impact on the environment. Includes indoor air quality, thermal control, lighting, acoustic and water systems, solar power, wind power, and other sustainable design alternatives. Application of these systems will be applied to various sustainable interior design projects and practices. Investigates LEED certification and other legislative issues. Covers physical and psychological implications of environmental stress, crowding and institutional living and applies them to projects along with the introductory concepts and procedures for effective facilities management. Intended for advanced-level students preparing for the NCIDQ licensing exam.

IND 283 Interior Design Studio III (2-2) 3 crs.
 Applies design techniques for privacy and accessibility to the development of public and private spaces including floor plans, elevations, perspectives, custom and semi-custom millwork, kitchen and bath planning, lighting and reflected ceiling plans, selection of furnishings and finishes, budgeting and utilization of pre-existing furnishings. Projects may include health care and assisted living facilities; restaurant, hospitality and food service; unusual residential spaces; educational facilities; sports and recreational facilities; and/or religious and community facilities. Please refer to the course schedule for specific focuses. Intended for advanced-level students preparing for the NCIDQ licensing exam.
Prerequisite: IND 203 and IND 205.

IND 285 Contract Studio II (2-2) 3 crs.
 Explores spatial problems and design interventions in commercial and contract spaces. Researches various systems and how design solutions affect and are impacted by them. Includes construction systems and methods; power distribution systems; mechanical systems, energy management; data/voice telecommunication systems, lighting systems, ceiling systems; flooring systems; security systems; acoustics; and interface of workstation furniture. Applies building codes, fire and life safety principles and other regulations and standards to projects. Intended for advanced-level students with work experience who are preparing for the NCIDQ licensing exam.

ITP Sign Language Interpreting

ITP 101 Introduction to Interpreting (3-0) 3 crs.
 Provides an overview of the field of interpreting and discusses the historical development of the profession. Students are introduced to terminology, theoretical models of interpreting and current practices in the field. The Registry of Interpreters for the Deaf Code of Ethics is examined in light of personal and professional standards. The roles and responsibilities of the interpreter are also discussed.
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 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 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.
 Focuses on the development of consecutive expressive interpreting skills with rehearsed and spontaneous texts. Students interpret from English into American Sign Language with time allotted between delivery of the source language message and the interpretation. Text analysis and development of pre-interpreting skills (cloze, short-term memory, chunking, shadowing, paraphrasing and dual task training) are emphasized prior to the consecutive interpreting task.
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.
 Focuses on the development of consecutive interpreting skills with rehearsed and spontaneous texts. Students interpret from American Sign Language into English with time allotted between delivery of the source language message and the interpretation. Message comprehension and composition skills are emphasized. Text Analysis and pre-interpreting skills (prediction, visualization, short-term memory, and paraphrasing) are introduced prior to the consecutive interpreting task.
Prerequisite: ITP 101 and SGN 205 with grades of B or better, or consent of program coordinator.

ITP 120 Simultaneous Interpreting: English to ASL (3-0) 3 crs.
 Introduces the student to simultaneous interpreting and moves the student from consecutive interpreting to simultaneous interpreting with minimal time provided between delivery of source language text and interpretation into the target language. Development of simultaneous skills with both rehearsed and spontaneous text is emphasized. Students continue to develop skills in source and target language text analysis.
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.
 Introduces the student to simultaneous ASL to English interpreting and moves the student from consecutive interpreting to simultaneous interpreting with minimal time provided between delivery of source language text and interpretation into the target language. Students work on prediction strategies, message comprehension, composition and demeanor. Students are introduced to partnering techniques and register variation.
Prerequisite: ITP 111 with a grade of C or better, or consent of program coordinator.

COURSE DESCRIPTIONS

ITP 200 Transliteration and Educational Interpreting (3-0) 3 crs.

Focuses on the development of transliteration skills in simultaneous monologic and dialogic texts. Students work with both rehearsed and spontaneous spoken to signed English and signed to spoken English texts. Students develop skills in assignment preparation, transliteration performance and analysis, as well as practice of specific transliteration principles. Special emphasis will be put on the use of transliteration in educational settings.

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.

Focuses on the development of simultaneous interpreting skills in increasingly complex rehearsed and unrehearsed texts. Preparation, team interpreting, process management, and analysis of message of equivalency are stressed. Text material includes both teacher-directed and student-directed selections.

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 covering a variety of settings. Students also gain experience in process management, application of professional ethics and behavior, and articulation of role and responsibilities. Students analyze their work using a variety of strategies, including back-translation, to determine success of message equivalency. Students learn setting-specific logistics and protocol.

Prerequisite: ITP 211 and ITP 216 with grades of C or better, or consent of program coordinator.

ITP 216 Interpreting: Monologic Discourse (3-0) 3 crs.

Focuses on the development of English to American Sign Language interpreting skills in unrehearsed monologic presentations. Addresses assignment preparation, public speaking techniques, process management, peer critiquing skills, and analysis of message equivalency. Presents and allows for practice of techniques for interpreting in consultative and formal registers.

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 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.

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 community-based programs plus parole programs. IAI CRJ 911

LEJ 107 Vice and Drug Control (3-0) 3 crs.

Studies historical and sociological development 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 111 Traffic Enforcement and Investigation (3-0) 3 crs.

Applies principles of enforcement of traffic laws and the proper way to investigate traffic accidents. This course will address the Illinois Vehicle Code (laws), traffic law enforcement, crash investigations, officer safety issues and Field Sobriety Testing. Methods of documenting evidence are also examined along with hands-on classroom and field projects that increase student knowledge.

Prerequisite: LEJ 101 with a grade of C or better.

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 122 Principles of Policing (3-0) 3 crs.
 Examines police operations including patrol, investigation, traffic, juvenile and special operations. Manpower distribution, analysis of operations and enforcement policy will be stressed.

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 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.
 IAI CRJ 913
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 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.
**This course is pending ICCB approval.*

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 students 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 agency's needs and restrictions. The students must complete 8 hours of service a week for 14 weeks during the semester to earn 3 semester credit hours.
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 would include such authors as Ibsen, Miller, Moliere and Shakespeare. (See SPE 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 verite, 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.
Prerequisite: ENG 101 with a grade of C or better.
- 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.
Prerequisite: ENG 101 with a grade of C or better.
- 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 non-fiction. 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 Marmom 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 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.
Surveys English writers from Romantic Period to World War I. Reading and interpretation of such writers 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 in British and American literature since World War I.
- LIT 250 Topics in Literature (3-0)** 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 derivations 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.

MCM Mass Communication/Journalism

- 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 related areas of public relations and advertising. Focuses on media convergence, trends and issues. Analyzes the impact and effects of media on our consumer culture and democratic system. Encourages critical evaluation of the media.
IAI MC 911
- MCM 126 Introduction to Broadcasting (3-0)** 3 crs.
Introduces the basic history, technology and terminology of the radio and television broadcasting and cable industries. Explores commercial and non-commercial station operation, the roles of advertising and ratings, programming trends and career opportunities. Examines the effects of mega mergers and media convergence and the cultural impact of broadcasting over the years. Recognizes the importance of regulation, legislation and community standards in broadcasting.
IAI MC 914.
- MCM 130 Introduction to Journalism (3-0)** 3 crs.
Introduces the 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 131 News Reporting and Writing (3-0)** 3 crs.
Presents theory and techniques for gathering and writing news in political, police, social and civic coverage. Develops advanced reportorial and writing skills. Uses industry standard computer hardware and software.
IAI MC 919
Prerequisite: MCM 130 with a grade of C or better.
- MCM 133 Feature Writing (3-0)** 3 crs.
Focuses on writing and selling non-fiction articles. Develops the techniques to analyze markets, develop story ideas, prepare the query and submit the article. Stresses the importance of interviewing and researching, descriptive language and writing with clarity. Uses Macintosh computers with current word processing programs.
- MCM 136 Broadcast Writing (3-0)** 3 crs.
Develops skills needed to write for the broadcast media including television, radio and film. Focuses on the oral style. Emphasizes gathering of information, interviewing, writing and editing scripts and writing for continuity for video or film. Examines the legal, ethical and social implications of broadcast writing and programming.
IAI MC 917
- MCM 137 Media Writing (3-0)** 3 crs.
Provides an overview of the various formats and structures used in writing for the media. Includes writing for newspapers, radio and television stations, advertising and public relations agencies, business and industrial communications and new media technology. Focuses on information gathering, the elements of good writing, and matching message and audience.

MCM 140 Writing, Editing, and Design for the Internet (2-2) 3 crs.
 Introduces the writing styles, design principles and techniques to develop and manage web sites for journalism outlets such as newspapers, magazines and broadcast stations. Demonstrates the design process through storyboarding. Illustrates considerations in planning navigation, linking and site maps. Includes transferring photos, audio and video images using web design software. Discusses legal and ethical issues that apply to new media. Upon completion of this course, students are strongly encouraged to select WEB 150 to further their knowledge of Internet technology and Web-authoring tools.
 IAI MC 922
Prerequisite: MCM 130 and WEB 101 with grades of C or better.

MCM 141 Basic News Editing (2-2) 3 crs.
 Introduces the principles and techniques of copy editing for newspapers. Demonstrates the process of editing and rewriting while maintaining story's original focus. Students will learn to write appropriate headlines and cutlines, and to select and edit wire service copy. Builds on the Associated Press (AP) style knowledge. Teaches layout and design basics including typography and incorporation photos and other visual elements. Emphasizes legal and ethical concerns editors face in decision making on deadline schedule.
 IAI MC 920.
Prerequisite: MCM 130 and MCM 131 with grades of C or better.

MCM 230 Graphic Design Communication (3-0) 3 crs.
 Introduces students to contemporary design, photo manipulation, Web page design, animation, audio techniques, and page layout necessary for producing a variety of journalistic publications.

MCM 232 Introduction to Advertising (3-0) 3 crs.
 Explores the theory and practice of the advertising industry. Introduces students to the business and creative aspects of advertising. Students prepare original advertising campaigns from market and product research to evaluation. Familiarizes the student with desktop publishing using various software programs. Computer design experience is strongly recommended.
 IAI MC 912
Prerequisite: MCM 120 with a grade of C or better.

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.
 IAI MC 913
 Recommended **Prerequisite:** MCM 230 with a grade of C or better, or computer design experience.

MCM 235 Magazine Editing and Design (3-0) 3 crs.
 Introduces advanced writing, rewriting, and editing practices. Teaches students how to produce various publications using computer applications. Focuses on preparation and production of magazines, flyers, brochures, newsletters, and annual reports. Incorporates writing, copy editing, photography and illustrations, typography, page design and printing. Students produce a publication as a class project.
 Recommended **Prerequisite:** MCM 230 with a grade of C or better, or computer design experience.

MCM 240 Topics in Mass Communication (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.

MCM 241 Online Magazine Publishing (2-2) 3 crs.
 Explores online magazine publishing for new media writers and designers. Focuses on the preparation and publication of an online magazine through writing, page design, and Web site usage.
Prerequisite: MCM 140 with a grade of C or better.

MCM 242 Using the Internet as a Communications Tool (2-0) 2 crs.
 Explores the theory and practice of using the world wide Web for communication. Introduces students to the journalistic and creative aspects of using the Web for training, advertising, marketing, and research.
Prerequisite: WEB 101 with a grade of C or better, or consent of instructor.

MCM 243 Communication Web Site Applications (2-2) 3 crs.
 Applies writing and design skills to create a communications Web site for businesses from start to finish, including background information and links to related sites.
Prerequisite: MCM 241 with a grade of C or better.

MCM 250 Public Relations Writing and Production (3-0) 3 crs.
 Focuses on development of speed, clarity, brevity and style in writing for a range of audiences. Stresses the role of the public relations specialist as a bridge between the interests of the client organization and its stakeholders. Teaches how to write professionally in formats most frequently used by the public relations practitioners including news releases, feature articles, brochures, newsletters and public service announcements.
Prerequisite: ENG 101 and MCM 233 with grades of C or better.

MCM 251 Media Interviewing (3-0) 3 crs.
 Explores the critical art of interviewing. Teaches skills from both sides of the interview process including basic psychology and techniques of cultivating contacts, dealing with difficult sources, retrieving sensitive information, and tracking down elusive people. Focuses on preparation for and the conducting of a strong interview to aid in the production of materials for print, broadcast, or electronic media. Also explores confidentiality and interview ethics.
Prerequisite: MCM 131 or MCM 137 with grades of C or better.

MCM 252 Special Events and Promotions (3-0) 3 crs.
 Introduces students to one of the key tools of the public relations practitioner, the special event. Focuses on the role special events and promotions play in organizational communication including understanding the function, implementation and evaluation of the event. Identifies the various kinds of events and their particular uses. Covers the special event planning process, creative brainstorming, budgeting, overcoming obstacles, attracting sponsorships, soliciting volunteers, and event evaluations.
Prerequisite: MCM 233 with a grade of C or better.

MCM 260 Campaign Communication and Message Design (3-0) 3 crs.
 Explores the development and execution of comprehensive public relations campaigns within real-world circumstances. Examines what an organization's expectations of a public relations practitioner are and how to use this function to support other departments of the organization. Focuses on contemporary cases and the public relations tools necessary for effective strategic campaigns. This course is a capstone experience for public relations students and takes a hands-on approach to creating a public relations campaign for a client.
Prerequisite: MCM 250 with a grade of C or better.

MGT Management

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 115 Introduction to International Business (3-0) 3 crs.
Provides introductory concepts, principles and practice of the international business environment. The issues include the nature of international business; international organizations and monetary systems; the various foreign forces such as labor, legal, political, and cultural; and the impact on the U.S. economy and business.

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 Small Business Management (3-0) 3 crs.
Organization and operation of the small-scale retail, trading, service or manufacturing business. Location, financing, marketing, labor, accounting, and in the case of manufacturing, production, plus related problems of stock control, taxes and insurance.

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 International Management (3-0) 3 crs.
Analyzes the problems and practices in international business management activities. The issues include American management techniques in foreign settings, comparative management among different countries and the complexity introduced by the management of international companies. The course focuses on international organizational functioning to help the student gain a diversity of views.

Prerequisite: MGT 111.

MGT 168 OSHA Standards and Compliance Procedures (3-0) 3 crs.
Develops skills and competencies needed in instituting proper occupational safety and health environment in commercial and manufacturing business establishments for compliance with federal OSHA standards.

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 MGT 170 or BFC 200, 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 Foundations (1-0) 1 cr.
Introduces the concept of leadership and the impact a leader has on an organization. Emphasis is on the values of leadership traits, motives of recognized leaders and their styles and ethical behavior.

MGT 206 Leadership Skills (1-0) 1 cr.
Explores skill areas necessary for the successful leader in any organization. Emphasis is on problem-solving, motivation, conflict and negotiations, organizational vision and cultural diversity.

MGT 207 Leadership Trends (1-0) 1 cr.
Examines the impact of the future on leadership development today. Connects the need to understand one's self with internal and external influences on an organization in order to better prepare the leader for the 21st century.

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 work station.

Prerequisite: MGT 154.

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, but not both.)

IAI BUS 901, IAI M1 902

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 23 or more will satisfy all the previous prerequisites mentioned for this course.

MGT 230 Topics in Business (.5-0 to 3-0) .5-3 crs.
Studies selected problems or topics in business. The exact contents 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 two times to a maximum of three credit hours.

MGT 254 Small Business Formation (3-0) 3 crs.
Examines the problems in starting, expanding, and diversifying a small business. Includes forms of ownership; evaluation of risk in various types of businesses; performance measurement and market research; site location and layout; growth and trend analysis. It is recommended that MGT 154 be taken prior to enrollment.

MGT 265 Human Resources Management (3-0) 3 crs.
Addresses personnel problems and labor relations. Employment techniques, wages and hours, job evaluation, training, rating, collective bargaining, pensions, and fringe benefits will be examined.

Prerequisite: MGT 111.

MGT 266 Wage Analysis and Administration (3-0) 3 crs.
Studies the compensation process: wage, salaries, wage theory and legal considerations. Examines various fringe benefits, profit sharing, job analysis and its evaluations.

Prerequisite: MGT 265.

COURSE DESCRIPTIONS

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. Emphasis is given to decision making. Case problems, simulation and directed reading.

Prerequisite: MGT 160 and MGT 270 or consent of the instructor.

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 110 Retail Store Layout and Imaging (2-0) 2 crs.
Examines the importance and relationship of store layout, image projection, interior merchandise presentation and site location to store success. This course is designed to allow the learner to understand the relationship of image and product positioning to sales and profit. Emphasis is placed on layout, space allocation, interior merchandise presentation and store operations.

MKT 120 Customer Service (1-0) 1 cr.
Studies the importance of customer service satisfaction and the functions of various customer relation systems. This course is designed to promote an understanding of customer service in general and how it specifically contributes to the success of the marketplace and individual businesses. Emphasis is placed on the importance of striving for excellence in service to win and hold customers and to gain a competitive advantage.

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 190 Export Documentation (3-0) 3 crs.
Provides an understanding of the procedures and necessary documentation for exporting both goods and services. Course content will cover shipping documentation as well as insurance, banking and finance and governmental forms required for export marketing.

Prerequisite: MKT 260 or consent of program coordinator.

MKT 191 Business in the European Union (3-0) 3 crs.
Presents a general overview of cultural, political and economic infrastructure characteristics in the European Union with an emphasis on how these affect businesses in the United States. Focuses on unique and similar characteristics of member countries, and trade relationships and opportunities.

MKT 193 Business in Asia (3-0) 3 crs.
Studies of global business applications in Asia. Researches economic, social, political, technological and competitive factors. Explores relationships among countries and geographic pacts (including ASEAN and APEC).

MKT 196 Business in Latin America (3-0) 3 crs.
Presents a general overview of cultural, political and economic conditions in Latin America (including the Caribbean, Central America, Mexico and South America) with an emphasis on how these affect businesses in the United States. Studies regional trade pacts such as NAFTA, FTA and MERCOSUR.

MKT 202 Marketing for Non-Profit Organizations (3-0) 3 crs.
Provides practical applications in marketing for non-profit organizations. Encompasses the entire marketing process including positioning, targeting, and effective research methods.

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.

MKT 246 Business to Business Marketing (3-0) 3 crs.
 Provides a comprehensive understanding of industrial marketing by analyzing concepts and techniques in each of the major functional areas of industrial marketing. Topics to be investigated would include market development, product planning, price competition, promotional strategies, customer relations and marketing logistics.
Prerequisite: MKT 245 or consent of coordinator.

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 this 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 248 Direct Marketing (3-0) 3 crs.
 Explores the principles involved in the introduction of goods and services directly to the customer through various media sources without the use of a retail facility. Emphasis is placed on determining the correct target market, creating a measurable database, measuring the rate of response, selection and planning of media, and strategic implementation of a planned campaign. Development of direct mail pieces, telemarketing tools and broadcast and print media will be covered.
Prerequisite: MKT 245 or consent of program coordinator.

MKT 250 Retailing (3-0) 3 crs.
 Surveys types of retail institutions, including consideration of store location and organizational procedures, buying and merchandising practices, promotional and personnel policies.

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 or MKT 250.

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 260 International Marketing (3-0) 3 crs.
 Allows students to gain a broad understanding of the field of international marketing. It also provides insight into how international marketing is conducted, the requisites for effective performance and a knowledge of the special problems involved in language, finance and customs. Most importantly, it assists students in understanding international marketing problems and how marketing procedures apply to international business.

MKT 280 Marketing Problems (3-0) 3 crs.
 Focuses on the application of marketing skills and knowledge to marketing problems, case studies, projects or decision-making simulation.
Prerequisite: MKT 245 and nine hours of marketing courses, 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: Consent of program coordinator.

MKT 285 Topics in Marketing (.5-0 to 3-0) .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.

MKT 290 Principles of Exporting and Importing (3-0) 3 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.
Prerequisite: Prior or concurrent enrollment in MKT 260.

MNT Maintenance

MNT 105 Machining Processes I (1-5) 3 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 theory and operation of lathes, mills and surface grinders. Students are provided classroom and laboratory learning experiences while making a working tool.

MNT 110 Basic Welding (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.

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 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. Students are introduced to gauge blocks, height gauges, magnetic sine plate, and modern indexable tooling.
Prerequisite: MNT 105 and MTH 060 with grades of C or better, or consent of program coordinator.

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.

COURSE DESCRIPTIONS**MNT 210 Advanced Welding (1-4) 3 crs.**

Covers advanced welding theory and practice in arc welding. Provides experience in MIG and TIG (Heliarc) techniques. An introduction to strength of weld testing will be included.

Prerequisite: MNT 110 with a grade of C or better, or consent of instructor.

MNT 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: MNT 210 with a grade of C or better, or consent of program coordinator.

MNT 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). Emphasis will be placed on 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 AWS (American Welding Society) D1.1 Structural Welding Code.

Prerequisite: MNT 211 with a grade of C or better, or consent of program coordinator.

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 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 of 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 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. 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: ENG 101, HSC 104 and HSC 112 with grades of C or better.

MOA 150 Math Applications in Health Care (1-0) 1 cr.

Develops skill necessary to calculate medication dosages and solutions. A basic math ability, including decimals, fractions and percentages, is necessary to be successful in this course. Use of calculators emphasized with health care-related applications.

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. Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) coding techniques are introduced. Emphasis is on insurance rules and regulations, claim submission, reimbursement and collections.

Prerequisite: HSC 112 with a grade of C or better and prior or current enrollment in either BIO 135 or BIO 136 with a grade 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.

Prerequisite: BIO 135, BIO 136 and HSC 112 with grades of C or better. Prior or concurrent enrollment in MOA 195.

MOA 197 International Classification of Disease (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. Prior or concurrent enrollment in MOA 195.

MOA 215 Clinical Procedures (4-8) 8 crs.

Offers basic and advanced clinical techniques in the physician's examining room. 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. Includes a clinical rotation in a health care facility. (NOTE: The program's health requirements and American Heart Association Cardiopulmonary Resuscitation (CPR) certificate must be completed prior to placement in clinical rotation.)

Prerequisite: HSC 104, HSC 105, HSC 107, HSC 112, HSC 165, MOA 145 and MOA 150 with grades of C or better.

Corequisite: MOA 235.

MOA 235 Health Care Office Procedures (2-2) 3 crs.
Offers development of skills in office procedures used in a health care facility. Emphasizes patient relations in health care and office simulations. 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 240 Medical Transcription I (2-2) 3 crs.
Develops speed and accuracy in transcribing a variety of basic medical reports, using a transcriber and computer. Enhances student's knowledge of health care reports and terminology. Emphasis is on basic transcription techniques and guidelines.

Prerequisite: BIO 135, BIO 136, HSC 104, HSC 105, HSC 112 and MOA 145 with grades of C or better.

MOA 242 Medical Transcription II (2-2) 3 crs.
Offers speed and accuracy development in transcribing various health care reports and familiarizes student with the report formats. Extensive use of transcriber and computer. Progresses to advanced, specialized hospital dictation. Emphasis is on advanced transcription techniques and guidelines. Course is designed for students intending to enter the medical transcription profession.

Prerequisite: MOA 240 with a grade 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. 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).

Corequisite: MOA 265 or MOA 280.

MOA 265 Medical Office Administration 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. One-hour seminar each week devoted to health care issues. NOTE: The program's health requirements must be completed prior to placement in externship.

Prerequisite: MOA 235 or MOA 240 with a grade of C or better.

MOA 280 Medical Assistant Externship (1-10) 3 crs.

Provides 208 hours during the semester of supervised experience in a health care facility to enhance the student's administrative technical skills. One-hour seminar each week devoted to health care 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 and prior or concurrent enrollment of HSC 165 with a grade of C or better.

Corequisite: MOA 245.

MOA 299* Medical Office Capstone (3-0) 3 crs.

Applies and integrates skills from with Medical Office Administration courses within the AAS degree program. Discusses medical office management issues and methodologies and puts them into practice.

Prerequisite: MGT 111, MGT 270 and MOA 235 with grades of C or better.

Corequisite: MOA 245.

**This course is pending ICCB approval.*

MTH Mathematics

MTH 051 Arithmetic of Whole Numbers (0-2) 1 cr.

Covers reading and writing whole numbers 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 math placement test.

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 math placement test.

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 math placement test.

MTH 055 Basic Mathematics (3-0) 3 crs.

Covers the arithmetic of fractions, decimals, ratio, proportion, percent, measurement and rational numbers. Includes estimation, applications and graph interpretation. This course includes content of MTH 052, MTH 053 and MTH 054 and is offered as a lecture course or in the Math Lab as a lab course. Carries no transfer credit.

Prerequisite: MTH 051 with a grade of C or better or math placement test.

MTH 060 Foundations of Mathematics I (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 or MTH 055 with a grade of C or better or math placement test.

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 math placement test.

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.

COURSE DESCRIPTIONS**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 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 math placement test.

MTH 068 Foundations of Mathematics 1B (1-2) 2 crs.

Continues the basic concepts of algebra including real numbers, variable, 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 063 with a grade of C or better or required placement test score.

MTH 080 Foundations of Mathematics II (4-0) 4 crs.

Continues MTH 060 and introduces fundamental concepts of algebra including rational expressions, complex numbers, and functions that are polynomial, rational, exponential or logarithmic. Emphasizes mathematical reasoning and problem solving utilizing multiple approaches (algebraic, geometric, and numeric techniques) with focus on mathematical definitions, theorems, symbols and notations. 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, MTH 063 or MTH 068 with grades of C or better or required math placement test score.

MTH 101 Quantitative Literacy (4-0) 4 crs.

Focuses on the analysis and solution of problems. Includes representing and analyzing data using statistical measures, using logical reasoning in a real-world context, estimating, approximating, and judging the reasonableness of answers, and the use of appropriate approaches and tools, such as calculators and computers, in formulating and solving real-world problems. IAI M1 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 23 or more will satisfy all the previous prerequisites mentioned for this course.

MTH 103 College Algebra (3-0) 3 crs.

Emphasizes algebraic and graphical approaches to college algebra. Topics include but are not limited to: polynomial, rational, exponential, and logarithmic functions; systems of equations and inequalities; matrices; sequences and series, mathematical modeling. NOTE: This course does not fulfill the math requirement for the AA or AS degree.

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 23 or more will satisfy all the previous prerequisites mentioned for this course.

MTH 104 Plane Trigonometry (3-0) 3 crs.

Develops trigonometric functions and relations, solutions of triangles, complex numbers, identities, equations and applications.

Prerequisite: An ACT Math score of 28 or more with consent of the Mathematics Department Chair. (NOTE: Students who have completed MTH 103 with a grade of C or better before Fall 2004 may take MTH 104 to satisfy the prerequisite for MTH 200.)

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 and MTH 103 with a grade of C or better or placement test. 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 for 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 placement test. An ACT Math score of 23 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

Prerequisite: MTH 070 (or equivalent) with a grade of C or better or Geometry placement test and MTH 103 with a grade of C or better or placement test. 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 to provide the foundation in calculus and analytic geometry. Topics include but are not limited to: polynomial and rational functions and inequalities, analytic geometry, trigonometric functions, analytic geometry, inverse functions, applications of trigonometric functions, polar coordinates and vectors, the complex plane and relationships among exponential, logarithmic, and trigonometric functions.

Prerequisite: MTH 070 (or equivalent) with a grade of C or better or Geometry placement test and MTH 103 with a grade of C or better or placement test. An ACT Math score of 28 or more will satisfy all the previous prerequisites mentioned for this course.

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 165 or MGT 225, but not both.)
IAI M1 902
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 23 or more will satisfy all the previous prerequisites mentioned for this course.

MTH 200 Calculus with Analytic Geometry I (5-0) 5 crs.
Studies limits, the derivative and the definite integral with applications to geometry, science and engineering.
IAI M1 900-1, IAI MTH 901
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.

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 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, MTH 903
Prerequisite: MTH 201 with a grade of C or better.

MTH 203 Linear Algebra (4-0) 4 crs.
Introduces matrices, vector spaces, linear transformations. Serves as a first exposure to abstract mathematical structures. Includes 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, 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 and MTH 103 with a grade of C or better or placement test. An ACT Math score of 28 or more will satisfy all the previous prerequisites mentioned for this course.

MTH 265 Mathematical Statistics (3-0) 3 crs.
Includes the study of probability spaces, random variables and distributions, laws of large numbers and central limit theorem, joint probability distributions, sampling distributions, theory of estimation, simple linear regression and introduction to SPSS.
Prerequisite: MTH 202 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 instrument 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 resulted 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 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.

COURSE DESCRIPTIONS

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 experience 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 is 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 180-199 Minor Applied Music Subject (.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 in Fine Arts degree.

Flute and Piccolo, 180; Oboe and English Horn, 181; Clarinet, 182; Bassoon and Contra Bassoon, 183; Saxophone, 184; French Horn, 185; Trumpet, 186; Trombone, 187; Baritone, 188; Tuba, 189; Percussion, 190; Violin, 191; Viola, 192; Cello, 193; String Bass, 194; Harp, 195; Piano, 196; Organ, 197; Voice, 198; and Classical Guitar, 199.

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.

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 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 271 Piano Pedagogy I (3-0) 3 crs.
Surveys the basic teaching philosophies, methods, materials and skills needed to teach the beginning piano student. Observation of individual and group instruction.
Prerequisite: MUS 265 with a grade of C or better, or consent of instructor.

MUS 272 Piano Pedagogy II (2-2) 3 crs.
Continues development of skills begun in MUS 271. Emphasis will be placed on methods and materials for teaching the intermediate piano student. Lab includes supervised student teaching to aid in individual development.
Prerequisite: MUS 271 with a grade of C or better.

MUS 280-299 Major Applied Music Subject (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.
Flute and Piccolo, 280; Oboe and English Horn, 281; Clarinet, 282; Bassoon and Contra Bassoon, 283; Saxophone, 284; French Horn, 285; Trumpet, 286; Trombone, 287; Baritone, 288; Tuba, 289; Percussion, 290; Violin, 291; Viola, 292; Cello, 293; String Bass, 294; Harp, 295; Piano, 296; Organ, 297; Voice, 298; and Classical Guitar, 299.

NAN Nanoscience Technology

NAN 121 Fundamentals of Nanoscience I (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.

NAN 122 Fundamentals of Nanoscience II (2-2) 3 crs.
Covers nanoscience aspects as they relate to the fields of chemistry and physics. Emphasizes the impact of new developments in nanotechnology. Atomic structure, bonding, photonics, quantum effects, and wave/particle structure will be discussed with a focus on nanotechnology. Feasibility of implementation will be covered as well as the development of a nanoscale understanding of properties such as color, magnetism, electrical forces, strength, and rigidity.

Prerequisite: NAN 121 with a grade of C or better.

NAN 211 Nanoelectronics (2-2) 3 crs.
Covers state-of-the-art processes currently used for the fabrication of microelectronic and nanoelectronic devices. Students will learn to qualify and use semiconductor process equipment, inspect devices and perform electrical measurements on semiconductor devices. Considerations such as cost, manufacturing methodology, and societal impacts will be covered. Approaches for the development of quantum computers, holographic memories, and biological systems will be discussed.

Prerequisite: MTH 103 or higher and NAN 122 with grades of C or better.

NAN 221 Nanobiotechnology (2-2) 3 crs.
Studies the use of nanotechnology as it applies to biological and agricultural applications. Includes detecting and identifying DNA and proteins; drug delivery and medical imaging; mimicking biological systems to develop catalysts; nanoscale movement and information systems; and nanotechnology for agricultural applications such as ethanol production, sorbitol-based fuel cells, genetics, and uses of cellulose.

Prerequisite: BIO 110 and NAN 122 with grades of C or better.

NAN 231 Nanomaterials (2-2) 3 crs.
Discusses the opportunity and challenge of nanomaterial-based products from pharmaceutical coatings to smog-reducing paints to individual crystal structure determination. Includes manufacturing processes along with reliability and quality control aspects.

Prerequisite: MTH 103 or higher and NAN 122 with grades of C or better.

NAN 241 Nanoscience Manufacturing (2-2) 3 crs.
Presents an overview of quality methods as they relate to nanotechnology. Emphasizes statistical process control (SPC), design of experiments (DOE), gage repeatability and reliability (R&R), statistical significance, correlation, team-based problem solving, failure mode analysis, theory of inventive thinking (TRIZ), graphical statistical analysis, analysis of variance (ANOVA), and an introduction to ISO certification.

Prerequisite: MTH 165, NAN 211, NAN 221 and PHY 122 with grades of C or better.

NAN 295 Independent Research in Nanoscience (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 practices of modern experimental nanotechnology. Credit is contingent on the submission of a final report. Consent of the program coordinator is necessary to register for this course.

NAN 299 Nanoscience Internship (1-20) 6 crs.
Applies and expands nanoscience skills and knowledge in a research or industrial setting. Conducted jointly by Harper College and a research institution or industrial partner which will provide students authentic experiences using nanoscience instrumentation. Students must complete a minimum of 200 contact hours and submit a final report to earn 6 semester credit hours.

Prerequisite: Prior or concurrent enrollment in NAN 241 with a grade of C or better, prior consultation with instructor, and consent of program coordinator.

NET Networking

NET 100 Windows Fundamentals (5-1) 1 cr.
Introduces the student to the use of a graphical interface for the Windows operating system. Includes the use of the graphical interface and some of the built-in desktop and system accessories.

NET 101 Windows (2-2) 3 crs.
Introduces a student to the use of a graphical interface for the operating system. Includes the use of the graphical interface, built-in desktop accessories, and built-in system accessories. Covers several features of application packages when used in a Windows environment, networking considerations and switching between applications. Provides students with an introduction to the command-line environment, command-line file management, directory management, disk management, and the use of wildcards and options. Also introduces batch file concepts.

NET 106 Introduction to Linux (2-2) 3 crs.
Provides students with knowledge and hands-on experience in installing Linux, using the command line to manage a personal Linux workstation, and using a Graphical User Interface when appropriate. Students learn to manage files and file permissions, use the vim editor, and are introduced to operating system concepts such as file systems, pipes, filters, redirection, and processes.

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. Recommended preparation: CIS 101, NET 101, NET 106 or equivalent experience.

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. Recommended preparation: CIS 101, NET 101, NET 106 or equivalent experience.

COURSE DESCRIPTIONS

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.

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. Recommended preparation: NET 121 or equivalent experience.

NET 141 Linux Administration (2-2) 3 crs.
Provides students with knowledge and hands-on experience in installation, using utilities on the command line and using Graphical User Interface, using programming tools, editing text files and simple shell scripting. Also provides an understanding of the Linux kernel, introductory networking concepts, and file systems.

NET 161 Windows Client Administration (2-2) 3 crs.
Provides students with knowledge and experience in installation, operation, administration, and troubleshooting Microsoft's Professional Workstation (PC) Operating System. Recommended preparation: NET 111, NET 112, NET 121 and NET 122 or equivalent experience.

NET 171 Cisco Networking Basics (2-2) 3 crs.
Provides students with a basic understanding of networking terminology, protocols, LANs, WANs, topologies, and communications.

NET 172 Cisco Routing Basics (2-2) 3 crs.
Provides students with a basic understanding of routers and routing including router interfaces, components configurations, IOS, TCP/IP addressing and subnetting, and routing protocols.
Prerequisite: NET 171 with a grade of C or better.

NET 173 Cisco Switching Basics (2-2) 3 crs.
Provides students with a basic understanding of switching and intermediate routing including switches, VLANs, Spanning-Tree protocol, routing and routine protocols, access control lists, network documentation, security, and troubleshooting.
Prerequisite: NET 172 with a grade of C or better.

NET 174 Cisco Network Design (2-2) 3 crs.
Provides students with an understanding of basic network design including network requirements, IP addressing, prototyping, WANs and proposal preparation.
Prerequisite: NET 173 with a grade of C or better.

NET 182 Computer Forensics (2-2) 3 crs.
Provides students with a comprehensive introduction to computer forensics: the preservation, identification, extraction, documentation and interpretation of computer data. Topics include computer forensics tools, file systems and disk structures, information analysis, and proper incident response techniques. Recommended preparation: NET 111 and NET 112 or equivalent experience.

NET 201 Help Desk/Soft Skills (2-2) 3 crs.
Introduces and provides practice in the business, team, communication, and self-management skills needed to provide excellent technical support for computer users. Recommended preparation: NET 111 and NET 112 or equivalent experience.

NET 211 Supporting Operating Systems (2-2) 3 crs.
Provides students with hands-on experience installing, configuring, managing, and troubleshooting a currently popular operating system. Topics also include troubleshooting desktop user environments, networking and network resources such as printers and storage devices. Recommended preparation: NET 111, NET 112, NET 121, and NET 122 or equivalent experience.

NET 212 Supporting Applications (2-2) 3 crs.
Provides students with hands-on experience installing, configuring, managing and troubleshooting currently popular desktop office applications. Topics also include identifying and troubleshooting network issues, configuring application security settings, and monitoring security vulnerabilities and updates. Recommended preparation: CAS 160 and NET 211 or equivalent experience.

NET 221 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. Recommended preparation: NET 121 or equivalent experience.

NET 222 Communications Technologies (2-2) 3 crs.
Provides students with an introduction to communications technologies, telecommunications, and data convergence. Topics include telephony, network engineering, communications applications, hardware, architecture, management and security. Recommended preparation: NET 122 or equivalent experience.

NET 223 Information Storage and Management (2-2) 3 crs.
Provides students with an introduction to information storage and management concepts. Includes storage systems, storage networking technologies and virtualization, business continuity, and storage security and management. Recommended preparation: NET 122 or equivalent experience.

NET 231* Windows Scripting (2-2) 3 crs.
Provides students with hands-on experience scripting the Windows environment. Topics include Windows Script Host, VBScript, variables and arrays, conditional logic, procedures, file and data access, error handling, and registry settings. A variety of administrative scripts are created throughout the course. Recommended preparation: NET 112 and NET 121 or equivalent experience.

*This course is pending ICCB approval.

NET 236 Linux Shell Scripting (2-2) 3 crs.
Provides students with in-depth knowledge of basic and advanced topics, and the hands-on experience needed to master Shell Programming. Recommended preparation: NET 141 or equivalent experience.

NET 241 Linux Networking (2-2) 3 crs.
Provides students with knowledge and hands-on experience in Linux system administration, including user and group account management, file system, set-up and management, back-up strategies, software installation, and performance monitoring. Recommended preparation: NET 141 or equivalent experience.

NET 242 Linux Security (2-2) 3 crs.
Provides students with knowledge and hands-on experience in configuring a secure Linux network using command line and graphical utilities. Introduces students to networking technologies and protocols, protection of business assets and user privacy, and system administrator ethics. Recommended preparation: NET 241 or equivalent experience.

NET 261 Windows Server Administration (2-2) 3 crs.
Provides students with knowledge and experience in installation, operation, administration, and troubleshooting Microsoft's Server Operating System. Recommended preparation: NET 111, NET 112, NET 121 and NET 122 or equivalent experience.

NET 262 Windows Network Administration (2-2) 3 crs.
Provides students with knowledge and skills to administer, upgrade, and maintain a Microsoft-based network. Recommended preparation: NET 261 or equivalent experience.

NET 263 Windows Directory Services Administration (2-2) 3 crs.
Provides students the knowledge and skills to administer, upgrade, and maintain the Directory Services in a Microsoft-based network. Recommended preparation: NET 262 or equivalent experience.

- NET 270 Cisco Networking (CCNA) (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. Recommended preparation: NET 111, NET 112, NET 121 and NET 122 or equivalent experience.
- NET 271 Cisco Advanced Routing (2-2)** 3 crs.
Provides students with experience performing advanced routing tasks including selecting and configuring scalable IP addresses; implementing OSPF, EIGRP and BGP; configuring access lists; and designing and attesting edge router connectivity into a BGP network.
Prerequisite: NET 174 or NET 270 with grades of C or better.
- NET 272 Cisco Remote Access (2-2)** 3 crs.
Provides students with experience performing advanced remote access tasks including configuring asynchronous connections, PPP, ISDN, X.25, frame relay and AAA.
Prerequisite: NET 174 or NET 270 with a grade of C or better.
- NET 273 Cisco Multilayer Switching (2-2)** 3 crs.
Provides students with experience performing multiplayer switching tasks including Fast Ethernet, Gigabit Ethernet, VLANs, Spanning Tree Protocol, MLS processes and configuration, and multicasting.
Prerequisite: NET 174 or NET 270 with a grade of C or better.
- NET 274 Cisco Networking Troubleshooting (2-2)** 3 crs.
Provides students with experience performing network troubleshooting tasks in areas such as OSI layers 1, 2 and 3, TCP/IP, switching, VLANs, frame relay, ISDN, EIGRP, OSPF, and BGP.
Prerequisite: NET 273 with a grade 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. Recommended preparation: NET 121 and NET 122 or equivalent experience.
- NET 281 Networking Systems Security (2-2)** 3 crs.
Provides students with hands-on experience securing a variety of networking systems. Topics include Linux and Windows operating systems, routers, wireless networks, auditing and contingency planning. Recommended preparation: NET 280 or equivalent experience.
- NET 282 Network Defense and Countermeasures (2-2)** 3 crs.
Provides students with hands-on experience securing network access. Topics include security policies, firewalls, remote access, virtual private networks, and intrusion detection. Recommended preparation: NET 280 or equivalent experience.
- NET 283 Ethical Hacking (2-2)** 3 crs.
Provides students with hands-on experience using penetration tools and techniques to test and protect computer networks. Topics include network and computer attacks, footprinting, social engineering, scanning, enumeration, cryptography, operating system and device vulnerability, and related ethical considerations. NOTE: A criminal background check is required.
Prerequisite: PHI 115 or PHI 150, NET 231 or NET 236, and NET 280 with grades of C or better.
- NET 284 Computer Security Incident Response (2-2)** 3 crs.
Provides students with hands-on experience preparing for and responding to computer security incidents. Topics include incident response preparation, detection, reaction, recovery, and maintenance. Computer-related disaster recovery and business continuity planning are also addressed. Recommended preparation: NET 280 or equivalent experience.

- NET 289 Security Capstone (1-4)** 3 crs.
Provides students with security implementation and troubleshooting skills. Based upon real-life conditions, students will establish a corporate networking environment. The network will then be alternately analyzed and attacked, providing opportunity for students to determine security risks, forensically identify and document security incidents, and provide proper responses to resolve security issues.
Prerequisite: NET 281 and NET 282 or NET 283 and NET 284 with grades of C or better.
- NET 299 Networking Capstone (1-4)** 3 crs.
Provides students with network implementation and troubleshooting skills. Based upon real-life conditions, students will establish a corporate networking environment. The network will then be configured in various states of dysfunction, providing opportunity for students to identify problems and provide proper corrections and adjustments to make the network function properly again.
Prerequisite: Prior or concurrent enrollment in NET 231 or NET 236 and NET 270 and NET 280 with grades of C or better.

NUR Nursing

- NUR 101 PN Fundamentals (4-9)** 7 crs.
Introduces the student to the nursing process and the roles as member of the discipline of nursing and provider of care. Emphasizes assessment and intervention in caring for adult clients. 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 Lifespan Nursing for the PN (5-9)** 8 crs.
Focuses on the use of the nursing process to meet the needs of old adults, adults, children, infants, and childbearing women 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 (1-9)** 4 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 and NUR 108 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.

COURSE DESCRIPTIONS

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 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: 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 is 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 setting 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 199 Bridge to Advanced Nursing (-5-1.5) 1 cr.

Reviews nursing skills and theory to assist the incoming transfer licensed practical nurse or the continuing RN student, who has previously stepped out of the program, to successfully move into the second level of the Nursing program which focuses on the RN role. Emphasis is on the performance of selected nursing skills and utilization of the nursing process. Provides content on the Harper nursing program philosophy, curriculum, study strategies, support services and stress reduction techniques to bridge the student into the Harper Nursing program.

Prerequisite: Admission into the Nursing program. BIO 161, HSC 201, NUR 102, PSY 101 and PSY 228 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 is 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 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 assessments 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 setting 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 multisystems 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.

OCC Career Foundations

OCC 030 Computers in the Workplace (3-0) 3 crs.
 Presents a basic overview of the use of computers in the modern workplace. Emphasis will be placed on practical workplace applications or computer software. Enrollment is limited to students counseled and enrolled through the Office of Access and Disability Services (ADS). Carries no transfer credit.

OCC 040 Workplace Communication I (3-0) 3 crs.
 Explores the importance of effective communication in work situations. Methods of effective workplace communication are discussed and modeled by the students. Enrollment is limited to students counseled and enrolled through the Office of Access and Disability Services (ADS). Carries no transfer credit.

OCC 042 Workplace Communication II (3-0) 3 crs.
 Continues to explore the importance of effective communication in work situations. Methods of effective workplace and communication are discussed and modeled by the students. Enrollment is limited to students counseled and enrolled through the Office of Access and Disability Services (ADS). Carries no transfer credit.

Prerequisite: OCC 040 with a grade of C or better or consent of instructor.

OCC 050 Career Exploration I (3-0) 3 crs.
 Acquaints students with the American workplace. Explores the world of work and current issues and trends affecting employability. Introduces topics such as job/career assessment, individual education and employment plans, employment/life skills, job search techniques, employment documents, interviewing skills, employment practices and job retention skills. Enrollment is limited to students counseled and enrolled through the Office of Access and Disability Services (ADS). Carries no transfer credit.

OCC 052 Career Exploration II (3-0) 3 crs.
 Continues to acquaint students with the American workplace. Explores the world of work and current issues and trends affecting employability. Continues discussion of topics such as job/career assessment, individual education and employment plans, employment/life skills, job research techniques, employment documents, interviewing skills, employment practices and job retention skills. Enrollment is limited to students counseled and enrolled through the Office of Access and Disability Services (ADS). Carries no transfer credit.

Prerequisite: OCC 050 with a grade of C or better or consent of instructor.

OCC 060 Business Office Career Observation (1-15) 4 crs.
 Provides opportunities for Career Pathways students to apply their knowledge and skills in a business office setting. Classroom sessions allow for discussion of experiences and workplace practices. Enrollment is limited to students counseled and enrolled through the Office of Access and Disability Services (ADS). Carries no transfer credit.

COURSE DESCRIPTIONS

OCC 062 Workplace Experience (1-15) 4 crs.
Provides opportunities for Career Foundation project students to apply their knowledge and skills in a workplace setting. Classroom sessions allow for discussion of experiences and workplace practices. Enrollment is limited to students counseled and enrolled through the Office of Access and Disability Services (ADS). Carries no transfer credit.

Occupational Health and Safety

See: EHS Environmental Health

Paramedic

See: Emergency Medical Services (EMS)

PED Physical Education*

*Some, but not all, physical education courses can be taken more than one time for credit. Course descriptions indicate which courses are approved for repeating.

PED 100 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.

PED 104 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 training and the different methods of developing muscular strength and endurance. Students will also be able to apply the principles they have learned and ultimately develop their own individualized program. May be repeated up to a maximum of two credit hours.

PED 105 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.

PED 106 Weight Training — Olympic and Power (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. May be repeated up to a maximum of two credit hours.

PED 109 Volleyball (0-1) .5 cr.
Provides instruction in basic skills, rules, scoring and terminology. May be repeated up to a maximum of one credit hour.

PED 110 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.

PED 119 Mind/Body I (0-2) 1 cr.
Provides a wide variety of mind/body modalities designed to develop balance, strength, flexibility, proper posture alignment and stamina. Additional emphasis is on alleviating tension and fatigue and improving circulation. The fitness guidelines followed in this course are designed for the apparently healthy individual and are not designed for individuals with known heart, pulmonary or metabolic disease.

PED 120 Team Sports (0-2) 1 cr.
Provides instruction in one or two of the following team sports: competitive volleyball, floor hockey, football, soccer and softball. Material covered includes fundamental skills, offensive and defensive tactics of play, game strategy, rules and terminology. May be repeated up to a maximum of two credit hours.

PED 122 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.

PED 123 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.

PED 128 Yoga II (0-2) 1 cr.
Provides students with the opportunity to build on the skills they have gained in 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.
Prerequisite: PED 122 with a grade of C or better, or consent of instructor.

PED 129 Mind/Body II (0-2) 1 cr.
Provides advanced instruction in a variety of mind/body modalities. More advanced movement patterns are introduced. Requires strong abdominal core. Advanced breathing techniques are emphasized. The fitness guidelines followed in this course are designed for the apparently healthy individual and are not designed for individuals with known heart, pulmonary or metabolic disease.
Prerequisite: PED 119 with a grade of C or better or consent of instructor.

PED 130 Individual Sports (0-2) 1 cr.
Provides instruction in a variety of individual sports. Fundamental skills, terminology, proper equipment and safety are emphasized. Students will have the opportunity to practice the skills they have learned in a competition situation. Horse-back riding, snow skiing, cross country skiing, in-line skating, canoeing, fly casting, spin casting, cycling and mountain biking are some of the sports offered. May be repeated up to a maximum of two credit hours.

PED 131 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.)

PED 136 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 learned in a competitive situation.

PED 139 Aquasize (0-1) .5 cr.
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. May be repeated up to a maximum of one credit hour.

PED 140 Sculpturing Muscle Strength and Tone (0-1) .5 cr.
Provides students the opportunity to sculpture the entire body through muscle strength and endurance exercises to music. Flexibility and proper stretching exercises are emphasized. This course utilizes a variety of exercise equipment to accomplish personal exercise goals.

PED 144 Hap Ki Do (0-2) 1 cr.
Provides a basic understanding, training, and practical application of Hap Ki Do self-defense techniques. Includes proper training methods, physical conditioning, and techniques.

PED 145 Tae Kwon Do I (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.

PED 149 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 activities. May be repeated up to a maximum of two credit hours.

PED 150 Bowling (0-2) 1 cr.
Provides students with a progressive sequence in learning both basic and advanced skills. History, techniques, scoring and etiquette will also be covered. This course may be repeated up to a maximum of two credit hours.

PED 152 Golf (0-1) .5 cr.
Introduces to students the fundamentals of golf which include the grip, stance and swing using irons and woods. Terminology, etiquette, scoring and safety standards are also emphasized. May be repeated up to a maximum of one credit hour.

PED 153 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. May be repeated up to a maximum of two credit hours.

PED 154 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.

PED 158 Tennis (0-1) .5 cr.
Provides instruction of the basic skills, rules and scoring. Students will have the opportunity to practice their skills in both singles and doubles games situations. May be repeated up to a maximum of one credit hour.

PED 159 Competitive Tennis (0-1) .5 cr.
Provides rules, scoring, theory and practice of the skills of competitive tennis. Emphasizes game strategy in singles and doubles play. May be repeated up to a maximum of one credit hour.

PED 160 Modern Dance I (0-2) 1 cr.
Opportunity to explore movement potential, increase technical proficiency and broaden rhythm background; skills in technique and composition stressed. May be repeated up to a maximum of two credit hours.

PED 162 Introduction to Ballet (0-2) 1 cr.
Provides instruction for students with little or no previous training in ballet. May be repeated up to a maximum of two credit hours.

PED 163 Basic Aerobics (0-1) .5 cr.
Provides a wide variety of aerobic fitness programs structured to tone and trim the body. Vigorous exercise routines may be choreographed to music. Emphasis is on developing cardiovascular endurance, flexibility, muscular strength and endurance and movement efficiency. The fitness guidelines followed in this course are designed for the apparently healthy individual and are not designed for individuals with known heart, pulmonary or metabolic disease. May be repeated up to a maximum of one credit hour.

PED 166 Advanced Aerobics (0-1) .5 cr.
Provides a wide variety of advanced fitness programs structured to challenge the experienced student. Vigorous exercise routines may be choreographed to music. Emphasis is on developing a higher level of cardiovascular pulmonary endurance, flexibility, muscular strength and endurance and movement efficiency. The fitness guidelines followed in this course are designed for apparently healthy individuals and are not designed for individuals with known heart, pulmonary or metabolic disease.
Prerequisite: PED 163 with a grade of C or better or consent of instructor.

PED 167 Jazz Dance I (0-2) 1 cr.
Provides students with the elements of ballet, modern dance and Afro-Haitian to combine them into a dance form that is idiomatic, syncopated and fast paced. May be repeated up to a maximum of two credit hours.

PED 168 Racquetball (0-1) .5 cr.
Offers the theory and practice of the game of racquetball. Students will learn rules, terminology, etiquette and game strategies. Emphasis will be on developing basic and advanced racquetball skills. May be repeated up to a maximum of one credit hour.

PED 169 Competitive Racquetball (0-1) .5 cr.
Provides rules, scoring, theory and practice of the skills of competitive racquetball. Emphasis on the strategy of singles and doubles play. May be repeated up to a maximum of one credit hour.

PED 178 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.

PED 179 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.
Prerequisite: PED 178 with a grade of C or better, or consent of instructor.

PED 181 Ju-Jitsu I (0-2) 1 cr.
Introduces Ju-jitsu (Miyama Ryu) the art of the Japanese Samurai from which judo, aikido and karate were derived. Based on mechanical principles, ju-jitsu 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.

PED 183 Ju-Jitsu II (0-2) 1 cr.
Continues PED 181. Building upon the skills obtained in PED 181, a broader range of more advanced techniques and applications are covered.
Prerequisite: PED 181 with a grade of C or better, or consent of instructor.

COURSE DESCRIPTIONS

PED 191 Hip Hop Dance (0-2) 1 cr.
Provides students with the fundamentals of hip hop dance which includes basic and complex movements, musicality, rhythms and spatial awareness. Teaches students general patterns and basics for choreographing routines. May be repeated up to a maximum of two credit hours.

PED 195 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 stress test is required for men 45 years or older and women 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's clearance can be obtained.

PED 196 Physical Fitness II (0-2) 1 cr.
Continues PED 195. Introduces other wellness components as well, such as nutrition and stress management.
Prerequisite: PED 195 with a grade of C or better.

Physical Education Courses — Theory for Major and Minor Students

PED 200 Introduction to Physical Education (2-0) 2 crs.
Provides orientation and history of physical education in the United States. Presents aims and objectives and new approaches to physical education as an academic discipline.

PED 201 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 DPR and Responding to Emergencies certification, after successful completion of the skills and written tests.

PED 203 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.

PED 205 Drugs in Our Culture (3-0) 3 crs.
Presents materials that examine the physiological, psychological and sociological aspects of drug use and abuse. The intent of the course is to provide a potpourri of the facts, attitudes and opinions necessary to understand what drugs do, how they do it, who uses them and why. Also, treatment modalities as well as legal and ethical issues in drug abuse will be discussed.

PED 207 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.

PED 208 Personal Training I: Bioscientific Foundations (2-2) 3 crs.
Provides an analysis of basic human movement skills as they relate to exercise and physical fitness. Emphasis is on human anatomy and exercise physiology, as well as cardiorespiratory development, muscular strength and endurance. Guidelines for training and physical fitness are provided through laboratory experiences. Especially designed for students who plan on becoming a personal trainer, physical education teacher or for those who are entering the fitness field.

PED 209 Personal Training III: Functional Exercise Instruction (1-2) 2 crs.
Provides the academic and practical experience that will enable students who are interested in becoming certified exercise instructors or personal trainers to design and deliver safe and effective physical training programs.
Prerequisite: PED 208 with a grade of C or better, or consent of Department Chair.

PED 210 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 baseball, basketball and volleyball.

PED 211 Physical Education in Elementary School (3-0) 3 crs.
Provides instruction on the growth and development of elementary school children and the planning and organizing of elementary physical education programs.

PED 212 Personal Training II: Fitness Assessment Procedures (1-2) 2 crs.
Provides students with a study of the basic scientific components of physical fitness. It 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: PED 208 with a grade of C or better or consent of instructor.

PED 213 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.

PED 214 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 PED 208 and PED 212. 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: PED 208 and PED 212 with grades of C or better, or consent of the instructor.

PED 218 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 sport 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.)

PED 219 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.

PED 220 Track and Field Techniques (2-0) 2 crs.
 Provides an opportunity for students to learn the history of track and field as well as basic skill techniques, rules, training, conditioning, coaching techniques, meet administration and responsibilities of officials. Students are able to apply their skills by planning, participating and officiating their own track and field meet.

PED 221 Soccer Techniques (2-0) 2 crs.
 Provides the fundamental skills and organizational techniques of the game of soccer. Strategy, rules, terminology, practice drills, conditioning, safety standards and officiating techniques are emphasized.

PED 222 Football Techniques (2-0) 2 crs.
 Provides the fundamental skills and organization techniques of the game of football. Strategy, rules, terminology, practice drills, conditioning, safety standards and officiating techniques are emphasized.

PED 223 Volleyball Techniques (2-0) 2 crs.
 Provides the fundamental skills and organizational techniques of the game of football. Strategy, rules, terminology, practice drills, conditioning, safety standards and officiating techniques are emphasized.

PED 224 Basketball Techniques (2-0) 2 crs.
 Provides students with the knowledge and fundamental skills of basketball. Offensive and defensive playing techniques, game strategy, coaching and applications of the basic rules are also covered. Students will have the opportunity to use these skills and techniques in game situations.

PED 225 Tennis Techniques (2-0) 2 crs.
 Provides the fundamental skills and organizational techniques of the game of tennis. Strategy, rules, terminology, practice drills, conditioning, safety standards and officiating techniques are emphasized for both singles and doubles play.

PED 226 Baseball Techniques (2-0) 2 crs.
 Provides the analysis, instruction and demonstration of fundamental skills, strategy, practice drills, conditioning, safety standards and officiating techniques in teaching and coaching baseball.

PED 228 Aquatics (2-0) 2 crs.
 Provides students with instruction in the planning, development, organization and management of aquatic programs. 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.

PED 230 Water Safety Instructor (1-2) 2 crs.
 Provides instruction in both 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 accuracy: back crawl, front crawl, elementary backstroke, sidestroke and breast stroke.
- Student must swim 15 yards of the butterfly stroke.
- Student must maintain position on back one minute in deep water while floating or sculling.
- Student must tread water for one minute.

PED 246 Tap Dance (0-2) 1 cr.
 Provides instruction in basic techniques of tap dance. Emphasizes the development of tap dance routines.

PED 270 Community Health (2-0) 2 crs.
 Presents basic principles of community living and examines scientific methods applied to environmental health in urban and rural communities. Focuses on the functions of community health organizations and the way they relate to individual health needs.

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 the program's health requirements prior to placement in the internship.)

Prerequisite: PHB 101 with a grade 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 will be: evaluating claims, recognizing informal fallacies, problem solving, 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 include contracts, legal arguments, and computer languages.

COURSE DESCRIPTIONS

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. Considers 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 (Biblical, Greek, 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 Feminist Philosophy (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 of 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 hrs
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, major philosophical theories on the nature of religion. IAI H4 905

**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

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

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 basic chemical principles. Course is for non-science majors fulfilling laboratory science requirements. Knowledge of high school algebra is assumed.
IAI P1 900L

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

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

PHY Physics

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.
Prerequisite: MTH 140 with a grade of C or better, or required placement test scores into MTH 200.
IAI P1 900L

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

Prerequisite: MTH 201 with a grade of C or better or concurrent enrollment.

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. For students in chemistry, engineering, mathematics and physics.

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 gasses, entropy, relativity, quantization, the atom, solid state physics and conduction, nuclear and elementary particle physics. For students in chemistry, engineering, mathematics and physics.

Prerequisite: MTH 212 with a grade of C or better or concurrent enrollment, and PHY 202 with a grade 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. Students must have taken PLS 101, PLS 102, PLS 103, and a PLS elective with grades of C or better before registering.

PLS 210 Corporate and Securities Law (3-0) 3 crs.
Prepares paralegal student 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.

COURSE DESCRIPTIONS

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 year. 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 *

* Educational Psychology, see EDU 211.

Students with Disabilities in School, see ECE 219.

Introductory Social Psychology, see SOC 215.

PSY 101 Introduction to Psychology (3-0) 3 crs.
Studies human and animal behavior with emphasis on the scientific nature of psychological investigation. The course includes introduction and history of psychology, research methods, life span development, biology of behavior, learning, intelligence, motivation, emotion, personality, abnormal behavior, and therapy. 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.

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) 2 crs.
Provides specific topic seminars which allow each student the opportunity to examine current issues, such as career development, developing self-esteem, or young adult development. The focus is on the analysis and organization of experiences for personal and positive growth. Goal setting, decision-making and lifestyle planning are emphasized.

PSY 210 Introduction to Research in Psychology (3-0) 3 crs.
Introduction to the logic and theory of the scientific method. Emphasis on the basic statistical procedures and principles of experimental design. The purpose is to promote critical interpretations of behavioral data through an understanding of methods used in psychology. **Prerequisite:** PSY 101.

PSY 216 Child Psychology I (3-0) 3 crs.
Individual child from conception to fetal development, infancy and latency. Emphasis placed on child rearing practices and techniques that appear beneficial in creation of independent and well-adjusted personality. Child's interaction with parents, siblings, peers and greater community considered in the formation of the integrated self.
IAI S6 903

Prerequisite: PSY 101.

PSY 217 Adolescent Psychology (3-0) 3 crs.
Psychological study of the human organism from pubescence through adolescence and the beginnings of adulthood. Adolescence is studied as a time of rapid change resulting from increased drive state, physical maturity and changed social expectation. Emphasis is on how these changes are influenced by social institutions such as the family, the schools and the world of work, as well as by the divisions and conflicts taking place in society generally.
IAI S6 904

Prerequisite: PSY 101

PSY 218 Adult Psychology (3-0) 3 crs.
Focuses on human psychological development from young adulthood to old age and adult psychological processes of personality. Emphasizes identity and intimacy of young adults and changing male and female roles with maturity; the family; work; personality and psychopathology; aging and death.
IAI S6 905

Prerequisite: PSY 101 or consent of instructor.

PSY 220 Biological Basis of Behavior (3-0) 3 crs.
Studies the physiological aspects of behavior. Emphasizes the physiological foundations of motivation, consciousness, learning, emotion, aggression and stress. Clarifies the interaction between physiology, behavior and environment.

Prerequisite: PSY 101.

PSY 225 Theories of Personality (3-0) 3 crs.
Investigates the determining factors and dynamics of human personality. Studies major contemporary approaches such as psychoanalytic, humanistic, learning, trait and factor theories. Also considers the primary methods of research and personality assessment within the field.
IAI PSY 907

Prerequisite: PSY 101.

PSY 228 Psychology of Human Development (3-0) 3 crs.
Introduces a complete coverage of human growth from conception to death. Emphasizes psychological and psychosexual developmental stages and crises. Incorporates interaction of biological factors with psychosocial stressors of one's environment.
IAI S6 902

Prerequisite: PSY 101.

PSY 230 Abnormal Psychology (3-0) 3 crs.
Studies the definition and classification of abnormal behavior. Current theories and empirical findings concerning the biological, psychological, and social cultural causes of behavioral disorders are examined as well as research concerning the treatment and prevention of behavioral disorders. Research methods for discovering the causes of and effective treatments for abnormal behavior are also reviewed.
IAI PSY 905

Prerequisite: PSY 101.

PSY 235 Learning Theory and Human Behavior (3-0) 3 crs.
Studies the basic principles of learning theory, particularly as they apply to human behavior. Includes application of these principles to the modification of human behavior.

Prerequisite: PSY 101.

PSY 245 Industrial/Organizational Psychology (3-0) 3 crs.
Studies psychological principles and theories of organizations. Topics include structure and management practices; individual and work group behavior; employee and employer culture; and socialization conflict.

IAI PSY 906

Prerequisite: PSY 101.

RAC Heating, Ventilation and Air Conditioning (HVAC)

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.

Prerequisites: 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.

Prerequisites: 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 thermo-dynamic 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.

COURSE DESCRIPTIONS

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 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.
Prerequisite: Admission into the Radiologic Technology program. Prior or concurrent enrollment in BIO 160, HSC 104, HSC 105, HSC 107 and HSC 112.
Corequisite: 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 systems/computerized radiography, laser printers, and film processing are presented.
Prerequisite: Admission into the Radiologic Technology program. Prior or concurrent enrollment in BIO 160, HSC 104, HSC 105, HSC 107 and HSC 112.
Corequisite: RAD 102.

RAD 105 Radiologic Procedures II (2-2) 3 crs.
Examines the radiologic anatomy and examination procedures for the lower extremity, bony thorax and vertebral column. Students are taught to read various types of technique charts and program X-ray units for correct exposure for these examinations.
Prerequisite: BIO 160, HSC 104, HSC 105, HSC 107, HSC 112, RAD 102 and RAD 103 with grades of C or better and prior or concurrent enrollment in BIO 161, HSC 165 and HSC 213 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 provide the necessary skills needed to evaluate the radiologic image and provide appropriate recommendations for improving the diagnostic quality of the radiograph.
Prerequisite: BIO 160, HSC 104, HSC 105, HSC 107, HSC 112, RAD 102 and RAD 103 with grades of C or better and prior or concurrent enrollment in BIO 161, HSC 165 and HSC 213 with grades of C or better.
Corequisite: RAD 105 and RAD 107.

RAD 107 Radiologic Clinical Education I (0-16) 3 crs.
Applies principles of radiologic positioning under the supervision of qualified registered American Registry of Radiologic Technologists (ARRT) technologist. Emphasis on appendicular and axial skeleton. 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: BIO 160, HSC 105, HSC 107, RAD 102 and RAD 103 with grades of C or better and prior or concurrent enrollment in BIO 161, HSC 165 and HSC 213 with grades of C or better.
Corequisite: RAD 105 and RAD 106.

RAD 201 Radiologic Clinical Education II (0-16) 4 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: BIO 161, HSC 165, HSC 213 and RAD 107 with grades of C or better.

RAD 202 Radiologic Procedures III (2-2) 3 crs.
Covers the radiologic anatomy and examination procedures for the digestive, urinary, and hepatobiliary systems, as well as the cranium, paranasal sinuses and facial bones. 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 205.

RAD 203 Advanced Radiologic Principles (3-0) 3 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, filtration, physics of computerized radiography and digital radiography, and dosimeter. 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 202, RAD 204 and RAD 205.

RAD 204 Radiobiology (3-0) 3 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 patient/clients is covered.
Prerequisite: BIO 161 and RAD 106 with grades of C or better.
Corequisite: RAD 202, RAD 203 and RAD 205.

RAD 205 Radiologic Clinical Education III (0-24) 4 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 202, RAD 203 and RAD 204.

RAD 206 Radiologic Pathology (3-0) 3 crs.
Examines the etiology and processes of trauma and disease. Emphasis placed on radiologic pathology of body systems.
Prerequisite: BIO 161, RAD 202 and RAD 204 with grades of C or better.
Corequisite: RAD 210.

RAD 207 Radiologic Quality Assurance (1-0) 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 205 with a grade of C or better.

RAD 208 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.
Prerequisite: RAD 203 and RAD 205 with grades of C or better.
Corequisite: RAD 206, RAD 207, RAD 209 and RAD 210.

RAD 209 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 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 202 with a grade of C or better.
Corequisite: RAD 206, RAD 207, RAD 208 and RAD 210.

RAD 210 Radiologic Clinical Education IV (0-24) 4 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 205 with a grade of C or better.
Corequisite: RAD 206, RAD 207, RAD 208 and RAD 209.

RAD 211 Radiologic Clinical Education V (0-20) 5 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 209 and RAD 210 with grades of C or better.

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 Mammography Technologist Certification exam. This course may be scheduled as (1) one 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.

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 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 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: 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 105 College Reading (2-0) 2 crs.
Increases reading rate and flexibility and improves ability to interpret written materials critically. Emphasis is on improving rate while maintaining comprehension. A 10th-grade reading level or above is required for this course.

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.

RES Real Estate

RES 101 Real Estate Transactions (3-0) 3 crs.
Provides instruction in basic real estate fundamentals for those who wish to qualify for a real estate sales license. Surveys real estate law, interests in real estate ownership, the real estate business, financing and appraisal. Also covers agency relationships and responsibilities, disclosure, and environmental issues.
(NOTE: Students must be 21 years of age to qualify for the State of Illinois Real Estate Exam.)

COURSE DESCRIPTIONS

RES 105 Real Estate Math Applications (1-0) 1 cr.
Explains use of mathematics in the real estate business and drills in land area and volume, capitalization rates, computing valuations and prorations. Emphasizes logical approach to arithmetic situations.

Recommended **Corequisite:** RES 101.

RES 110 Real Estate Survey (1-0) 1 cr.
Covers the most current real estate laws, both Illinois and federal, affecting the real estate business as well as the information required of real estate licensees.

RES 140 Uniform Standards of Professional Appraisal Practice (1-0) 1 cr.
Examines the uniform standards of professional appraisal practice, including explanatory comments and ethics provisions. Fulfills one of the educational requirements necessary to become a licensed appraiser (IL 3-08).

RES 141 Basic Appraisal Principles (2-0) 2 crs.
Introduces the foundations of real estate appraisal principles including the role of the professional real estate appraiser, how an appraisal is conducted, and the importance of the appraisal in a real estate transaction. Fulfills one of the educational requirements necessary to become a licensed appraiser (IL 1-08).

RES 142 Basic Appraisal Procedures (2-0) 2 crs.
Examines the nature of real property value. Covers the various functions and methods of estimating value with emphasis on residential property. Fulfills one of the educational requirements necessary to become a licensed appraiser (IL 2-08).

RES 143 Residential Sales Comparison and Income Approaches (2-0) 2 crs.
Focuses on the correct applications of the Sales Comparison Approach and Income Approach to appraisal. Includes valuation principles and procedures; finance and cash equivalency; use of a financial calculator; identification, derivation and measurement of adjustments; gross rent multipliers; valuation of partial interest; and reconciliation.

Prerequisite: RES 142 with a grade of C or better.

RES 144 Residential Appraisal Report Writing (1-0) 1 cr.
Provides a basic understanding of effective writing as it pertains to residential real estate appraisals. Focuses on developing an understanding of how to design a narrative report relative to the value of residential property. Fulfills one of the educational requirements necessary to become a certified appraiser.

Prerequisite: RES 140, RES 141 and RES 142 with grades of C or better, or consent of instructor.

RES 190 Contracts and Conveyancing (1-0) 1 cr.
Covers deeds, contracts, options, leases and other legal instruments used in the use and transfer of ownership of Illinois real estate. Fulfills one part of the State of Illinois education requirements to obtain a Real Estate Broker's license.

Prerequisite: RES 101 with a grade of C or better, or consent of instructor.

RES 192 Advanced Principles of Real Estate (1-0) 1 cr.
Covers the most current real estate agency, disclosure, environmental and license laws affecting the real estate business. Fulfills one part of the State of Illinois education requirements to obtain a Real Estate Broker's license in compliance with the Real Estate License Act of 2000.

Prerequisite: RES 101 with a grade of C or better, or consent of instructor.

RES 194 Real Estate Finance (1-0) 1 cr.
Examines mortgages, articles of agreement, primary and secondary money markets. Borrower and property evaluations are considered. Both residential and commercial financing are covered. Fulfills one part of the State of Illinois education requirements to obtain a Real Estate Broker's license.

Prerequisite: RES 101 with a grade of C or better, or consent of instructor.

RES 196 Property Management (1-0) 1 cr.
Considers aspects of legal responsibility as to accounting, reporting, insuring and protecting income property. Americans with Disabilities Act, civil rights laws and regional occupancy laws are to be covered. Problem solving is stressed. Fulfills one part of the State of Illinois education requirements to obtain a Real Estate Broker's license.

Prerequisite: RES 101 with a grade of C or better, or consent of instructor.

RES 198 Brokerage Administration (1-0) 1 cr.
Covers operation of a real estate brokerage company including ethics, management skills and record and account management. Fulfills one part of the State of Illinois education requirements to obtain a Real Estate Broker's license in compliance with the Real Estate License Act of 2000.

Prerequisite: RES 101 with a grade of C or better, or consent of the instructor.

RES 220 Real Estate Investment Analysis I (3-0) 3 crs.
Presents the beginning skills used in interpreting investment potential of real property. Highly quantitative, requires advanced calculators and some knowledge of personal computers.

Prerequisite: RES 101 with a grade of C or better.

RES 221 Real Estate Investment Analysis II (3-0) 3 crs.
Continues study of real estate investment potential. Case studies research into the current marketplace, and applications using modern methodology, calculators, and personal computers will be used.

Prerequisite: RES 220 with a grade of C or better.

SCM Supply Chain Management

SCM 101 Supply Chain Management (3-0) 3 crs.
Provides an introduction and overview of the field of supply chain management. Topics covered include objectives, benefits, relationships with other functions, organization, planning, inventory control, production control, purchasing, just-in-time, receiving and stores, material handling, physical distribution, automation, implementation and pitfalls, measurement and control, and finance.

SCM 120 Production Control Concepts (3-0) 3 crs.
Describes the development, scope and objectives of production control. Specific attention will be given to scheduling, control, critical path, machine loading, materials requirements planning and other techniques, functions, and activities which are implicit in this aspect of material management operations.

Prerequisite: SCM 101 or consent of program coordinator.

SCM 121 Principles of Physical Distribution (3-0) 3 crs.
Movements of goods from production to delivery to distribution of channel intermediaries. Attention is focused upon distribution channels, traffic management, warehousing, inventories, organization, control and communication. Heavy emphasis is given to distribution system design and distribution system analysis.

Prerequisite: SCM 101 or consent of program coordinator.

SCM 122 Inventory Control (3-0) 3 crs.
Provides an overview of the dynamics of managing inventory in the constantly changing industrial and commercial environment. Topics include forecasting sales and inventory requirements, computer applications to inventory control problems, building inventory models, simulation and the relationships of inventory control to marketing management and production control.

Prerequisite: SCM 101 or consent of program coordinator.

SCM 123 Traffic and Transportation (3-0) 3 crs.
Provides an overview of transportation systems and the impact on cost and service that each system provides. Examines costs in various modes and routings. Reviews operational aspects of the transportation function.

Prerequisite: SCM 101 or consent of coordinator.

SCM 124 Material Handling and Packaging (3-0) 3 crs.
Presents material handling and packaging as tools for use in a total system of material management. Material handling concepts include palletization, containerization, conveyor systems, fully automated warehousing and integrated production lines. Packaging is treated as a function with ramifications far beyond mere protection of a product.

Prerequisite: SCM 101 or consent of coordinator.

SCM 125 Purchasing (3-0) 3 crs.
Covers the nature and importance of the procurement function in modern business organizations. Principles, tools, methods and techniques employed for the acquisition of materials, supplies and equipment.

Prerequisite: MKT 245 or SCM 101.

SCM 226 Material Requirements Planning (MRP) (3-0) 3 crs.

Covers computer based Material Requirements Planning (MRP) systems, important to modern material management. Focuses on using MRP systems to reduce inventories, set priorities, initiate orders, purchase requirements and develop master production schedules.

Prerequisite: SCM 122 or consent of coordinator.

SCM 227 Just-In-Time (JIT) (3-0) 3 crs.
Provides a comprehensive study of the JIT philosophy/technique for improving manufacturing practices. Results in improved material flow systems, low inventories, improved manufacturing activities, increased capital turnover and maximized profits.

SCM 230 International Supply Chain Management (3-0) 3 crs.

Provides a comprehensive study of the supply chain management function related to the international environment: business/cultural customs, legal considerations, purchasing strategies, financial aspects, international distribution and counter-trade.

Prerequisite: SCM 101 or consent of instructor.

SCM 259 Advanced Purchasing (3-0) 3 crs.
Continues SCM 125. Emphasis to be given to managerial aspects of purchasing, contract negotiation and administration and speculative purchasing.

Prerequisite: SCM 125.

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 three credit hours. Students who have 12 semester hours in SCM course work or who have the consent of the coordinator are eligible to enroll.

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 chairperson.

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 104 CASE: Signed English (1-0 to 3-0) 1-3 crs.

Provides instruction in conceptually accurate signed English and introduces students to deaf culture. Combines English grammatical structures with American Sign Language signs, initialized signs, fingerspelling and specific ASL linguistic principles. Designed for parents and teachers of the hearing impaired, other interested professionals and students preparing to enter the Sign Language Interpreting program.

One Credit: Covers introduction to the manual alphabet and numbers 1-20, basic linguistic principles including signing space, sight line, sign parameters, Time Line and questions, and basic vocabulary skill development and introduces the student to deaf culture.

Two Credits: Covers preceding content along with numbers 20-30, linguistic principles: negation, present and absent referent, person affix/agency, additional lexical items and information regarding myths and stereotypes and conversation regulators.

Three Credits: Covers preceding content along with numbers 30-100, directional verbs, number incorporation, noun-verb pairs, classifiers, lexical development and cultural information, including the deaf community and deaf education.

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 sociocultural 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.

Prerequisite: SGN 201 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.

COURSE DESCRIPTIONS

SGN 210 American Sign Language Community: A 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, intergroup 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, 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, conditions under which these forms of inequalities 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 that 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 that comprehend spoken Spanish and may have varying degrees of speaking and writing ability.

- 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 I (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 II (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 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 H3 917
Prerequisite: SPA 202 with a grade of C or better, or equivalent or consent of instructor.

SPE Speech and Theatre

- 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 111 Introduction to the Theatre (3-0)** 3 crs.
Introduces to 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
- SPE 115 Interviewing (1-0)** 1 cr.
Focuses on the unique demand of dyadic communication. The student will examine interview types, participate in model interview situations and identify and practice good listening skills.
- SPE 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, Native American theatre, feminist theatre, gay and lesbian theatre, political theatre, performance art and post-modernism as well as international trends.
IAI F1 909D
- 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.

COURSE DESCRIPTIONS

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 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.

SPE 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.

SPE 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.

SPE 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.

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 experience and introduces students to the principles, techniques and types of group discussion including roles, goals, cohesiveness, listening, problem-solving, leadership and conflict.

SPE 212 Acting I (3-0) 3 crs.

Methods used in the art of acting; stress on practical acting situations.

IAI TA 914

SPE 213 Acting II (3-0) 3 crs.

Continues 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: SPE 212 with a grade of C or better and consent of instructor.

SPE 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 (.5-1.0) 1 cr.

Introduces the student to the capabilities of the Internet and the World Wide Web through the use of currently popular software packages. Students must have working knowledge of Microsoft Windows environment prior to registration.

WEB 150 Web Development I (2-2) 3 crs.

Introduces the student to creating web pages, utilizing XHTML and Cascading Style Sheets. Web design best practices, web site hosting, Internet protocols, graphics, media, security, and e-commerce are among the topics covered. Students utilize the skills learned to create a web site project of their choice and design. Recommended preparation: CIS 101, GRA 101 or equivalent experience.

WEB 170 Web Graphics (2-2) 3 crs.

Provides an introduction to creating, manipulating, and implementing bitmapped and vector based graphics in multimedia applications and web pages. Currently popular graphics applications will be used.

Prerequisite: WEB 150 with a grade of C or better.

WEB 180 Flash Multimedia I (2-2) 3 crs.

Introduces students to the Flash authoring environment as they utilize the basic features and functions of the application to combine graphics, music, video, and text in multimedia projects for the web. Provides a background in the terminology, growth, and application of multimedia. Recommended preparation: CIS 100 or CIS 101 or WEB 150, or equivalent experience.

WEB 185 Motion Graphics and Effects (2-2) 3 crs.

Provides a foundation in a popular motion graphics application. Uses animation, visual and special effects and motion graphics tools to output images and video sequences for the Web. Works with elements such as text and object animations, images, audio and effects, tracking, layer, keyframes, masks and the timeline to develop a solid foundation. Recommended preparation: WEB 180 or equivalent experience.

WEB 190 Web Authoring Tools (2-2) 3 crs.

Builds on web development skills learned in WEB 150. This course provides an introduction to a currently popular web authoring tool. Unique features of the authoring tool will be utilized.

Prerequisite: WEB 150 with a grade of C or better.

WEB 200 Web Development II (2-2) 3 crs.

Builds on web development skills learned in WEB 150. Emphasizes the development of interactive web pages using JavaScript, Cascading Style Sheets, and XHTML. Students utilize the advanced skills learned to create a business-oriented web site of their choice and design.

Prerequisite: WEB 150 with a grade of C or better.

WEB 210 Web Accessibility (2-2) 3 crs.

Provides the student with the foundation in developing usable 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 220 Flash Multimedia II (2-2) 3 crs.

Provides an introduction to Action Script and to practical skills required to build Rich Internet Applications (RIAs) using Adobe's Flash platform. Covers design considerations for various formats including optimizing Flash multimedia for the Web. Includes interactive multimedia projects using video, graphics, audio and text.

Prerequisite: WEB 150 and WEB 180 with grades of C or better.

WEB 235 Interactive Scripting (2-2) 3 crs.

Provides an introduction to AJAX (Asynchronous JavaScript and XML) and types of AJAX toolkit and framework solutions that are well-established in the Web community. Uses advanced JavaScript techniques to create highly functional web pages. Develops a fully functional AJAX-driven website that supports rich content.

Prerequisite: WEB 200 with a grade of C or better.

WEB 240 E-Commerce Development (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. Student must have working knowledge of Microsoft Windows environment and the Internet prior to registration.

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. Creates a data-driven web application that uses Structured Query language (SQL) to access and update information in a database.

Prerequisite: CAS 125 and WEB 200 with grades of C or better.

WEB 260 Interactive Multimedia (2-2) 3 crs.
 Provides an introduction to Flex. Builds highly interactive, expressive web applications using the Flex open source framework. Creates interactive user interfaces providing consistent experiences across browser platforms. Develops interactive Flex applications such as Web forms and data visualizations.

Prerequisite: WEB 220 with a grade 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.

Career Skills Credit Courses

Continuing Education and Harper College for Business courses often designated as "credit" are Career Skills credit and generally cannot be applied to credit certificates or degrees. No formal application or entrance assessments are required for enrollment in Career Skills credit classes. Contact the Continuing Education Division for more information. (Harper College for Business courses are offered on a contract basis to area businesses and employers.)

Discipline/Prefix

Below is an alphabetized list of disciplines followed by a prefix for these specific Career Skills courses.

CE Allied Health	LAH
CE CompTia	LAP
CE Business Solutions	LBS
CE Career Exploration.....	LCE
CE Cisco.....	LCI
CE Computer Training.....	LCT
CE Game Programming	LGP
CE International Trade	LGT
CE Linux	LIX
CE Management Development	LMD
CE Microsoft	LNT
CE Health Care Professionals.....	LNU
CE Oracle DBA.....	LOR
CE Real Estate	LRE
CE Food Service	LRP
CE Sun Java.....	LSJ
CE Security Certified Personnel	LSP
CE Therapeutic Massage.....	LTM
CE AutoDesk	LVV
Harper College for Business.....	HCB

HCB 8121 Introduction to Local Area Networks (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.

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 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 (.5-0 to 3-0) .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 (.5-0 to 3-0) .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 (.5-0) .5 cr.
 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 (.5-0) .5 cr.
 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 (.5-0) .5 cr.
 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 (.5-0) .5 cr.
 Builds the skills to plan and conduct interviews to elicit information needed to make sound hiring decisions.

HCB 8186 Customer Service Excellence (.5-0) .5 cr.
 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-.5) 2 crs.
 Provides tools and skills to build and management 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.

COURSE DESCRIPTIONS

HCB 8192 Communication Skills (.5-0 to 3-0) .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 (.5-0) .5 cr.
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 (6-0) 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 (6-0) 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 (6-0) 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 (6-0) 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 (6-0) 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 (6-0) 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 (.5-0) .5 cr.
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 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 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 (5.5-1) 6 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 or help desk support or studies in advanced technology.

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.

LBS 8101 Supply Chain Management (1-0) 1 cr.
Provides an introduction and overview of the field of supply chain management. Includes objectives, benefits, relationship with other functions, organization, planning, inventory control, production control, purchasing, just-in-time, receiving and stores, material handling, physical distribution, automation, implementation and pitfalls, measurement and control, and finance.

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 8005 Residential Decorator (1.5-0) 1.5 crs.
Studies room design, fabric selection, color themes, window treatments and floor coverings. Discover resources available for selling full-line products, how to consult with customers, and making choices to suit customer needs. Provides fundamental skills for entry-level work in businesses specializing in furniture, window covering and floor needs.

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-.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 completion of a project portfolio.

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 Service, Lake-in-the-Hills, IL.)

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 8020 Security Guard/Security Contractor (1.5-0) 1.5 crs.
Teaches Illinois requirements to become an unarmed security professional. Shares insight in eligibility for employment with a certified agency or starting your own business. Includes the Illinois Private Security and Contractor Act, state criminal code, Code of Ethics, fire and accident prevention, patrol procedures, liabilities, report writing and use of force. Provides eligibility to apply for the Illinois PERC (Permanent Employee Registration Card). Requires computer access on or off campus.

LCI 8001 Cisco CCNA/Router Training (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.

LCT 8036 Photoshop (1-.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-.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-.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-.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 8200 Apple Final Cut Pro 6: Intro (.5-1) 1 cr.
Teaches basic video editing techniques using Final Cut Pro's powerful advanced features. Demonstrates aspects of video editing and finishing using actual broadcast footage. Explores marking and editing clips to create a rough cut. Includes methods to trim and refine the cut before moving on to complex tasks such as mixing sound, adding titles, creating transitions and motion effects, applying filters, real-time color correcting, and working with multi-format and multi-camera footage.

Prerequisite: LCT 0050 with an outcome of satisfactory (S), or consent of instructor or program coordinator.

LCT 8201 Apple Final Cut Pro: Beyond Basics (.5-1) 1 cr.
Examines advanced video editing and finishing skills with hands-on projects. Teaches advanced trimming techniques, polished transitions, nested sequences, editing multi-camera projects, creating fantastic effects, color correction, and composition. Demonstrates how to manage your clips and media in Soundtrack Pro and improve editing workflow.

Prerequisite: LCT 0050 with an outcome of satisfactory (S), or consent of instructor or program coordinator.

COURSE DESCRIPTIONS

LCT 8202 Apple Final Cut Pro: Editing (.5-1) 1 cr.
 Introduces advanced video editing and finishing skills with hands-on projects. Exhibits techniques for cutting dialogue scenes, fight and chase scenes, documentaries, comedy, music videos, multi-camera projects and more.

Prerequisite: LCT 8200 and LCT 8201 with an outcome of satisfactory (S), or consent of instructor or program coordinator.

LGP 8510 2D Flash Game Programming (1-.5) 1 cr.
 Covers topics critical to any aspiring game programmer including sprites, animation, text, user input, audio, physics, and simple AI. Requires basic computer skills and lab work outside of class.

LGP 8520 3D Level Building with Unreal Engine (1-.5) 1 cr.
 Explores the exciting art of level building using one of the most powerful game engines on the market. Students will be able to quickly build complex 3D building interiors and outside terrains and test their creations immediately. Covers 3D geometric tools, textures, meshes, lighting, sound, special effects, skyboxes, jump pads, teleporters, movers, and bot pathing. Students will critique creations in class. Requires basic computer skills and extensive lab work outside of class.

LGP 8530 Crash Course in C# Programming (1-.5) 1 cr.
 Provides a focused study of the C# programming language and the Microsoft Visual Studio IDE as they relate to game programming. Allows students to use their prior experience along with C# syntax to pursue Xbox programming. Requires experience with other object-oriented programming language and lab work outside of class.

LGP 8535 Introduction to Xbox Game Programming (1-.5) 1 cr.
 Explores the XNA framework and associated tools and demonstrates how to develop and export games to an Xbox 360 game console. Covers game content, tools and resources. Requires extensive lab work outside of class.

Prerequisite: LGP 8530 with an outcome of satisfactory (S) or equivalent knowledge.

LGP 8550 Crash Course in C++ Programming (1-.5) 1 cr.
 Covers the fundamentals of the difficult C++ programming language, the most popular language for game development. Includes program structure, functions, pointers, dynamic memory, object-oriented programming, classes, inheritance, polymorphism, exception handling, operator overloading and data structures. Requires considerable lab work outside of class. Students should have academic or work experience with any programming language.

LGP 8560 Introduction to Open GL (1-.5) 1 cr.
 Explores the OpenGL framework for platform-independent 3D graphics and game programming. Includes setup, additional utility libraries, geometric objects in 3D space, camera control, color, lighting, texture mapping, and user input. Requires considerable lab work outside of class.

Prerequisite: LGP 8550 with an outcome of satisfactory (S) or equivalent knowledge.

LGP 8600 2D Game Creation (1.5-.5) 1.5 crs.
 Covers principles and construction of two-dimensional video games using industry-recognized game development tools. Includes basic game creation, user input, sprite movement and animation, triggers, collision detection, particle effects, projectiles, trajectories, gravity, interface design, splash screens, and final game creation.

LGP 8610 3D Game Creation (1.5-.5) 1.5 crs.
 Covers the fundamentals of three-dimensional game development using the popular and industry-recognized Torque game engine. Includes: terrain, basic modeling, user interfaces, sound, scripting, and creation of simple 3D games.

LGT 8044 Import Regulations (1-0) 1 cr.
 Provides a thorough understanding of importing with a step-by-step approach to the regulations governing the importing of merchandise, marking requirements, customs service, court rulings, civil and criminal penalties and import restrictions and duties.

LGT 8045 Import Problem Solving (1-0) 1 cr.
 Examines a new import file problem in each session. Investigates what went wrong, how the mistakes were discovered, how the importer dealt with the problems and how the problems could have been avoided.

LGT 8100 Introduction to International Trade (2-0) 2 crs.
 Includes an overview of the process of importing and exporting, terms and abbreviations commonly used in the industry, currency, metrics and math, Inco terms and documentation, world geography and an overview of the Harmonized Tariff Schedule. Industry job descriptions will also be reviewed.

LIX 8501 SUSE Linux Enterprise Server Fundamentals (1-1) 1.5 crs.
 Includes the history of Linux, simple Linux installation, the Linux desktop, KDE, GNOME, accessing the command line interface, help resources, administration and hardware configuration using YaST, command shells, file system layout, permissions, text editors, processes, and network configuration. Students should have experience administering any operating system.

LIX 8502 SUSE Linux Enterprise Server Administration (2-1) 2.5 crs.
 Includes updating and monitoring a SLES server, managing users and groups, providing basic system security, managing software installation, providing basic network services such as printing and web access, and remotely accessing the server.

LIX 8503 Advanced SUSE Linux Enterprise Server Administration (2-1) 2.5 crs.
 Covers the installation of SLES, manual network configuration, security, backup and recovery, shell scripts, source code compilation, performance tuning, process monitoring, and management of hardware and component changes.

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 8047 Installing and Managing MS Exchange Server 2007 (1.5-1) 2 crs.
 Teaches how to configure and manage a messaging environment in accordance with technical requirements for Microsoft Exchange Server. Covers installation, routing, addressing, mailboxes, groups, contacts, and back-up restoration. Requires experience with NTBackup, NSLookup, MMC, IIS, Windows, networks, Active Directory, and email technologies.

LNT 8051 Monitoring and Troubleshooting MS Exchange 2007 (1.5-1) 2 crs.
 Teaches messaging specialists to monitor and troubleshoot an Exchange Server 2007 messaging system. Covers correlation of client and server issues, monitoring techniques, and report generation. Requires students to have experience with NTBackup, NSLookup, MMC, IIS, Windows, networks, Active Directory, and email technologies.

LNT 8061 MS Office SharePoint Server (1-1) 1.5 crs.
 Teaches system administrators how to plan, deploy, administer, and maintain Microsoft Office SharePoint Server. Includes portal solutions, content management, business intelligence, and search and indexing solutions. Recommended preparation: work experience with SharePoint, Windows Server, and IIS.

LNT 8147 Advanced SharePoint Solutions (2-1) 2.5 crs.
 Covers planning, deployment and configuration of server form solutions with Microsoft Office SharePoint Server and Windows SharePoint Services. Focuses on key deployment and configuration tasks. Includes security, disaster recovery and capacity planning. Recommended preparation: LNT8060 and LNT8061 or equivalent knowledge.

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 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 Integration 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 8274 Managing Microsoft Windows Server 2003 Environment (2-1) 2.5 crs.

Introduces the management of accounts and resources in a Microsoft Windows Server 2003 environment. Covers network resources, printers, Active Directory, and group policies. Course serves as the entry point for other Windows Server 2003 courses. Intended for system administrators and system engineers with A+ and Network + certifications or equivalent.

LNT 8275 Maintaining Microsoft Windows Server 2003 Environment (1-1) 1.5 crs.

Covers maintenance of server resources, monitoring of server performance, and safeguarding of data running one of the operating systems in the Microsoft Windows Server 2003 family. **Prerequisite:** LNT 8274 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8276 Implementing Server 2005 Network Infrastructure (1-5) 1 cr.

Covers configuration of Windows computers to operate in a Microsoft Windows Server 2005 networking infrastructure. Intended for entry-level IT professionals.

Prerequisite: LNT 8275 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8277 Microsoft Windows Server 2003 Network Services (2-1) 2.5 crs.

Covers Windows Server 2003 management and maintenance. Includes DHCP, DNS, WINS, IP traffic and security, and remote access.

Prerequisite: LNT 8276 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8285 Install, Configure, Administer Windows XP Professional (1-0.5) 1 cr.

Covers installation, configuration, and administration of Microsoft Windows XP Professional computers in a simulated Microsoft Windows Server 2003 production environment. Explains differences between Windows 2000 and Windows XP Professional.

Prerequisite: LNT 8277 with an outcome of satisfactory (S) or equivalent knowledge.

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 8415 Network Infrastructure for Windows Server 2008 (1.5-1) 2 crs.

Provides students with an understanding of network infrastructure technology in Windows Server 2008. Intended for IT professionals experienced with Windows Server 2000 or 2003 and who hold an MCSE or MCSA certification and/or equivalent knowledge. Requires MCSA, equivalent knowledge or consent of instructor or program coordinator.

LNT 8416 Active Directory for Windows Server 2008 (1.5-1) 2 crs.

Provides students with an understanding of Active Directory technology in Windows Server 2008. Intended for IT professionals experienced with Windows Server 2000 or 2003 and who hold an MCSE or MCSA certification and/or equivalent knowledge. Requires MCSA, equivalent knowledge or consent of instructor or program coordinator.

LNT 8417 Application Platform for Windows Server 2008 (1.5-1) 2 crs.

Provides students with an understanding of Applications Platform technology in Windows Server 2008. Intended for IT professionals experienced with Windows Server 2000 or 2003 and who hold an MCSE or MCSA certification and/or equivalent knowledge. Requires MCSA, equivalent knowledge or consent of instructor or program coordinator.

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 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.

COURSE DESCRIPTIONS**LNT 8463 Visual Studio 2008:****ASP.NET 3.5 (1-.5) 1 cr.**

Teaches the knowledge and skills to create a fully functional web application by using ASP.NET 3.5. Covers ASP.NET basics, creation of dynamic web pages, state management, user interface creation, data manipulation, application deployment, and programming for mobile devices.

LNT 8464 Visual Studio 2008:**ADO.NET 3.5 (1-.5) 1 cr.**

Teaches the knowledge and skills to access and modify data by using ADO.NET 3.5. Covers ADO.NET commands, querying and maintaining data using Datasets and LINQ, implementing an entity model, and using synchronization services.

LNT 8541 Core Data Access Microsoft**Visual Studio 2005 (1-1) 1.5 crs.**

Provides workshop experience in the development of data-access applications using the Microsoft .NET framework and Microsoft Visual Studio 2005. Describes how to access and update data in a database by using ADO.NET. Also describes how to create, read, and write XML data.

Prerequisite: LNT 8544 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8542 Advanced Data Access with**Microsoft Visual Studio 2005 (1-.5) 1 cr.**

Covers advanced data access features and techniques in the Microsoft .NET framework and Microsoft Visual Studio 2005. Describes how to access data and how to implement database functionality by using Microsoft ADO.NET 2.0 and Microsoft SQL Server 2005. Includes how to locate, edit, and transform XL by using XPath and Extensible Style Sheet language for transformations (XSLT).

Prerequisite: LNT 8541 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8543 Core Web Application Technology**with Visual Studio 2005 (1-.5) 1 cr.**

Provides the knowledge and skills to develop Microsoft ADO.NET 2.0 web applications using MS Visual Studio 2005. Focuses on user interfaces, website structure and functionality, and implementation details.

Prerequisite: LNT 8994 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8544 Advanced Web Application Technologies with Visual Studio 2005 (1-.5) 1 cr.

Provides the knowledge and skills to develop Microsoft ADO.NET 2.0 web applications using MS Visual Studio 2005. Focuses on advanced user interfaces, website functionality, and implementation details using the advanced features of ADO.NET 2.0 and VS 2005.

Prerequisite: LNT 8543 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8778 Queries SQL 2008 Transact-SQL (1-1) 1.5 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 8779 Implementing Microsoft SQL**Server 2005 Database (2-1) 2.5 crs.**

Focuses on teaching individuals how to use SQL Server 2005 product features and tools related to implementing a database. Students should have working knowledge of relational databases and Transact-SQL for this course.

Prerequisite: LNT 8778 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8780 Maintaining Microsoft SQL**Server 2005 Database (2-1) 2.5 crs.**

Focuses on SQL Server 2005 product features and tools related to maintaining a database. Students should have working knowledge of relational databases and Transact-SQL.

Prerequisite: LNT 8779 with an outcome of satisfactory (S) or equivalent knowledge.

LNT 8927 Managing Projects (1.5-1) 2 crs.

Provides students with the knowledge and skills to build, maintain, and control well-formed project plans. This is the first course in the Microsoft Office Project 2007 Official Curriculum series. Requires experience with Windows, Project, and Excel, plus fundamental knowledge of project management.

LNT 8928 Enterprise Project Management (1.5-1) 2 crs.

Teaches students to initiate, plan, execute, monitor and control, and close enterprise projects by using the Microsoft Office Project Server 2007 enterprise tool. This is the second course in the Microsoft Office Project 2007 Official Curriculum series and covers the Microsoft Enterprise Project Management (EPM) Solution. Requires experience with Windows, Project, and Excel, plus fundamental knowledge of project management.

LNT 8994 Introduction to Programming .Net**Visual Studio 2005 (1-2) 2 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 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.

LOR 8501 Oracle DB 10G: Introduction to SQL (2-1) 2.5 crs.

Introduces Oracle Database 10G technology, relational database concepts, and the SQL programming language. Teaches creation of database objects, queries and manipulation of data, and generation of reports. Students need basic computer skills and experience with relational database concepts for this class.

LOR 8502 Oracle DB 10G: Administration I (2-1) 2.5 crs.

Provides a foundation in database administration. Students create an operational database and learn about performance monitoring, security, user management, and backup and recovery techniques. This course counts toward the hands-on requirements for the Oracle 10G DBA certification.

Prerequisite: LOR 8501 with an outcome of satisfactory (S) or equivalent knowledge.

LOR 8503 Oracle DB 10G: Administration II (2-1) 2.5 crs.

Covers advanced administration tools including the Resource Manager, Scheduler, Automatic Resource Management (ASM), and VLDB features. Students set up a secure database using Virtual Private Database and learn how to move data between databases.

Prerequisite: LOR 8502 with an outcome of satisfactory (S) or equivalent knowledge.

- LOR 8601 Oracle Database 11g: Introduction to SQL (.5-1)** 1 cr.
Covers the fundamentals of SQL using Oracle Database 11g database technology. Explains concepts of relational databases and the powerful SQL programming language. Provides the essential SQL skills that allow developers to write queries against single and multiple tables, manipulate data in tables, and create database objects. Teaches single row functions to customize output, conversion functions and conditional expressions and group functions to report aggregated data. Demonstrations and hands-on practice reinforce the fundamental concepts. Utilizes Oracle SQL Developer as the main tool and SQL *Plus is introduced as an optional tool. Requires familiarity with data processing concepts and techniques.
- LOR 8602 Oracle Database 11g: Administration Workshop I (1-2)** 2 crs.
Demonstrates the installation and maintenance of Oracle Database 11g. Provides a conceptual understanding of the Oracle database architecture and how its components work and interact with one another. Teaches how to create an operational database and properly manage the various structures in an effective and efficient manner. Includes performance monitoring, database security, user management and backup/recovery techniques. Reinforces topics with structured hands-on practices.
Prerequisite: LOR 8601 with an outcome of satisfactory (S) or consent of instructor or program coordinator.
- LOR 8603 Oracle Database 11g: Administration Workshop II (1-2)** 2 crs.
Explores concepts and architecture that support backup and recovery, along with varied situational implementation. Includes how to define and test your own backup and recovery scenarios. Teaches effective memory management, performance evaluation and tuning tasks, and the use of advisors. Includes flashback technologies, scheduling jobs inside and outside of the database, controlling system resource usage, and hands-on practices.
Prerequisite: LOR 8602 with an outcome of satisfactory (S) or consent of instructor or program coordinator.
- LOR 8604 Oracle Database 11g: New Features for Administrators (1-2)** 2 crs.
Teaches new change management features and other key enhancements in Oracle Database 11g. Emphasizes the benefits and use of the new features in managing change, diagnosing and recovering from problems, ensuring high availability, improving scalability and performance, strengthening security, and several other areas that concern database administrators. Prepares for the Oracle 11g DBA certification upgrade exam. Requires strong Oracle Database 10g concepts, consent of instructor or program coordinator.
- LRE 8101 Real Estate Transactions (3-0)** 3 crs.
Provides instruction in basic real estate fundamentals for those who wish to qualify for a real estate sales license. Includes the Illinois Licensing Act, the nature of real estate, interests, rights and ownership, legal descriptions, title transfers, contracts, appraisals, financing and closing statements. This course is IDFP approved; students are required to attend all sessions. Must be 21 years old, a high school graduate/GED, and successful complete this course in order to take the State of Illinois Real Estate Exam.
- LRE 8112 Home Inspection (3-0)** 3 crs.
Prepares students for the State of Illinois licensing exam for home inspectors. IDFP 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 8140 Uniform Standards of Professional Appraisal Practices (1-0)** 1 cr.
Covers the ten National USPAP standards and their implementation, and the ethical responsibility of licensed and certified appraisers. Required by the Appraisal Foundation; 2008 compliant. IDFP approved pre-licensing course; requires attendance at all sessions. Knowledge of industry terminology or completion of LRE 8141 is strongly recommended.
- LRE 8141 Basic Appraisal Principles (2-0)** 2 crs.
Introduces an overview of the valuation process and appraisal principles. Establishes a basic understanding of appraisal theory and the context in which objective judgment is applied. USPAP is prefaced and the responsibility for rendering sound conclusions is stressed. IDFP approved pre-licensing course; requires attendance at all sessions (30 hours); this course is 2008 compliant. Requires a basic calculator with square root function.
- LRE 8142 Basic Appraisal Procedures (2-0)** 2 crs.
Covers the entire valuation process and the Sales Comparison, Cost, and Income Approaches to valuations. Also covers reconciliation. IDFP approved pre-licensing course; requires attendance at all sessions; this course is 2008 compliant. Knowledge of industry terminology or completion of LRE 8141 is strongly recommended. Requires a basic calculator with square root function.
- LRE 8190 Contracts and Conveyancing (1-0)** 1 cr.
Develops skills that cover the legal obligations of buyers, sellers, landlords, tenants and brokers. This pre-licensing broker course is IDFP approved; for complete IDFP requirements, visit <http://www.idfpr.com>. Must be 21 years old, a high school graduate/GED, attend all sessions and successfully complete this coursework.
- LRE 8192 Advanced Principles of Real Estate (1-0)** 1 cr.
Covers the Illinois Real Estate Act, agency listings, the broker-salesperson relationship, land use and development, management, interest and ownership, insurance and income tax obligations, title examination and evidence, recording and closing statement and procedures. IDFP approved pre-licensing broker course; requires attendance at all sessions. Must be at least 21 years old, a high school graduate/GED, and successfully complete this coursework.
- LRE 8194 Real Estate Finance (1-0)** 1 cr.
Includes the various methods of real estate financing including basic finance methods, economic issues, mortgages and other types of loans, taxes and interest, foreclosures, government regulations and evaluation, analysis and risk. Both residential and commercial financing are covered. IDFP approved pre-licensing broker course; requires attendance at all sessions. Must be at least 21 years old, a high school graduate/GED, and successfully complete this coursework.
- LRE 8196 Property Management (1-0)** 1 cr.
Studies methods to increase income from real estate through effective management including maintenance and repairs, property analysis, financial structure and budget, rental schedules, tenant and landlord rights, collections, marketing, management programs, and the actual obtaining of property to manage. IDFP approved pre-licensing broker course; requires attendance at all sessions. Must be at least 21 years old, a high school graduate/GED, and successfully complete this coursework.
- LRE 8198 Brokerage Administration (1-0)** 1 cr.
Includes the primary functions of the real estate office and the duties of the managing broker including broker qualifications and the nature of brokerage, client, customer, salesperson and employee relations; basic policies; staff selections; training and supervision; listing and compensation; marketing and prospecting; accounting and accountability; and government regulations. IDFP approved pre-licensing broker course; requires attendance at all sessions. Must be at least 21 years old, a high school graduate/GED, and successfully complete this course.

COURSE DESCRIPTIONS

LRE 8240 Housing Market Issues (1-0) 1 cr.
Provides students with a comprehensive understanding of the housing crisis and the role of the real estate market in the U.S. economy. Concentrates on the factors that drive the current real estate market and the role of the subprime lender.

LRP 8005 Food Standards/Sanitation Exam Preparation (1.5-0) 1.5 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 8003 Java Programming Language (2-1) 2.5 crs.
Focuses on the syntax of the Java programming language and helps students prepare for the SCJP certification exam. Includes object-oriented programming, classes, encapsulation, inheritance, arrays, exception handling, generics, I/O, interfaces, and threads.
Prerequisite: LSJ 8012 with an outcome of satisfactory (S) or equivalent knowledge.

LSJ 8012 Java Programming Fundamentals (2-1) 2.5 crs.
Introduces students to object-oriented programming and the basics of the Java programming language. Intended for students with little or no programming experience or those with experience in non-object-oriented languages. Students need basic computer skills for this class.

LSJ 8500 Beginning Programming with Java (1-5) 1 cr.
Covers setup, basic program construction, variables, expressions, methods, loops, decision, and the Java API for individuals with little or no programming experience and basic computer skills.

LSJ 8510 Introduction to OOP with Java (1-.5) 1 cr.
Covers the essentials of object-oriented programming using Java. Discusses object benefits, how they are constructed and used in a program. Teaches OOP with relevant and insightful examples. Requires lab work outside of class.
Prerequisite: LSJ 8500 with an outcome of satisfactory (S) or equivalent knowledge.

LSJ 8511 Java SCJP Certification Training I (1-5) 1 cr.
Covers important Java syntax in detail and helps students prepare for the SCJP certification exam. Includes data types, loops, arrays, static vs. instance code, keywords, access modifiers, abstract classes, and interfaces. Requires extensive lab work outside of class.
Prerequisite: LSJ 8510 with an outcome of satisfactory (S) or equivalent knowledge.

LSJ 8512 Java SCJP Certification Training II (1-5) 1 cr.
Covers advanced topics from the SCJP certification exam. Includes enumerations, collections, exceptions file I/O, serialization, regular expressions, and threads. Requires extensive lab work outside of class.
Prerequisite: LSJ 8511 with an outcome of satisfactory (S) or equivalent knowledge.

LSJ 8520 Java Developer Program (1-5) 1 cr.
Presents topics related to the SCJD certification. Covers Swing and user interface design, client-server networking, object-oriented development, file I/O, and data sorting and presentation. Requires extensive lab work outside of class.
Prerequisite: LSJ 8512 with an outcome of satisfactory (S) or equivalent knowledge.

LSJ 8530 Introduction to Java-Micro Edition (1-.5) 1 cr.
Introduces Java programming tools and techniques for developing small applications for cell phones. Covers the Java ME specifications, vendor APIs, the MIDP User Interface, and the MIDP Game API. Requires lab work outside of class.
Prerequisite: LSJ 8512 with an outcome of satisfactory (S) or equivalent knowledge.

LSJ 8550 Java 3D Game Programming (1-5) 1 cr.
Explores 3D game programming using Java. Enables students to learn important 3D graphics and game concepts with a powerful language without the complexities of other languages. Covers the Java 3D APE, Open GL for Java, JInput, and other gaming-related libraries. Requires extensive lab work outside of class.
Prerequisite: LSJ 8512 with an outcome of satisfactory (S) or equivalent knowledge.

LSP 8201 Tactical Perimeter Defense (1-2) 2 crs.
Covers the core issues of building a perimeter network defense system and advanced concepts of the TCP/IP protocol suite. Introduces secure design and configuration techniques. Presentations discuss wireless networks and Virtual Private Networks.
Prerequisite: LAP 0008 with an outcome of satisfactory (S) or consent of instructor or program coordinator.

LSP 8202 SCP: Strategic Infrastructure Security (1-2) 2 crs.
Examines core issues of cryptography, including public and private key concepts. Provides knowledge and hands-on tasks on most cryptography and data security technologies including ethical hacking attack techniques. Emphasizes the hardening of infrastructure elements, such as Windows and Linux servers.
Prerequisite: LSP 8201 with an outcome of satisfactory (S) or consent of instructor or program coordinator.

LSP 8203 Computer Forensics and Investigation (3-3)4.5 crs.
Examines techniques and tools of computer forensics investigations. Explains how to use the most popular forensic tools. Maps to the objectives of the International Association of Computer Investigative Specialists (IACIS) certification to provide credible, standards-based information. Includes coverage of the latest technology including PDAs, cell phones, and thumb drives.
Prerequisite: LAP 0008 with an outcome of satisfactory (S) or consent of instructor or program coordinator.

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.

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 8300 AutoDesk 3DS MAX 9 Essentials (.5-1) 1 cr.
 Teaches fundamental skills with 3DS Max that can be applied to television, movies and video game development. Includes modeling techniques, materials, lighting, animation, and scene building. Basic computer skills are required for this class.

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 8325 Texture Gaming Characters (1.5-5) 1.5 crs.
 Delves into the subtleties of character texturing using 3DS Max. Shows how to unwrap a character quickly, minimize inconsistencies and generate normal maps. Covers techniques for using images to texture characters for use in games.

LVV 8330 3DS Max Advance Modeling and Mapping (1.5-.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 8401 AutoCAD 2008 Level 1 (1-1) 1.5 crs.
 Covers the creation of basic 2D drawings, organization of drawing objects on layers, addition of text and basic dimensions, and preparations for plotting. In addition to basic CAD skills, covers more sophisticated techniques for drawing setup and productivity. Students should be familiar with Windows environments and drafting concepts.

LVV 8402 AutoCAD 2008 Level 2 (1-1) 1.5 crs.
 Builds on basic concepts from the Level 1 course. Includes boundaries, regions, templates, dimensioning, annotation, blocks, layouts, views, sheet sets, tables and an introduction to 3D models.
Prerequisite: LVV 8401 with an outcome of satisfactory (S) or equivalent knowledge.

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 8511 AutoCAD Architecture 2009 Essentials (1.5-1)2 crs.
 Provides comprehensive training in AutoCAD Architecture 2009. Includes hands-on lessons that cover features, commands, and techniques for creating, editing, and printing drawings.
Prerequisite: Previous AutoCAD experience required. Drafting, design, or engineering experience recommended.

LVV 8512 AutoCAD Architecture 2009 Advanced (1.5-1)2 crs.
 Covers many of the advanced features of AutoCAD Architecture 2009. Explains how to set-up a project, create tool catalogs and styles, export to different output formats, edit section/elevation objects, use ACE dimensions, display themes, and mask blocks.
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 (1.5-1) 2 crs.
 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 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 (1.5-5) 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.

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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 the College Web site, harpercollege.edu.



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