## Richland Community College

Community College District 537


## 2008-2009 Catalog

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Friday - 7:30 a.m. - 5:00 p.m.
```

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www.richland.edu
E-mail Address:
rcchelp@richland.edu
(Campus tours available)

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## Table of Contents

C ollegeC alendar ..... 6
W elcometo Richland ..... 9
Governance, A ccreditation, R ecognition ..... 10-11
V ision, M ission, C ore V alues ..... 11
Facilities ..... 13
Off-campus Facilities ..... 14
Admissions ..... 17
A dmission to the College ..... 18
GED Placement Program ..... 18
Admission to a Program or Course ..... 18
A dmission to Program of Study ..... 18
Selective A dmission to Health Professions Programs ..... 19
Transfer of College Credit to RCC ..... 20
A dmission of High School and Gifted Students ..... 20
Dual Credit ..... 20
Registration ..... 20
CreditEvaluation Programs ..... 21
C ourse Placement and Placement Testing ..... 22-23
Financial Information ..... 25
Tuition, Fees, and Charges ..... 26
PaymentInformation ..... 26
Deferred Tuition PaymentPlan ..... 27
Tuition Discount for Senior Citizens ..... 27
Proficiency Exam ..... 27
Transcripts ..... 27
Refund Policy ..... 27
Residency ..... 27
C harge-Back Authorization ..... 28
CooperativeA greements ..... 28
Financial A id ..... 28
Grants and Scholarships ..... 29
StudentEmployment ..... 31
Loans ..... 31
Standards of A cademic Progress for Financial Aid Recipients ..... 31
V eterans' Affairs ..... 33
Student and Academic Support Services ..... 35
Orientation ..... 36
Counseling Services ..... 36
CareerServices ..... 36
A cademic A dvisement ..... 36
Self-A dvisement ..... 36
TransferCenter ..... 36
StudentEmployment ..... 37
Internships ..... 37
K itty Lindsay Learning Resources C enter ..... 37
Learning A ccommodationServices ..... 37
StudentL earning C enter ..... 38
Online L earning Support ..... 38
TestingCenter ..... 38
ISTEP-DisplacedH omemakers ..... 38
Student Support ..... 38
Clinton Extension C enter ..... 39
RCC Hope A cademy Center ..... 40
Student SupportServices/TRiO Program ..... 40
Perkins Program ..... 40
Project READ ..... 40
Honors Opportunities Program ..... 41
International Studies ..... 41
Child DevelopmentC enter ..... 41
Student IDs ..... 42
Campus Safety ..... 42
Campus Life ..... 43
CampusLife Program ..... 44
Clubs and Organizations ..... 44-45
Student R ecords and C onfidential Information ..... 46
Student Rights and R esponsibilities ..... 47
Student Grievance and ConductPolicies ..... 49
Tobacco Policy ..... 51
Substance A buse Policies ..... 51
Chronic CommunicableDiseasePolicy ..... 51
Sexual Harassment Policy ..... 52
Responsible U se of Information Technology ..... 52
Possession of W eapons Policy ..... 53
WISE-1 ..... 53
Continuing and Professional Education ..... 55
A dult Education (GED) ..... 56
Alumni and Friends A ssociation ..... 56
A pplied Learning Skills(ALS) ..... 56
Continuing and Professional Education Division ..... 56
English as a Second L anguage (ESL) ..... 57
Extension Center Programming ..... 57
Fitness C enter ..... 57
Richland Foundation ..... 57
Academic Information \& Regulations ..... 59
StudentStatus and Classification ..... 60
Full-TimeA cademic L oad ..... 60
A cademic Standards ..... 60
Probation ..... 60
Suspension ..... 61
Grading Policy and Grade Point A verage ..... 61
A cademic Honors ..... 62
A ppealing a Grade ..... 62
A IternativeD elivery of Instruction ..... 62
Dropping a Course ..... 63
Repeating a Course ..... 63
ClassA ttendance ..... 63
Withdrawing from a Course or the College ..... 63
Changing Program of Study ..... 63
Graduation ..... 64
Constitution R equirement ..... 64
Graduating with Two Certificates or Degrees ..... 64
Graduating Transfer Students ..... 65
Earning Graduation H onors ..... 65
Effect of Changes in Program on Graduation ..... 65
Effect of Previous Quarter System on G raduation ..... 65
Health Professions G raduation R equirements ..... 65
Transfer of Credit to Other Colleges ..... 66
IllinoisA rticulation Initiative ..... 67
Guarantee of T ransfer of Credit ..... 67
Instructional Programs ..... 69
Programs of Study ..... 70
Cooperative Education Programs with Other Community Colleges ..... 71
Certified Programs ..... 73
B accal aureate/Transfer Programs ..... 74
A ssociate in Arts ..... 74
A A Transfer Plan W orksheet ..... 75
A ssociatein Science ..... 76
A S Transfer Plan W orksheet ..... 77
A ssociate in Fine A rts ..... 78
A FA Transfer Plan W orksheet ..... 79
A ssociate in Liberal Studies (A LS) ..... 80
A LS Plan W orksheet ..... 81
A ssociatein Engineering Science ..... 82
A ES Transfer Plan W orksheet ..... 83
A ssociate of A rts in Teaching ..... 84
A A T Secondary M athematics Plan W orksheet ..... 85
A reas of Concentration Suggestions ..... 86
A rticulated 2+2 Programs ..... 89
Guaranteed Transfer A greement ..... 90
Partnership for College and Career Success ..... 90
Occupational and Technical Programs ..... 90
B asicCertificate ..... 91
A dvanced Certificate ..... 91
A ssociate in A pplied Science ..... 91
Capstone Options ..... 91
G raduation R equirements ..... 91
Course Prerequisites ..... 92
Course Sequences ..... 92
G roup Requirements ..... 93
Occupational Program D egree R equirements ..... 94
Instructional Programs ..... 95
GuaranteeforTechnical Competency ..... 168
Instructional Programs-General ..... 169
B asic C ertificate Programs ..... 170
Course Descriptions ..... 173
CourseResponsibilities ..... 174
A pplicability of Course to Program ..... 174
A dult Education Courses ..... 309
ESL (English as a Second L anguage) Classes ..... 313
A pplied Learning Skills (ALS) Courses ..... 315
Correctional Education Programs ..... 320
CollegeStaff ..... 333
Index ..... 341

# College Calendar 

(Subject to change)

## Spring 2008

January
Jan. 1
Jan. 2
Jan. 14
Jan. 19
Jan. 21
Tu New Year's Day (College Closed)
W Registration Resumes
M Classes Begin
S
M

February
Feb. 12
T Lincoln's Birthday (College Closed)

## March

Mar. 7
Mar. 10
Mar. 21-22
Mar. 24-29
F Midterm
M Second 8-week Classes Begin
F-S $\quad$ Spring Holiday (College Closed)
M-S Spring Break
May
May 9
May 12-15
May 16
May 17
May 19
May 26
F Last Day for Withdrawal with "W"
M-Th Final Exams
F Graduation
S Saturday Finals
M Grades Due by 11:00 a.m.
M Memorial Day (College Closed)

## Summer 2008

## June

June 2
June 26
M Classes Begin
Jun
Th Midterm

## July

July 4
July 22
July 23-24
F Independence Day (College Closed)

July 28
Tu Last Day for Withdrawal with "W"
W-Th Finals
M Grades Due by 11:00 a.m.

Fall 2008
August
August 18
August 23
M Classes Begin
S Saturday Classes Begin

## September

Sept. 1 M Labor Day (College Closed)

## October

Oct. 10
Oct. 13
F Midterm
Oct. 14
M Columbus Day Observance (College Closed)
T
Second 8-week Classes Begin

## November

Nov. 11
Nov. 26
Nov. 27-29

## December

Dec. 5
Dec. 8-11
Dec. 13
Dec. 15
Dec. 24-31

## Spring 2009

January
Jan. 1-3
Jan. 5
Jan. 14
Jan. 17
Jan. 19

February
Feb. 16

March
Mar. 6
Mar. 9
Mar. 11-14
April
April 9
April 10-11
F-Sa
Professional Development (College Closed)
Spring Holiday (College Closed)
May
May 8
May 11-14
May 15
May 16
May 18
May 25

| T | Veterans Day (College Closed) |
| :--- | :--- |
| W | No Classes after 5 p.m. |
| Th-S | Thanksgiving (College Closed) |

T Last Day for Withdrawal with "W"
M-Th Finals
S Saturday Finals
M Grades Due by 11:00 a.m.
Holiday Break

Th-S Holiday Break (College Closed)
M Registration Resumes
W Classes Begin
S Saturday Classes Begin
M Martin Luther King, Jr., Day Observance (College Closed)

Summer 2009

## June

June 1
June 25
M Classes Begin
Th Midterm

## July

July 3
July 21
July 22-23
July 27
F Independence Day (College Closed)
Tu Last Day for Withdrawal with "W"
W-Th Finals
M Grades Due by 11:00 a.m.

## Welcome to Richland Community College!

Welcome to Richland Community College. The faculty, staff, and I are pleased that you have chosen Richland to begin or continue your education.

As Richland celebrates over 35 years of serving the citizens of its District, you have joined thousands of people who have benefited from the many programs, services, and opportunities that the College offers. Some academic programs are designed for easy transfer for a baccalaureate degree. Occupational degrees and certificates are designed for you to find a job or to learn specific skills for your current job. Non-credit courses for training and retraining offer focused, short-term options. Students can find what they need to meet their academic, personal, and professional needs.


Learning opportunities extend beyond the classroom. Clubs and organizations offer options for leadership roles, for serving the community, and for developing friendships. Some clubs are organized around specific majors, and others focus on broader interests and issues. You can also find opportunities to lead and learn through serving as a Student Mentor, a Student Trustee, or a Student Senator. Information about all of these groups is available in this Catalog and you can learn about activities in the Student Handbook, on bulletin boards, and the College website, www.richland.edu.

Perhaps the best connections you can make at Richland Community College are with the faculty and staff. You will soon discover that the Richland faculty and staff are dedicated to providing the best educational experience through teaching excellence and student support. Every student is important at Richland, so do not hesitate to ask questions and seek assistance.

Whatever your reason for coming to Richland, we're glad you're here and hope you will take advantage of the student services, cultural programs, and mentoring opportunities that Richland offers. In fact, we hope you will find Richland to be even more than you expected!


Dr. Gayle M. Saunders
President

## Introduction to Richland

Richland Community College was founded in 1971. At that time, its mission statement identified it as a comprehensive community college, which required that it offer baccalaureate, technical, continuing education, and community service programs. For over 35 years, that is what the College has done. The people of the District have benefited and prospered from the services the College has offered.

Since its founding, the basic purpose and mission have not dramatically changed. What have changed, however, are the scope of activities and the manner in which they occur. The 21st Century places demands on Richland that are far different than the demands in 1971. Today's new economy retains the elements of mass production but adds new standards for quality, variety, customization, convenience, and timeliness. Yesterday's community colleges measured their success by how many students they served. Today's community colleges measure their successes by how well they serve. For a college to serve well, it mustcommit to improving standards of quality. It mustcommit to providing education, programs, and services in a variety of ways to diverse people at ever-changing times and places.

The faculty and staff of Richland are committed to meeting the challenges of the new economies and technologies. They are committed to providing the leadership and education required to create a talented pool of people who will help Central Illinois grow and prosper in an increasingly complex world. The following statement of purpose and mission and the requisite goals outline the blueprint, the plan, and the process by which Richland will meet the challenges of the 21 st Century.

As Richland Community College works to serve residents of the College District, it looks forward to meeting new challenges and fulfilling its most important missionstudent success.

## Governance

The College is governed by an eightmember Board of Trustees. Seven of the members are elected on staggered, six-year terms by the registered voters living within the District. The eighth, a student member, is elected for a one-year term by the College student body. The Student Trustee may cast an advising vote to show position and can make and second motions.

The Trustees meet on the third Tuesday of every month in the College Board Room. Special meetings are also called as required. All meetings of the Board and its committees are open to the public except for discussion of certain exempt matters including those relating to employment, land acquisition, and pending litigation. The general public is invited to attend all Board meetings, and time is set aside during these meetings for citizens to address the Board and to make their opinions known.

## Accreditation

Richland Community College is accredited by the Higher Learning Commission and a member of the North Central Association of Colleges and Schools. In 2000, Richland Community College became a member of the Academic Quality Improvement Program, recognized by the Higher Learning Commission as an alternative to the traditional accreditation process.

The Higher Learning Commission
30 North LaSalle Street, Suite 2400
Chicago, IL 60602-2504
1-312-263-0456
www.ncahigherlearningcommission.org
Richland earned its Reaffirmation of Accreditation from the Higher Learning Commission in Spring 2008. Accreditation has been extended to 2014-2015.

## Recognition

Richland Community College is recognized by the following organizations and agencies:
-Illinois Board of Higher Education
-Illinois Community College Board
under the provision of the Community
College Act
-Illinois State Board of Education
-University of the State of Illinois
-U.S. Department of Education
-Veterans' Administration
-Illinois Student Assistance Commission
-Commission on Accreditation of Allied
Health Education Programs
-National League for Nursing

## Statement of Purpose

The primary purpose of Richland Community College is to improve the quality of life in Central Illinois by actively serving the educational needs of the people, organizations, and institutions it serves. The College pledges to provide equal access to education and training for all citizens regardless of race, age, gender, religion, national origin, ethnic background, or disability.

## College Vision

In November 2003, the Board of Trustees adopted a new vision statement for Richland Community College: to be the premier source for education, workforce training, partnerships, and economic development.

## College Mission

The mission of Richland Community College is to offer educational programs that enable students to achieve their potential through higher education by obtaining the abilities, attitudes, and skills needed for personal and professional growth.

Richland Community College achieves its mission and purpose by offering the following programs:

1. The first two years of a baccalaureate education;
2. Technical courses, certificates, and degrees designed to provide job training, retraining, and upgrading of skills;
3. Basic educational skills designed to prepare students toengage in college-level study; 4. Continuing and community education courses and programs designed to provide andencourage opportunities for lifelong learning;
4. Student development programs and services designed to help students identify educational and career goals, set realistic career paths, and develop skills necessary to achieve intellectual and personal growth;
5. Academic programs and services that provide supplemental support to both teaching and learning;
6. Community education activities and programs that complement, enhance, and contribute to the growth and enrichment of students and the community, both inside and outside of the classroom; and
7. Community service activities and programs that promote linkages with business, industry, and governmental agencies designed to meet the changing needs of the market place and promote economic growth in Central Illinois.

## Core Values

RichlandCommunity College engages in a process of self and community reflection that would lead us to recognize and heighten awareness of the core values we and our institution have already practiced and articulated, to seek agreement about those values, and to develop an institutional culture that holds itself accountable to those values.

What we practice at Richland
Commitment-
We are dedicated to meeting the needs of the communities we serve.
Respect -
We recognize the expertise of all members of the College community and encourage individual contribution.
Excellence-
We strive to develop and pursue higher standards.
Accountability -
We assume and demonstrate responsibility for our actions.
Diversity -
We believe that our similarities and differences are opportunities for establishing a common bond and strengthening the College.

## Ethics and Leadership

In September 1989, the staff of Richland Community College developed two statements to guide its leaders and managers. The first statement provides a framework for leadershipandmanagement. The second statement, prepared at the request of the Board of Trustees, provides a framework for good trusteeship.

The statements were adopted by the Board of Trustees in March 1990 and reaffirmed in 2007. The purpose of the statements is to establish a viewpoint, framework, and tone from which the College's leaders will lead.

## The Tenets of Community College Trusteeship

The community college is an egalitarian institution committed to the principle that highereducation should be available to every person who can benefit. The purpose of a comprehensive community college is to serve all who then can serve to build a better society.

The primary task of the Board of Trustees is to serve as a regenerative force, always expanding and improving the College's service to people. Given this basic condition, the activities and deliberations of the Board of Trustees will be governed by the following tenets:

## About Allegiance

Trustees have butone allegiance; that is to the institution and its mission. Representing special constituencies dilutes trust and undermines institutional mission.

## About Commitment

To achieve distinction requires commitment, and commitment requires the devotion of time, thought, energy, effort, and ability whenever needed.

## About Creating a Culture of Sustainability

When the Board of Trustees weaves the core values into sustainable concepts with a perspective measured by the Triple Bottom Line(Environment, People, Economics), the College becomes values-driven, exceeding its mission.

## About Distinction

The Board of Trustees has the authority and the autonomy to be original, creative, and regenerative; that is its responsibility. If the College is to become an institution of distinction, it will be because the Board demonstrates and requires distinctive service.

## About Evaluation

Purpose achieved with distinction does not occur in a vacuum. It occurs because of a Board desire for distinction and willingness to measure how well it is achieved.

## About Power

Power rests mostly with the Board of Trustees butalsoextends farbeyondit.Trustee power and influence well used will result in staff power and influence well used; students will be served.

## About Purpose

The purpose of an educational institution is more than a Board decision. It is a Board responsibility. Defining the institution is a critical task that requires continuing review.

## About Service

All activities in which the College en-gages-teaching, serving, and guiding-must be evaluated by theireffect upon students and community. How the College serves its community and how it serves and prepares its students are fundamental criteria by which the College must be measured.

## About Teamwork

The Board consists of individuals with differing values and beliefs, and debate is expected and natural. Although there are individual expressions, there are no individual decisions. Board decisions must be team decisions.

## An Administrator's Creed

The moral character of an educational organization is reflective of its leadership. Among those involved in the art and science of teaching, it is imperative that both teachers and leaders demonstrate a strong commitment to good principle and ethical behavior. The fundamental contributions of education to society demand commitment to exemplary values. Educators influence, shape, and teach the values, attitudes, and beliefs that create tomorrow. As aconsequence, they are charged with the responsibility to husband, advance,
and improve upon the values and beliefs that sustain and characterize a people.

Educational leaders at Richland Community College believe and practice the following principles:

## About Creativity

Experimentation and originality are integral to the process of educational achievement; they should be more than encouraged-they should be sponsored.

## About Expectations

In a productive and harmonious work environment are clear standards and expectations for employees and the employer. Policies and procedures are common knowledge as is the process for changing them.

## About Learning

The most important element of education and learning is quality; the measure of quality will be found in the achievement of students.

## About Objectivity

The relationship between the institution and an individual is stable and harmonious where impartiality and reason guide the belief and conduct of the institution's leaders.

## About Openness

The College is founded in the public trust. Its leaders and managers have a responsibility to inform continually the students, staff, and public about not only the institution's goals but also its progress toward achieving them.

## About People

People generally wish to contribute to society. They have dignity; they have worth. Where dignity and worth are valued, positive contributions will be abundant.

## About Respect

All things deserve consideration, be they man-made or natural. Nothing and no one should be summarily ignored or rejected. Something is to be learned from everyone and everything.

## About Risk

Leadership requires risk. Risk brings victory or defeat.Leadership requires courage to face defeat and humility to live with victory.

## About Trust

Educational leaders must demonstratefaith and reliance on the integrity and ability of people. This trust is both a concept and an emotion. It requires leaders to rely on others.

## About Truth

Truth is beyond quantification. It is a way of thinking that demands sincerity and integrity. It is a way of living-straight-forward, candid, and simple.

## Facilities

RichlandCommunity College District 537 includes all of Macon County and parts of Christian, DeWitt, Logan, Moultrie, Piatt, Sangamon, and Shelby Counties, serving approximately 7,600 students annually at its main campus in Decatur, at its Clinton Extension Center, and at several satellite campuses throughout the District.

Richland offers students a more complete educational experience through the use of a variety of on-campus and off-campus facilities.

## Main Campus

Richland moved into its permanent home during the fall of 1988 . This 154,071 -sq. ft . facility houses 44 classrooms and 25 laboratories, located on a site of 155 acres.

A 12,000-sq.-ft. Horticulture/Agriculture/Maintenance Facility was completed during the summer of 1990. Through the generous donation of Paul Weidenbacher, an 800 -sq.-ft. greenhouse was added to the Agriculture building during the spring of 1991.

The Shilling Community Education Center was made possible by a $\$ 750,000$ bequest from the Shilling Trust administered by the Main Street Bank and Trust. Construction on the 44,607-sq.-ft. Shilling Center was completed in January 1993. The Center features a 325 -seat auditorium, banquet room with seating for 300 , conference rooms, and several classrooms available for use by students, faculty, staff, and the community. The facility is available for meetings, programs, teleconferences, performances, and other events by calling 875-7211, Ext. 240.

Richland's Fitness Center, located in the Shilling Center, includes aerobic conditioning equipment, weight machines, and free weights. Richland District residents may use
the Fitness Center by registering for the appropriate Physical Education class or multiple non-credit options with the Fitness Center. A new Fitness Center will open in Summer 2008.

The Kitty Lindsay Learning Resources
Center, located next to the Mueller Student Center, provides a variety of resource materials, Internet, and e-mail equipment and a professional staff trained to help students locate and use materials.

The Richland Bookstore, operated by Validis Resources, a division of Nebraska Book Company, is located next to the Mueller Student Center. It carries textbooks and materials for all Richland courses and a variety of school supplies. VISA, MasterCard, and Discover are accepted by the Bookstore. The Bookstore can be contacted at 875-7211, Ext. 231.

The Industrial Technology Center, adding 23,550 square feet to the east wing and dedicated in August 2002, is the location of many technology programs including Drafting and Design, HVAC, and Engineering Technology. State-of-the-art equipment allows integrated training opportunities for students in these programs.

The Schrodt Health Education Center offers training opportunities for health professions through realistic replications of hospital rooms and surgical rooms. General classrooms, laboratories, and computer labs are also available in this $25,570-\mathrm{sq}$-ft. wing, dedicated in January 2003.

The Dwayne O. Andreas Agribusiness Education Center, a 15,000-sq.-ft. addition to the east wing, was dedicated in Fall 2007 and open for classes in Spring 2008. This new space allows the expansion of current programs and the development of new programs related to Agribusiness.

A variety of fast foods, drinks, and daily specials may be purchased from MJ's Grille next to the Mueller Student Center. Hours of operation are from 7:30 a.m. to 8:00 p.m. when classes are in session, with no service onSaturday. Summer hours are posted. Vending machines are located in the cafeteria, in the lounge adjacent to the LRC, and in the Shilling Center, just south of the lobby.

The StudentServices Center is the location of many services for students. Counseling and Advisement Services, Financial Aid and Veteran's Affairs, Admissions and Records, the ISTEP Program, and Career and Transfer Services are housed here.

## Off-campus Facilities

The Decatur Area Technical Academy, 300 E. Eldorado Street, Decatur, is used primarily during late afternoon and evening hours for the teaching of machining credit classes and contract training for business and industry.

The Automotive Technology Center, located at the corner of Cerro Gordo and Jackson Streets (justeast of the Decatur Area Technical Academy), is used for the teaching of all Automotive Technology classes.

The Decatur Public Library is the site of Project READ, whose goal is to provide educational services for adult students reading below the ninth-grade level. Services include recruiting, training, and placing volunteers in locations where they can be effective tutors for those adultstudents. Prospective students and volunteers may call for appointments or further information at 423-7323.

The Richland Community College Hope Academy Center opened in Fall 2005 at the Decatur District\#61 Hope Academy at 1050 E. Sangamon (at the intersection of Jasper and Sangamon Streets). The Hope Academy Center offers admissions advising, registration, placementtesting, financial aid information, and many other services. Credit classes and non-credit workshops are scheduled at the RCCHope Academy Center. The Center houses a free public access computer lab. Free workshops on job skills, résumé writing, and introduction to basic computer skills are offered periodically. General Education Diploma (GED) classes are also offered. Call 217-421-6565 for more information.

The Clinton Extension Center offers admissions, advising, registration, placement testing, virtual testing, financial aid, and many other services. Creditclasses, noncredit workshops, and General Educational Development (GED) classes are scheduled in Clinton and othercommunities throughout Richland's district. General Educational Development (GED) classes are also provided. The Clinton Extension Center is located in Clinton at Clinton High School (northeast entrance), 1200 Highway 54 West. Call 935-6791 for additional information.

Area schools also provide classrooms for off-campus credit classes and non-credit workshops. Dual creditclasses are provided to area high school students at their high schools.


## Consultation



(Mega) Registration

## Counseling



## Admission to the College

Students seeking admission to Richland Community College should

1. Have graduated from high school, or
2. Have received a High School Equivalency Certificate based on the GED test, or
3. Have been home-schooled and meet the "ability to benefit" as determined through a test recognized by the U.S. Department of Education, or
4. Intend to enroll in a GED course, or
5. Be a high school junior or senior and have principal approval to enroll, or
6. Be a gifted student below the age of 16 and have principal approval to enroll (see page 20).

Students enrolling at Richland Community College are expected to submit all transcripts. High school and college transcripts must be sent directly from the appropriate schools to Richland's Office of Admissions and Records. No hand-delivered transcripts will be accepted.

## GED Placement Program

Students without a high school diploma will be required to participate in the Richland GED placement program and enroll in the appropriate GED course. Students will then be eligible for further study at Richland upon successful completion of the GED test and receiptof the High SchoolEquivalency Certificate.

## Admission to a Program or Course

Admission to the College is not the same as admission to a program of study and/or courses. Admission to a program or courses is based upon previous education, experience, and levels of achievement.

## Admission to a Program of Study

Each program of study (for example, Fire Science, Horticulture, Associate in Arts or Associate in Science) has specific requirements for admission. These requirements are based on the student's previous education, work experience, and levels of achievement. See "Programs of Study" on page 70 for complete list of prerequisites for each program. Information that may be used in admission to a program includes

1. A transcript of the student's high school and college records. The student should request a transcript from the school(s) to be sent to the Admissions and Records Office at Richland. High school seniors applying for admission should also include a list of courses in progress. Transcripts of individuals who do notenroll at Richland will be kept on file for two years after receipt. High school and college transcripts must be sent directly from the appropriate schools to Richland's Office of Admissions and Records. No handdelivered transcripts will be accepted.
2. Test scores. Richland generally uses the American College Testing Assessment (ACT).
3. Application and personal interview, including related experiences since leaving high school or college.
Students may be provisionally admitted to a program even if they fail to meet some requirements. Students provisionally admitted may be required to enroll in developmental courses, take areduced load, complete further testing, and/or receive career counseling.

Similar procedures may also apply to students enrolling in individual courses only.

## Selective Admission to Health Professions Programs

Students who wish to declare a major in some health professions programs must meet specialized criteria under the instructional program section of this Catalog. Admission to some health programs is selective due to availability and limitations of practicum sites and limitations in the number of students who can be accommodated in clinical groups. The selective admissions procedures also apply to readmission students, advanced placement students, and transfer students. Admission to Richland Community College does not guarantee admission to selective admissions programs. The following programs require specialized admission:
AS Dental Hygiene-cooperative agreement with Lakeland Community College
AAS Nursing-Registered Nursing
AAS Occupational Therapy Assistantcooperative agreement with Parkland Community College
AAS Physical Therapy Assistant-cooperative agreement with Lakeland College
AAS Radiography
AAS Respiratory Care-cooperative agreement with Parkland College
AAS Surgical Technology
Pharmacy Technology Certificate
Practical Nursing Certificate
Surgical Technology Certificate

## Evaluation of Specialized Courses

Students who would like to requestevaluation of specialized coursework from another college mustobtain a Request for Evaluation of Specialty Credit Form from the Health Professions Office, submit a weekly outline for the completed course, and pay a fee for each course evaluated.

## Evaluation of Clinical Courses

Students who wish to transfer credit for clinical courses may be required to have their skills evaluated. Additional lab fees are required depending on the extent of the evaluation needed. See the appropriate Health Professions program director for the evaluation of the lab time and fees required.

## Transfer Credit by Licensure

A student who is currently enrolled in Richland Community College or has completed 8 credit hours is eligible to apply and receive transfer credit withoutexamination, based on current licensure or certification in certain program areas where approved by the College. The student must submit an application for transfer credit for each course applied for to the specific program director in which the transfer credit is to be awarded.

## Minimum Subject Admission of High School Requirements for Transfer Programs

The Illinois Board of Higher Education has established minimum subject requirements for baccalaureate degree programs. These subject requirements, which will be in addition to the admissions requirements and procedures currently in place at Richland, became effective in the 1993 Fall Semester.

Students entering a transfer program with subject deficiencies will be admitted provisionally and will be required to make up these deficiencies by graduation. The minimum subject requirements are listed below:

## Units/Subjects

4 English (emphasizing written and oral communications and literature)
3 Social studies (emphasizing history and government)
3 Mathematics (introductory through advanced algebra, geometry, trigonometry, or fundamentals of computer programming)
3 Science (laboratory sciences)
2 Foreign language, music, art, or vocational education

For further information, please contact your high school counselor or the Registrar at Richland Community College, 217-8757211, Ext. 284.

## Transfer of College Credit to RCC

Students who wish to transfercreditearned at another accredited college or university must request a transcript from the college attended. The transcript should be sent directly from the college or university to Richland's Office of Admissions and Records. No hand-delivered transcripts will be accepted. The student requesting a transfer of credit must pay any applicable transcript fees.

Approved credit hours will be applied toward the total number of hours needed for the degree or certificate, provided the average grade for all such work is " C " or better.

Transfer credit will not be included in computing the student's grade point average at Richland. Approved credit hours will be recorded on the student's academic record pending formal evaluation of the transfer work.

## Admission of High School Students and "Gifted" High School Students

High school students may attend classes at Richland for credit toward either a high school diploma or a college degree. Eligibility for enrollment as a high school student is decided as follows:

1. The student is a high school junior or senior and has completed and signed an "Admission Information FormHigh School."
2. A signed "Principal's Approval" form must be submitted.
3. A signed "Parent Guardian Approval" form must be submitted.
4. A high school transcript is submitted to Richland.
Final approval for enrollment is then determined by Richland. College credit for classes taken by high school students will be
held in "the bank" and awarded to the student upon completion of high school (as verified by an official high school transcript).
"Gifted students" (students with exceptionally high academic ability as determined by the student's school and the College) who are below sixteen years of age may also take courses at Richland with the approval of the student's principal, parent/guardian, and the College.

Gifted students should follow the application procedures previously listed for the admission of high school students.

## Dual Credit

High school students who rank above average in academic achievement and who meet all College course prerequisites may enroll in selected college classes at Richland Community College and receive both high school and college credit simultaneously. Students enrolling for dual credit must have appropriate academic qualifications and approval from their high school principal and parent or guardian. Upon the request of school officials, a dual credit information session will be offered.

Students enrolling for dual credit should follow the application procedures previously listed for the admission of high school students. Students are encouraged to contact the Admissions Office of the university or college they are interested in to ensure that dual credit courses will be accepted.

## Registration

Registration for classes at Richland takes place at scheduled times before the beginning of each semester. Class schedules, including a list of all courses offered and registration dates, are available both online and in printed format to interested persons before the start of the term. Students must complete placementtests in the Testing Center, Room W124, prior to orientation and registration.

Drop/Add registration is held the first week of classes and is limited to courses for which enrollment is not filled.

Students may register for any course that has not begun if space is available and if the student is eligible.

Students must have their class schedules and fee forms approved and signed by a counselor or academic advisor before regis-
tering. Students registering for one course only may register without seeing an advisor if that course does not have a prerequisite.

Counselors and academic advisors are available during registration periods. Students are encouraged to register early.

Under certain conditions students may register without seeing a counselor or advisor. See the current class schedule for details.

## Credit Evaluation Programs

## College Credit for Experience Outside the Classroom

Richland realizes that many people who attend school have knowledge gained through work, military service, independent study, and other learning experiences. Richland may grant credit for this knowledge through the programs listed below. Credit earned in this way will be recorded on the student's transcript without a grade and will not be used in computing the student's grade point average. The programs include the following:

1. Advanced Placement Program (APP) The APP is an organized instructional and/or testing program offered in high school in cooperation with the College Entrance Examination Board. Advanced high school courses may be offered through the program for college credit, or credit may be given for course areas not offered by the APP if the student passes an APP examination given by the high school. High school students interested in the Advanced Placement Program should contact their high school counselor.
2. College Level Examination Program (CLEP) and DANTES Exam
Richlandparticipates in the College Level Examination Program (CLEP) and the DANTES Examination Program, which allow students to obtain college creditbased on their learning outside the class room.

CLEP examinations are available in over 30 areas, including Social Science, Natural Science, Humanities, and Mathematics. Credit through a CLEP examination may be applied to a degree or certificate as general education or elective(s). DANTES exams are available in areas
such as education, criminal justice, finance, business, and world religions. Credit through a DANTES exam may also be applied to a degree or certificate. No credit will be awarded for English 101, 102, or Speech 101 at Richland through either the CLEP or the DANTES Exam.

Credit granted through a CLEP or DANTES examination will be recorded as "Credit through CLEP" or "Credit through DANTES" and will not be used in computing a grade point average. Students should check with the Registrar, Ext. 284, to verify how CLEP will be applied.

Students who have enrolled in college study before attempting a CLEP or DANTES examination will not be granted credit if they attempt examination after they have received a grade for that specific course or for prior college study that is directly related to an exam taken.

For more information or to register to take a CLEP or DANTES examination, contact the Testing Center, Ext. 238, or the Student Learning Center, Ext. 419.

## 3. Proficiency Examination

Students with wide varieties of educational experience may convert this experience into college credit on the basis of evaluations by Richland Community College staff and standards set by the College in those areas and courses deemed appropriate.

Students must be currently enrolled at Richland and not enrolled in the course in which they are requesting to be tested. They should obtain the appropriate form and obtain permission from the division involved, pay the required fee, and successfully pass the examination.

A proficiency examination for a given course may be taken only once. A fee of one-half the in-district or out-of-district tuition normally charged for the course must be paid before the exam. The fee is not refundable. The student must receive a score of $80 \%$ or better to earn credit by proficiency.

Credit hours earned through proficiency examination are posted on the student's permanent record. The credit is not included in the calculation of the grade point average and may not be used to establish enrollment status.

## 4. Proficiency by Advanced Course

Some courses are organized in sequence so that completion of an advanced course depends on knowledge gained from a previous course. Students who satisfactorily complete the advanced course at Richland without taking the previous course may be eligible for college credit for the previous course. Course sequences in which students may apply for proficiency by advanced course are listed be low, along with the minimum grade required in the advanced course to earn credit for the lower course:

| Advanced <br> Course | Proficiency <br> Credit | Required <br> Grade |
| :--- | :--- | ---: |
| CS 281 | CS 251 |  |
| CIS 110 | CIS 101 | B |
| FREN202 | FREN101, 102, 201 | B |
| FREN201 | FREN101 and 102 | B |
| FREN102 | FREN101 | B |
| GERM202 | GERM101, 102, 201 | B |
| GERM201 | GERM101 and 102 | B |
| GERM102 | GERM101 | B |
| IT 105 | CIS 101 | B |
| IT 115 | CIS 101 | B |
| IT 116 | CIS 101 | B |
| IT 282 | IT 153 | B |
| MATH221 | MATH 116, 117, 121 \&122B |  |
| MATH122 | MATH116, 117 \& 121 | B |
| MATH121 | MATH116 and 117 | B |
| NURS203 | NURS112, 150, 152 |  |
| if successful completion of |  |  |
| NLN with 65\% | C |  |
| OTK101 | OTK 100 | B |
| OT114 | OTK 100 | B |
| SPAN202 | SPAN101, 102, 201 | B |
| SPAN201 | SPAN101 and 102 | B |
| SPAN102 | SPAN101 | B |
| WELD102 | WELD100 and 101 | B |

Students desiring credit by advanced course must apply officially for such credit within the four years following completion of the advanced course. Exceptions to this policy must be approved by the Dean of the appropriate division. To apply for proficiency credit, obtain a "Required for Proficiency Credit by Advanced Course" form from the Admissions and Records Office. A fee of $\$ 1.00$ per semester hour will be charged for consideration of the student's request and may be refunded only if the student is not
eligible to receive such college credit. Other military credit may be accepted if applicable. Call the Registrar, Ext. 284, for additional information.

## 5. Armed Forces Health and Physical Education

Any veteran who has completed a minimum of six months' active duty in the armed forces and presents evidence of an honorable or general "under honorable conditions" discharge from the service is eligible for a maximum of four semester hours of credit. Such credit will be recorded as "credit from military service" and will not be used to compute a grade point average. The credit will be applied as health and/or physical education activity course credit.

Veterans may apply for credit through the Admissions and Records Office.

## 6. United States Armed Forces and Armed Services Courses

Credit may be given for group study or correspondence work completed through the United States Armed Forces Institute (USAFI) if the course is recommended by the American Council on Education. Training courses may also be used to earn credit if they are deemed appropriate by the American Council on Education. The courses must be within the student's field of study, and the student must provide evidence of satisfactory completion of the course(s). Such credit granted will be recorded as "credit through USAFI" or "credit through armed services courses." Contact the Registrar, Ext. 284, for further information.

## Course Placement

Students come to Richland with a wide variety of education, achievement, experience, and training. To help determine the student's level of learning, placement tests are given to help students select courses that will be most beneficial and to maintain academic standards.

Reports from other tests and transcripts also aid in placing students in the courses for which they are best prepared.

## Course Placement Testing

Student are required to complete placement testing in English, mathematics, reading, health, and/or other areas in the Testing Center, Room W124, and/or at the Clinton Extension Center. Test results will be used to determine a student's eligibility for courses with prerequisites and/or placement in developmental courses (courses numbered 087 through 098).

Some of these tests are administered on a computer, and some are untimed. Photoidentification is required for all testing. Review materials for the mathematics and English sentence skills tests are on our website at www.richland.edu/services/assmntsrvs. Other review options are available by asking in the Student Learning Center, Room S117. Retesting for some placement tests for a fee is possible if a student meets certain guidelines. Placement testing results are valid for two calendar years. Once a student begins a sequence of courses based on the test results, the student may not retake the placement test in that area regardless of the amount of time that has elapsed since the course was started.

English-Reading - Each student will receive an English placement report based on his/her transcripts and/or ACT test scores. ACT and SAT scores are valid for three years. The report advises in which English class (ENGL 088, 090, 095, 097, ENGL 101, or OT 119) the student is to enroll. In some cases, students may be required to take English and Reading Placement Tests to help determine their level of competence. The English and Reading Placement Tests are also used to determine eligibility in some collegelevel courses. See the course description to determine prerequisites for courses.

Students unsure about their placement into reading/writing courses should contact a counselor in the Student Services Center or the Dean of Communications in RoomC160.

Foreign Language - Students who have not studied a specific foreign language are to begin their college study with the course numbered 101. All students whose most recent prior study of the language occurred more than five years ago should also start their college study with the course numbered 101.

Students who have studied a specific foreign language in high school within the past five years are to begin their study at Richland with the course number determined by the earned quality points. Quality points are computed on the basis of full years of high school study and are assigned on the basis of the grade earned for each semester divided by two. $(\mathrm{A}=4.00, \mathrm{~B}+=3.50, \mathrm{~B}=3.00, \mathrm{C}+=$ $2.50, \mathrm{C}=2.00, \mathrm{D}+=1.50, \mathrm{D}=1.00, \mathrm{~F}=0$.)

Example: A student who studied a foreign language for one year and received an "A" for both semesters would have earned four quality points, (i.e., $4.00+4.00=8.00$ divided by $2=4.00$ ). Another student who completed one year with a " B " for one semester and an "A" for one semester would have earned three and one-half quality points (i.e., $4.00+3.00$ $=7.00$ divided by $2=3.50$ ).


Any person who wishes to register for a specific foreign language with course placement different from that shown above should consult with the Dean of Communications, Education, Humanities, \& Fine Arts (C162), Ext. 386 , regarding appropriate placement.

Mathematics - Some mathematics and science courses require prerequisites for enrollment. In some cases students will be required to take a placement test in arithmetic, elementary algebra, or college mathematics.

Students seeking clarification regarding their math placement should see a counselor in the Student Services Center or the Dean of Mathematics and Sciences in Room S119.


Challenges...



## Assistance!



## Tuition, Fees, and Charges

Tuition, fees, and other charges paid by a student to Richland Community College cover a portion of the actual expenses of a student's education. The balance of the cost is paid by the public through local property taxes assessed within District 537 (or, in some cases, the student's own community), state financial support, and federal financial assistance.

The Academic/Technology Fee includes the following services and privileges: computers, both for computer-based classes and for open use, and student activities, including student clubs and organizations, entertainment, and events.

Tuition, fees, and other charges are due and payable at designated times each registration session. The College reserves the right to change the rate of tuition, any fees, or any charge without notice.
Residents of Richland Community College District (and Out-of-District Students with Charge-Back Authorization)

Per Credit Hour
Tuition \$69.50*
Academic/Technology Fee \$4.50*
Total $\$ 75.00^{* *}$
Out-of-District Students of Richland Community College (Without Charge-
Back Authorization)
Per Credit Hour
Tuition \$69.50*
Academic Technology Fee \$4.50*
Out-of-District \$302.48
Total \$376.48
Out-of-State and International students pay $\$ 417.94^{* *}$ per credit hour plus fees.

* Subject to change with Board approval.
** These charges are subject to change on a yearly basis as per capita costs are determined.


## Fees

Registration Fee (non-refundable and payable with tuition \& fees) $\$ 10.00$
Graduation Fee (per application) \$25.00
Course Fees (not applicable to all courses) generally range from $\$ 8.00$ to $\$ 280.00$ per course. A current listing of course fees is available in the Business Services Office.

## Health Professions Fees

Course Fees: Due to the cost of medical and surgical supplies and outcome testing used in some health professions courses, additional fees are required. All program fees are estimates subject to change.

Evaluation of Specialized Health Professions Courses transferred to Richland Community College - $\$ 35.00$ per course

Evaluation of Specialized Clinical Courses Skill Evaluation - \$30.00 per lab hour

Nursing Fees Associated with NCLEX Testing

Background Check - \$75.00*
Application to Test (Continental Testing Service) - \$82.00*
Examination Fee (NCLEX Testing -
National Council of State Boards of Nursing)- $\$ 250.00^{*}$
PSB Exam (Prerequisite for Surgical
Technology) - \$15.00
Certification Exam (SURGT 202)
\$190.00*
*Subject to change without notice.

## Payment Information

Full payment ( $100 \%$ ) of tuition and fees is due approximately one weeks before the start of classes. Payment dates for each semester are published in the class schedule and are also available at the cashier's window. Students are not required to pay at the time of registration unless the date of registration is less than one weeks before the start of classes. A student payment plan, FACTS, is available. Details of the payment plan are listed in the section below. All students are encouraged to apply for financial aid and should apply as early as possible. Failure to pay for classes by the due date may result in the student being dropped from class but NOT from his or her obligation to pay. NONattendance or NEVER attending also does not release a student from the obligation to pay tuition charges. Refunds or adjustments are only made when classes are officially dropped within the refund period. Official drops are processed by the Admissions and Records Office and must be initiated by the student.

## Deferred Tuition Payment Plan

For students desiring additional time for payment, the College offersFACTS, the online tuition payment plan through Nelnet Business Solutions. The FACTS plan does not add interest or finance charges, and there is no credit check. For a fee of $\$ 25$ per semester, tuition payments will be automatically deducted from the designated bank account or credit card on a predetermined monthly schedule. Enrollment and additional information is availableonlineat.www.richland.edu/cashier/ facts. Informational brochures are also available at the cashier's window.

## Tuition Discount for Senior Citizens

District 537 residents who are 65 or older or who will become 65 years old during the calendar year are eligible to enroll without payment of tuition in regularly scheduled credit courses, other than credit courses designed specifically for senior citizens, provided that available classroom space exists and tuition-paying students enrolling constitute the minimum number required for the course. Such waiver does not apply to all other fees associated with enrollment in such a course. For more information, call the Business Services Office, 875-7211, Ext. 227.

## Proficiency Exam

The fee for a proficiency exam is one-half of the tuition normally charged for a course and should be paid before the exam is taken. See page 21 for information about the process of proficiency.

## Transcripts

Transcripts are $\$ 2.00$ per copy. Faxed transcripts are $\$ 5.00$ per copy. Transcripts can be obtained in the Admissions and Records Office.

## Refund Policy

Richland Community College's refund policy is based on full payment of tuition and fees. Students whoregister and then officially withdraw from any or all classes at the College will have a portion of their tuition returned according to the schedule below.

All withdrawals and drops must be initiated by the student and must be processed through the Admissions and Records Office to be eligible for a refund. The Registration Fee is non-refundable unless the class has been canceled. Course fees and all other fees are non-refundable after classes begin.

## Regular Semester:

Prior to beginning of semester $100 \%$
First week of classes $100 \%$
After the first week of classes $0 \%$

## Summer Session:

Prior to beginning of semester $100 \%$
First three days of session $100 \%$
After third day of session $0 \%$

For classes that do not follow a traditional semester schedule, refunds will be issued at the equivalent of the above regular semester schedule. Students receiving the Federal Pell Grant shall receive refunds computed in accordance with Federal regulations.

## Residency

A student is considered a resident of Richland Community College District 537 if one of the following criteria is met for at least 30 days prior to enrollment:

1. The student resides with his/her parents within the District; or
2. The student does not live with his/her parents but depends on them for support at Richland, and both the student and the parents reside within the District; or
3. The student is married and maintains a family residence within the District; or
4. The student is 18 years of age or older, is self-supporting, and maintains a residence within the District.

Charge-Back Authorization

## In-District Students Planning to Attend Another Community College

Residents of Richland Community College's District who choose to pursue a program of study not offered by Richland but offered at another Illinois public community college may be eligible for a charge-back. If a charge-back is approved by the Richland Board of Trustees, the student will pay the other district's in-district tuition only. Chargebacks will not be approved for individual courses.

Applications for charge-back must be completed and submitted to the Student Services Center (Room C129) no later than 30 days prior to the beginning of any term to which the charge-back is to be applied. Chargeback applications must be completed prior to the start of each academic year the student is attending the other community college, regardless of any prior year's approval. Chargebacks will not be approved retroactive to the time of application.

Richland has cooperative agreements with several other community colleges. If Richland has a cooperative agreement with another college for the program of study for which the student is requesting a charge-back, the student must attend that college in order to pay only the in-district tuition of that institution. If the student chooses to attend a college other than the one Richland has the agreement with, the student will be responsible to pay that college's full out-of-district tuition.

Students are encouraged to contact the Student Services Center for further information.

## Charge-Back Authorization

## Out-of-District or Out-of-State Students Planning to Attend Richland

A resident of another community college district who plans to attend Richland Community College and wants to avoid out-ofdistrict fees should request an application for charge-back from the community college located in the district in which he/she resides. It must be completed and returned to that college no later than 30 days prior to the beginning of the term for which application for charge-back is being made.

Applicants who reside in another community college district may be granted an out-ofdistrict or out-of-state tuition waiver if they are employed at least 35 hours per week by an entity located in Richland's District or if they are enrolled in a course that is being provided under the terms of an agreement between the employing entity and Richland. If employed for less than 35 hours per week, the course must be work-related.

## Cooperative Agreements

Cooperative agreements exist between Richland Community College and the community colleges listed on page 71 . Under the agreements, no charge-backs or out-of-district fees are required of students enrolling in the designated programs of study listed on page 71. A cooperative agreement authorization must be completed by Richland and submitted to the college that the student plans to attend. Cooperative Agreement forms are available in the Student Services Center.

## Financial Aid

All students seeking state or federal financial assistance are required to complete the Free Application for Federal Student Aid (FAFSA) for each academic year unless otherwise instructed. This application may be obtained from the Financial Aid Office in the Student Services Center, from high school counselors, or at www.fafsa.ed.gov. Early application is important.

The FASFA is accepted until June 30 in the academic year. The deadline for accepting supporting documents for federal or state application will be 30 days after the student's last day of enrollment. The verification deadline is also 30 days after the student's last day of enrollment.

## Grants

## Pell Grant

The Pell Grant is awarded to help degreeseeking undergraduates pay for their collegerelated expenses. The Pell Grant, based on need, is the largest federal student aid program. For many students, these grants provide a "foundation" of financial aid to which aid from other programs may be added. Unlike loans, grants do not have to be paid back. Richland adheres to the standards and requirements set by the U.S. Department of Education. Eligibility is determined through the FAFSA. Richland verifies all students required by the U.S.Department of Education, first-time Richland students, and all students returning after an absence of more than an academic year. Any person required toregister with Selective Services who fails to register is ineligible for federal and state financial aid. Richland complies with all U.S. Department of Education regulations.

## Supplemental Educational Opportunity Grant (SEOG)

The SEOG is awarded to help pay for education after high school and is available only to undergraduates who receive Pell. This federal grant is awarded to students who demonstrate exceptional need determined through the submission of the FAFSA and is not repayable. Because of limited funding, priority is given to students who complete financial aid files the earliest.

## Academic Competitive Grants

Full-time, degree-seeking students who receive Pell funds and who have passed two Advanced Placement tests with a score of three or have a rigorous course of high school study (four years English, three years Science, three years Math, three years Social Studies and one year foreign language) may be eligible for this federal grant. Only students who graduated high school after 01/01/ 05 are eligible.

## Illinois Incentive for Access Grant (IIA)

The IIA A ward is for first-time freshman students who, based on the federal need calculation, have been determined to have no family resources. Eligible students who are enrolled at least half-time receive up to $\$ 500$ of grant aid beyond tuition and fees per year. The Illinois Student Assistance Commission determineseligibility.

## Illinois - Monetary Award Program (MAP)

The MAP provides tuition and fees to students who qualify on the basis of financial need, U.S. citizenship, Illinois residency, and other requirements. Eligibility is determined through the FAFSA and the Illinois Student Assistance Commission. Students must be taking a minimum of 3 credit hours in a degree-seeking program. Application should be made early for consideration. Students at community college level are allowed up to 75 MAP paid credits.

## Scholarships

## Merit Recognition Scholarship

This scholarship is awarded to Illinois students who rank in the top $5 \%$ of their high school class at the end of the seventh semester. Initial eligibility is determined by high school counselors. Eligible students will receive an application from the Illinois Student Assistance Commission that they must complete and submit to the college they will be attending. Awards depend on state funding.

## Illinois National Guard (ING)/Naval Militia Program

Funds are available to enlistees and officers to the rank of captain in either of these services for the equivalent of eight semesters or twelve quarters of undergraduate study.

The award pays tuition and certain fees. Eligible students should obtain a separate application available in the Student Services Center, from guard/militia units or at www.collegezone.com.ING recipients must meet the Standards of Academic Progress for Financial Aid Recipients. Applicants must apply each academic year within the Illinois Student Assistance Commission deadlines.

## Policeman/Fireman Scholarship

These scholarships provide tuition and mandatory fees for children under age 25 whose parents were killed in the line of duty. Interested students should apply directly to the Illinois Student Assistance Commission at www.collegezone.com or to the Richland Financial Aid Office.

## Correctional Workers' Scholarship

The fund provides tuition and mandatory fees for dependents of workers who were killed or were $90 \%$ disabled in the line of duty since January 1,1960. Application should be made directly to the Illinois Student Assistance Commission at www.collegezone.com or to the Richland Financial Aid Office.

## MIA/POW Scholarship

This scholarship pays the cost of tuition and fees for spouses and children of veterans who have been declared missing in action, were prisoners of war, died as a result of a service-connected disability, or have a permanent and total disability as a result of military service. The veteran must have been a resident of Illinois prior to entering military service.Eligible dependents are entitled to use the scholarship for up to 120 semester hours. Children must begin using the scholarship prior to their 26th birthday, and spouses must begin using the scholarship no later than ten years from the effective date of the veterans' eligibility. The scholarship may be used for twelve years from the initial term of study. Applications are available in the Financial Aid Office.

## Illinois Veteran Grant (IVG)

The IVG pays the cost of tuition and certain fees for veterans who were residents of Illinois before military service and who returned to Illinois within six months after discharge from service. Anyone who served honorably in the U.S. Armed Forces may be entitled, subject to the following requirements: any veteran who was separated after August 11, 1967, must have served at least one year or have been separated for a disability directly related to such service. The grant may be used for a maximum of 120 semester hours. IVG recipients must meet the Standards of Academic Progress for Financial Aid Recipients. Applications are available in the Financial Aid Office, in the Student Services Center, and at www.collegezone.com. Veterans mustinform Business Services that they want to use IVG each semester.

## Department of Human Services

The Department of Human Services provides financial assistance for postsecondary education for physically or mentally handicapped Illinois residents who have financial need. Interested individuals should apply to the local Office of Rehabilitation Services.

## RCC Foundation, Private, and Institutional Scholarships

The RCC Foundation offers hundreds of scholarships to students at Richland Community College. The Trustees Scholarship covers tuition costs for two years at Richland for students in the top ten percent of their high school graduating class. Other scholarships are available for both full- and part-time students. Some are need-based; others are based on grades, merit, declared major or other criteria. The student's first step is to submit a Richland Scholarship application to the Foundation Office. Applications maybe obtained in the Foundation Office, N104, or in the Financial Aid Office; a printable version is available on the Foundation website. There are three scholarship deadlines each year: April 1 and June 15 for Fall awards, November 15 for Spring awards.

Other scholarship applications are also available in the Financial Aid Office in the Student Services Center.

## Student Employment

## Federal Work-Study

This financial aid program authorizes parttime employment for eligible students who are enrolled at least half-time ( 6 semester hours or more), in good standing as defined by the Financial Aid Satisfactory Academic Progress Policy, and with an unmet need. Eligibility is determined by filing the Free Application for Federal Student Aid and completing a financial aid file. Student employment applications are available in the Student Services Center, Room C129.

## Institutional Student Employment

The College offers part-time, on-campus employment for students who are enrolled at least half time ( 6 semester hours or more). Students are limited to 20 hours per week while classes are in session and 30 hours per week during the semester breaks. Student Employment Applications are available in the Student Services Center, Room C129.

## Off-Campus Employment

The Career Center, Room C129, maintains a current list of job openings within the Richland District. Many Richland students are employed on a part-time basis by local places of business while attending college full or parttime. See the Job Placement announcements on College bulletin boards or on Richland's web page, or visit the Career Center.

## Veterans Affairs Work-Study

Veterans who are enrolled $3 / 4$ to full-time and interested in Veterans Affairs workstudy should contact the Financial Aid Office, Room C129, or a Veterans' Services Officer for more information.

## Loans

Richland participates in the Federal Family EducationLoan Program, which includes the Subsidized Stafford Loan and the Unsubsidized Stafford Loan. These are lowinterest loans to students made by lending institutions and guaranteed by the government. In order to receive aloan, students must apply for financial aid by filling out the Free Application for Federal Student Aid and
completing their financial aid file prior to submitting a loan application. Students must be enrolled in 6 or more credit hours and not be on financial aid suspension to receive a loan. Loan counseling is required for all applicants. Remedial hours are reviewed for financial aid purposes. Eligibility for a subsidized loan is calculated prior to calculating the unsubsidized eligibility. For more information, contact the Financial Aid Office, Room C129.

## Transfer Students

Students transferring from another college to Richland must submit a FAFSA and an academic transcript(s) from all colleges previously attended in addition to verifying their FAFSA application.

Transfer students who have not submitted a copy of their transcript from a prior school or were not meeting Satisfactory Progress at the last school attended will be placed on financial aid probation or financial aid suspension according to the Standards of Academic Progress after a successful appeal. Appeal forms are available in the Financial Aid Office.

## Standards of Academic Progress for Financial Aid Recipients

The Richland Community College Financial Aid Office is required by federal regulations to monitor academic progress toward a degree or certificate for all financial aid recipients.

In ordertoreceive financial aid at Richland, a student's total academic record, including transfer work, must be evaluated. The following three conditions must be met each semester in order to receive financial aid in good standing:

## Condition I. Cumulative Grade Point Average Standard

The following grade point average must be maintained:

| Cumulative hours | GPA |
| :--- | :--- |
| attempted | required |
| $1-15$ hours | 1.70 |
| $16-30$ hours | 1.85 |
| $31+$ hours | 2.00 |

Students who do not earn the above overall grade point averages will be placed on probation. Once a student has attempted 48 credit hours, he/she cannot receive further financial aid without a 2.0 cumulative GPA.

## Condition II. Completion of Hours

Based on the student's enrollment status at the end of the first week of classes, the students must complete $67 \%$ of credit hours attempted for the semester and for the academic career:

Grades of A, B, C and D are considered successful completion for the Credit Hour Completion Standard. Grades of F, W, or Ido not count as completed classes; however, they do count toward hours attempted. A student with an incomplete class at the end of the term that prevents him/her from complying with the above conditions will be placed on Probation or Suspension until the class is completed and a grade is posted. The completion rate condition applies to remedial classes.

While remedial hours are not counted in the cumulative grade point average calculation, they will be reviewed for successful completion for financial aid purposes.

All credits are counted as credits attempted even though financial aid may not have been received.

## Condition III. Maximum Credit Hour Standard

Maximum time allowed for program completion is $150 \%$ of the current program requirements. All previously attempted credit hours will be considered.

Hours attempted include all courses in which a student is enrolled one week after the first day of classes. It includes grades of $\mathrm{F}, \mathrm{W}$, and I. A student requiring remedial courses will be allowed an additional 30 credit hours attempted for remedial course work.

Students may appeal the $150 \%$ maximum time rule by filling out a Request for Consideration Form available in the Financial Aid Office.

Failure to meet Satisfactory Academic Progress Conditions I, II, or III listed above will result in Financial Aid Probation or Suspension. Progress will be checked at the end of each semester. Financial aid probation is not the same as academic probation. Students on financial aid probation or suspension will be notified.

## Financial Aid Probation

Students who do not meet the conditions explained above will be placed on Financial Aid Probation.

A student may continue to receive state and federal grants, Stafford loans, scholarships, and work-study during a probationary semester.

Students placed on probation are requested to sign a Probation Contract outlining the requirements needed to return to good standing. The probation requirements are enforced with or without a signed contract.

Students must enroll in at least six credit hours and complete the classes taken during Probation with a 2.00 GPA and meet the conditions listed above.

If the conditions of probation are met and all other conditions for Satisfactory Progress are met, the student may be returned to good standing.

Failure to meet the conditions of the probation will result in Financial Aid Suspension.

## Financial Aid Suspension

Financial Aid Suspension will result in the loss of all state and federal financial aid. Both of the following conditions must be accomplished during one semester in order to be reinstated:

1. Complete at least six credithours, with no drops or withdrawals at the student's expense, and earn a 2.0 GPA for the semester. The cumulative GPA should follow Condition 1.
2. The students should have at least a cumulative $67 \%$ course completion rate.

After fulfilling the above requirements, a student must notify the Financial Aid Office. The student will be placed on probation and must complete the terms on the Probation Contract in order to return to good standing.

Students will be terminated from financial aid once they have attempted $150 \%$ of the time frame needed to complete their degree program. The $150 \%$ limit counts all hours attempted, not just hours for which a student was paid financial aid. Students will be allowed to complete a Request for Consideration form if they feel unusual circumstances should be considered. Students who have
attempted 120 credit hours and do not have a certificate or degree will not be eligible for financial aid at Richland Community College.

## Appeals

A student may appeal financial aid suspension and the $150 \%$ limit by completing a Request for Consideration and submitting appropriate documents to the Director of Financial Aid. Appeals to return to financial aid probation from suspension must demonstrate circumstances beyond the reasonable control of the student, such as illness, accident or death in the family. If the student is not satisfied with the resolution, then a request for a formal hearing can be filed. A form to request aformal hearing can be obtained in the Student Services Center. Financial Aid appeals follow the College's Student Resolution Process Chart. (See the Student Handbook.)

Students should submit a Special Circumstances Form for an adjustment to the Federal Pell grant for unusual financial circumstances such as loss of employment.

## Other Financial Aid Policies

Federal financial aid applicants must have a high school diploma or GED. Applicants who have been home-schooled must pass U.S. Department of Education-approved test to determine their ability to benefit from postsecondary education. This test is offered free at Richland.

A student must be attending classes on a regular basis. Any student reported as withdrawing from all classes will have his/her financial aid adjusted accordingly.

A student must be enrolled in an eligible program as approved by the U.S. Department of Education, leading to an approved certificate or degree. All courses taken must be applicable to that certificate or degree.

Financial aid will not cover audited courses.

## Disbursement

The dates for disbursing Pell and/or loan checks are published prior to the beginning of each academic year. An enrolled student's award will be determined by his/her hours of enrollment and attendance. For more information, check with the Financial Aid Office.

## Bills/Refunds to Pell Recipients

Bills or refunds to students attending Richland who receive federal financial assistance and who withdraw before completion of $61 \%$ of the semester will be calculated on a pro rata basis on the federal government's Return of Title IV Funds rules. These rules calculate student federal awards based on the period of time he or she remained enrolled. The pro-rated calculation may affect the balance of tuition and fees that the student owes the College. It may also result in the student owing a repayment to the federal government previously disbursed to the student.

## Verification

All new, re-entering, and governmentselectedFinancial Aid applicants are required tocomplete an Institutional Verification form, sign a policy and procedure statement, and submit documents that verify the financial information on their student aid report. Documents requested may include, but are not limited to, tax returns, W-2's, and proof of all untaxed income. All financial aid applicants are required to complete an Institutional Verification form and sign a policy and procedure statement.

## Veterans' Affairs

Veterans may be eligible for federal and/or state benefits to assist them in completing a GED, certificate, associate's degree, or transportation courses. Information is available in the Financial Aid Office, at www.richland.edu/veterans or on the web at www.GIBILL.va.gov and www.collegezone.com. Richland offers the following veterans' programs:

Chapter 30 - Montgomery GI Bill - Active
Duty Educational Assistance Program
Chapter 31 - Disabled Veterans - Vocational Rehabilitation
Chapter 32 - Veterans' Educational Assistance Program (VEAP)
Chapter 35 - Survivors and Dependents'
Educational Assistance Program
Chapter 1606 - Montgomery GI Bill -
Selected Reserve Educational Assistance
Program
Chapter 1607 - Reserve Educational Assistance Program (REAP)
Illinois Veteran Grant-
www.collegezone.com
Illinois National Guard Scholarship www.collegezone.com
MIA/POW Scholarship -
www.collegezone.com
Veterans requesting benefits from the US Department of Veterans' Affairs are expected to inform the RCC Financial Aid and Veterans' Affairs Office of their enrollment each semester. When applying for benefits, a veteran submits a certified Member 4 copy of the DD214 or a Notice of Basic Eligibility (NOBE). An official academic transcript from all colleges or universities previously attended must be submitted to Admissions and Records for evaluation of prior credits within the first 2 semesters of receiving benefits.

Veterans receiving benefits from the VA must inform the Financial Aid Office each semester that they want to be certified for benefits. Only courses needed for the educational program will be certified. Veterans receiving benefits from the VA are encouraged to complete all credit hours certified each semester. If a veteran stops attending any course, even though he or she may not have withdrawn from the course, the veteran is responsible to report the last date of attendance to the Financial Aid and Veterans' Affairs Office.
"Accelerated" courses, independent study courses or televised courses may affect monthly benefits, so veterans are advised to see the Director of Financial Aid and Veterans' Affairs before enrolling in these courses.

Veterans who receive benefits from the Department of Veteran Affairs must meet the same Standards of Academic Progress for Financial Aid recipients.

Students who receive Illinois Veteran Grant, Illinois National Guard Scholarship, or the MIA/POW scholarship must meet the College's GPA standard. Veterans receiving these benefits should inform the cashier that they are requesting their benefits when they register.

## Veteran Tutorial Assistance

The StudentLearning Center, RoomS117, offers tutoring for students who need extra help in courses. In addition, veterans enrolled on at least a half-time basis are eligible for VA benefits to pay a qualified tutor, if needed.


Student Learning Center

Child Development Center


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## Orientation

Student Orientation, Advising, and Registration (SOAR)

New students are required to participate in new student orientation called SOAR 100 prior to registering for classes. SOAR 100 - Student, Orientation, Advising, \& Registration - helps students become familiar with College services, policies and regulations, social and recreational activities, and campus facilities. SOAR 100 is provided through the Student Services Center. New students can schedule a time to attend the orientation by calling 8757211, Ext. 267. An online orientation is available at www.richland.edu/soar.

## Nursing, Radiography, and Surgical Technology Program Information Session

Nursing, Radiography, and Surgical Technology Program information sessions are held once a month, and attendance is required before receiving an application to the programs. Contact the Student Services Center or the Health Profession Office for information, 875-7211, Ext. 450

## Counseling Services

Counselors are professionally trained, experienced in working with students of different ages and backgrounds, good listeners, and committed to students' well-being and development. Individual and group counseling is available on a short-term basis. The purpose of short-term counseling is to focus on personal issues that may prevent a student from achieving academic success at Richland. Counselors can also help students make contact with appropriate community agencies. Counseling Services is located in the Student Services Center, Room C129. Counseling Services information is available at www.richland.edu/counseling.

## Career Services

Selecting a career is an important part of each student's educational planning. The counselors and academic advisors in the Student Services Center assist students in all phases of the career planning process. Students may select from a variety of interest and personality inventories that provide insight into their career interests and values. Students meet with a counselor to explain the inventory results and also recommend other resources for further exploration. Career Services, located in C129 within the Student Services Center, offers many resources for students to use when planning a career or when looking for ajob. Visit RCC's Career Services online at www.richland.edu/career.

## Academic Advisement

Assistance with program and course selections is provided by faculty, counselors, and academic advisors. Students can review program requirements, degree completion status, and transfer options by working with a counselor or academic advisor. Students may contact the Student Services Center, Room C129, or call 875-7211, Ext. 267. Appointments or walk-in assistance is available. Information about Academic Advisement is available at www.richland.edu/ advising.

## Self-Advisement

Students may self-advise if they have completed 30 semester hours at Richland, have a 2.25 grade point average, and are eligible for English 101 and Math 098.

Students eligible for self-advisement are sent a notification by mail. Notification must be submitted with the class registration form at the time of registration in the Admissions and Records Office, Room C129.

## Transfer Center

Students planning to transfer to other colleges or universities should contact the Transfer Center, located in Room C129. The Transfer Center provides a wide range of services to assist students in the transfer process, including preparation of a Transfer Academic Plan and ensuring that Richland courses transfer to the college or university of
the student's choice. The staff also provides information on the transfer process, including admission requirements, financial aid, housing, and campus visits. Visit the RCC TransferCenter website at www.richland.edu/ testing.

## Student Employment

Job search assistance is available in Career Services, Room C129. Part-time and full-time job openings available in the community are posted in the Center and online at www.richland.edu/career/resources.

Students may also request résumé writing assistance, as well as other job search assistance, by making an appointment with the Career Services staff.

A computer, printer, and special résumé software are also available for student use. All services are free.

Educating students is the primary objective of Richland Community College. Studentemployment will support and supplement the academic mission and process. Students must be enrolled for at least six (6) semester hours and in "good academic standing" as defined by the College's Academic Standard Policy. Students are limited to twenty (20) hours per week while classes are in session and thirty (30) hours during semester breaks (fall and spring) and will receive minimum wage.

All RCC students who work for Richland Community College as College work study or federal work study must fill out an application and be authorized to work by the Career Services Office and Office of Financial Aid prior to employment.

Visit RCC Career Services online at www.richland.edu/career/.

## Internships

A wide variety of internships or work practica are available for students desiring to gain relevant work experience while they are attending school. Students enroll in the appropriate work experience and practicum seminar or internship course, which lasts eight to sixteen weeks.

Internships may be paid or unpaid. Interested students should consult with the appropriate Dean, faculty member, or the Director of Career Services. The following programs include internships as part of the curricula:

Accounting<br>Agribusiness<br>Art<br>Business Management<br>Business Marketing<br>Criminal Justice<br>Drafting \& Design<br>Early Childhood Education<br>Electronics<br>Electronics Bio-Medical Option<br>Engineering Technology<br>Graphic Arts<br>Heating, Ventilation, Air Conditioning and<br>Refrigeration<br>Horticulture<br>Hospitality Management<br>Information Technology<br>Office Technology<br>PoliticalScience<br>Sociology<br>Surgical Technology

## Kitty Lindsay Learning Resources Center (LRC)

The purpose of the Kitty Lindsay Learning Resources Center (LRC) is to support and expand classroom instruction. The library's collection includes a wide range of print and nonprint materials for both circulation and classroom use. The LRC offers one-on-one research assistance and information literacy workshops to help students succeed. The Audio Visual Department provides services that includes scheduling, transporting and setting up audio visual equipment and materials in classrooms and other College venues. The Audio Visual Department also provides training to faculty on smart classroom equipmentoperation.

## Learning

## Accommodation Services

Richland Community College offers support and accommodations to students with documented disabilities by providing advisement, counseling, adaptive equipment and materials, instructional aids, tutors, note-takers, interpreters, and testing accommodations, as well as many individualized services. All campus facilities are accessible. The campus is self-contained except for the Horticulture/Agriculture Building. For more information, students should contact the

Learning Accommodation Services (LAS) Office, Room C137.

Documentation of disability is required for all services. Visit LAS online at www.richland.edu/las.

## Student Learning Center

The Student Learning Center (SLC), Room S117, offers free tutoring to students who may need help with classes or programs. Both peer and faculty tutors are available on an appointment or drop-in basis for many areas including math, biology, chemistry, reading comprehension, study skills, vocabulary building, research, and specific written assignments. Biology and chemistry tutoring is available with hours varying each semester. In cooperation with other academic programs, the SLC may offer study groups each semester. Schedules with location and time are posted in the SLC. Computers with tutorial software and word processing programs are available for student use any time the SLC is open. Visit the Student Learning Center online at www.richland.edu/slc.

## Online Learning Support

Richland Community College's Online Learning Department is devoted to developing and providing programs and services for faculty, staff, and students that enhance the teaching and learning process through the use of electronic technology. Department staff are committed to working with all members of the College community while harnessing technology to fulfill the charge of preparing intellectually and technically competent students for success.

Staff assist students with a variety of technical queries such as login questions, email account sign-in, navigation in an online course, WISE-1 access and navigation, and technical questions regarding personal computer systems requirements and troubleshooting. Staff provide technical support through e-mail, telephone, and walk-in inquiries.


#### Abstract

The Online Learning Help Desk staff may be contacted by e-mail at ochelp@richland.edu, by calling 217-8757211, Ext. 376, or by walk-in (Room C150behind the Learning Resources Center). Normal hours of operation are Monday Friday, 7:30 a.m. -4:30 p.m. Other hours are available by appointment. Visit Online Learning at www.richland.edu/online.


## Testing Center

The Testing Center, located in Room W124, Ext. 238, provides testing services for placementin English, mathematics, and health courses. Also administered are the Constitution test, exams from other universities, and make-up tests for Richland classes. Photo identification is required for all students completing any test in the Testing Center. Students completing tests for other universities or for CLEP or DANTES testing may need topay an additional fee. Visit the RCC Testing Center online at www.richland.edu/testing.

## ISTEP Program

The Illinois Support, Training \& Employment Program (ISTEP), located in the Student Services Center on campus, assists those individuals who are divorced, widowed, separated, or who have a disabled spouse at home. Services may include funds for tuition, books, and some supplies. Call 875-7211, Ext. 572, for more information on the ISTEP Program.

## Student Support

The mission of Student Support Services is to help students become more independent, self-confident, and efficient learners who are able to respond effectively to specific academic challenges, to articulate their own educational goals, and to succeed at any level. We seek to build success from the beginning, offering support, workshops, and study groups designed to assist the students in achieving their learning potential and improve their academic performance. We seek
to create an environment that encourages students to integrate the academic side of their lives more fully with their understanding of themselves and their goals. We support students in theireffort to become full participants in Richland Community College and in the development of lifelong skills.

## Student Support offers

- support to new students in their transition to the academic environment of Richland Community College.
- assistance to students in developing com prehensive study skills.
- services that encourage students to build confidence in their ability to learn and to overcome academic challenges.
- services that strengthen and develop the foundational skills that are central to every student's continued academic success.
- services that support students' pursuit of challenging programs of study and mastery of their chosen curricula.


## Emerging Scholar Program (ESP)

ESP is for students who are in need of additional support services to maintain academic excellence. ESP provides college survival skills workshops, one-on-one personalized support, referrals to academic support services and peer support groups.

## Adults Who Are Reentering Education (AWARE)

AWARE is a program designed to provide support for adults who are beginning their college career by offering one-on-one personalized support, specialized academic skills workshops, personal counseling, career exploration, and peer support groups.

## Start Out Successful (SOS)

SOS is a program for high school students in need of supplementary academic support and guidance in their first semester of college. SOS provides assistance in advising, course selection, college skills workshops, and referral to other specialized services.

## Achieving College Excellence (ACE)

ACE is a program for students who are repeating a core college course (English, mathematics, or science) three or more times. This program provides specialized workshops designed to assess academic needs and assist the student in developing study skills that will facilitate student success.

## Workshops and Seminars

Richland Community College offers a variety of workshops and seminars for student success. Topics include: time management, effectively using your textbooks, note-taking skills, test taking skills, organizational skills, mathematics study skills, and others.

Students are invited to participate in the PASSport workshop series. Pathway to Achieving Student Support is a program designed to help students become familiar with Richland's resources. Students will set up a NetID, look at the RCC e-mail program, see how RCC databases work remotely for research, and learn about WISE-1 (a personalized transcript that allows a student to view grades, see financial aid status, and see what is needed to complete a degree). This fivesession series is scheduled periodically throughout the semester and before classes begin.

Call Student Support for workshop and seminar dates and times at 875-7211, Ext. 232.

## Clinton Extension Center

The Clinton Extension Center offers admissions, advising, registration, placement testing, virtual testing, financial aid, and many other services. Credit classes and noncredit workshops are scheduled in Clinton and other communities throughout the Richland District. General Educational Development (GED) classes are also provided. The Clinton Extension Center is located in Clinton at Clinton High School (northeast entrance), 1200 Highway 54 West, Clinton, IL. Call 935-6791 for information.

RCC Hope Academy Center

The RCC Hope Academy Center is located at Hope Academy at 1050E. Sangamon (intersection of Jasper and Sangamon Streets). The RCC Hope Academy Center provides free access to computers and the Internet through its recently updated computer lab and software. Free basic computer skills workshops and GED classes, admissions advising, training, job readiness workshops, placement testing, and career planning are available. Call 421-6565 for more information.

## Early Alert

In response to a student survey showing that students want to know how they are doing in classes during a semester instead of at the end of a semester, the College has developed an Early Alert program. Any time an instructor believes a student is at risk of being unsuccessful in a course, the instructor can notify the Director of Student Support. The Director will in turn contact the student and suggest assistance options that are available on campus (usually at no cost to the student). Students are welcome at any time to contact the Director at Ext. 314 or to stop by the office in the Student Services Center, Room C129.

## Student Support Services/TRi0

In Student Support Services/TRiO, participants receive intensive advising, tutoring, and mentoring in addition to academic improvement services, transfer trips, cultural trips, college orientation, leadership activities, and technology loans. The purpose of the program is to help eligible RCC students improve academic performance, graduate from Richland, and transfer to a four-year institution. TRiO is a federally funded program from the U.S. Department of Education that provides educational support to lowincome, first-generation students (neither parent has a bachelor's degree) and to students with physical or learning disabilities. All applications must include documentation of income and, if applicable, documentation of disability. Applicants receive free services
upon successfully completing an invited interview. Applications are available in the TRiO Office in Room C143.

## Perkins Program

ThePerkins Programis a federally-funded program designed to assist students in becoming academically successful. For students to be eligible for the Perkins Program, they must be enrolled in an occupational program and meet one of the following requirements:

1. student is enrolled in a non-traditional field for gender (i.e., female in Electronics, male in Child Care),
2. English is the student's second language,
3. student is considered low income,
4. student has a disability,
5. student has taken or is required to take a developmental math or English course,
6. student is a single parent (including single pregnant women), displaced homemaker, or
7. student has other barriers to educational achievement.

Perkins support must match the need of the students based on the criteria for which they were eligible.

If a student is enrolled in an occupational area, he or she is automatically enrolled in the Perkins Program. Students may call the Perkins Program Office atExt. 223 or 740 for more information.

## Project READ

The goal of Project READ is to provide educational services for adult students reading below the ninth-grade level. Services include recruiting, training, and placing volunteers in locations where they can be effective tutors for those adult students. The office is located at the Decatur Public Library, 130 N. Franklin, Decatur, IL. Prospective students and volunteers may call for appointments or for further information at 423-7323 or visit www.richland.edu/projectread.

## Honors Opportunities Program

Students with excellent academic skills are encouraged to apply for the Honors Opportunities Program. The Program is designed to offer students an added dimension to their studies through small class seminars, special lectures, programs, and field trips.

The Honors Opportunities Program is open to full- and part-time students who plan tocomplete any associate's sdegree at Richland.

One hundred percent of all tuition is waived for Honors Program participants.

To be admitted to the program:

1. Recent high school graduates must have an ACT composite score of 25 with no individual score lower than 22 (or equivalent scores on any national testing program).
2. Presently enrolled students or transfer students musthave a cumulative grade point average of 3.4 or better on a 4.0 scale for 12 or more semester hours in coursesequivalentto Richland courses numbered 100 or above.
3. All students must agree to complete the requirements of the program as outlined in the Honors Opportunities Program Brochure available from the StudentServices Center or from Division offices. Honors projects must be completed by the end of the semester in which the Honors course is taken.

A new student in the top $10 \%$ of his/her graduating class whose ACT composite score is 25 or better with no score lower than 20 will be permitted to take an honors course. Other non-honors students may take honors courses if they have a 3.4 GPA or consent of the instructor or of the Director of the Honors Program. Non-honors students who complete honors courses with grades of "A" or " B " may have " H " addedto the grades on their transcripts, but theirtuition will notbe waived. Contact a Director of the Honors Program, Professors Dr. Laurie Hughes (Ext. 373, lhughes@richland.edu) or Rosemarie King (Ext. 349, rking@richland.edu) for more information.

## International Studies

As a member of the Illinois Consortium of International Studies and Programs, Richland offers students the opportunity to attend universities in other countries and receive credit to apply to Richland degrees. Students may apply for acceptance into programs in Costa Rica, England, Austria, and the Netherlands. Pell Grant funds may be used to cover tuition and fees for some programs. For more information, contact the Office of Student and Academic Services, 875-7211, Ext. 292 or Ext. 364.

## Child Development Center

Licensed child care services are provided for the children of Richland students (credit and non-credit), staff, and faculty. Parents who are not Richland students may also enroll their children in the Center. The Center is open weekdays whenever the College is open. Evening care is provided only when classes are in session.

The program accepts children ages 2 (toilettrained) through 12. Both day and evening hours are available.

Children may attend on both a part-time and/or full-time basis. Lunch is provided for children who attend full time. Children who attend part time may schedule a minimum of two-hour time blocks. A $\$ 10.00$ non-refundable registration fee is required per child for each semester. Registration forms must be completed before children may attend. Medical records including physicals, immunizations, and T.B. test are also required.

Preschool activities are available to combine play with learning. These activities include art, music, science, math, motor development skills, and language skills. School-age children are offered table games, art, and science activities. Computer software is available for all ages.

The ChildDevelopment Center is licensed by the Illinois Department of Children and Family Services and is supported by Richland student activity funds, user funds, and fundraising activities. Contact the Child Development Center at 875-7211, Ext. 319, for the cost of child care services and for the hours of operation. Center hours are subject to change.

## Student IDs

Photo studentidentification cards are available at no cost to registered students. These are useful for students using the computer lab or Testing Center and for students to receive student discounts where applicable. There is a fee for replacement of a lost ID card. ID cards should be kept from year to year.

Photo IDs will be taken throughout the semester. Photo IDs are taken in the College's Switchboard Office, C130.

## Parking

Parking is available on a first-come, firstserved basis with the exception of handicapped parking spaces, which require a handicapped sticker/license issued only by the Secretary of State's Office; contact the Driver's License Facility.

## Campus Safety

The Office of Campus Safety and Security works to ensure the safest, friendliest, and most secure environment for all to work and learn. Students, employees, and visitors should be safe and feel safe while on the campus. Security officers are stationed on campus around the clock, and evening escort service is available.

It is the right of all Richland staff, faculty, students and parents to know that emergency plans exist to offer them protection in times of emergency. Emergencies are fluid and can include actions for every scenario, but general flexible plans are in place to give direction to leaders and to the campus population. College emergency response plans have been developed and are under constant review. The preservation of life is the top priority followed by the protection of property.

Richland is committed to continuing the process of making the campus learning environment as safe as possible. Emergency procedures can be found on the College website, www.richland.edu/security/plan/ procedures. Contact the Office of Safety and Security at 875-7211, Ext. 557.

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## Campus Life Program

The Campus Life Program promotes the educational experiences of students through the development of, exposure to, and participation in social, cultural, intellectual, recreational, and governance programs. Through various communications, students are informed about institutional policies and procedures and how these are related to their lives and activities.

Clubs and organizations are structured to meet the needs of a changing student population, including creating more diverse programs and services to meet the needs of ethnic populations, older and disabled students, and other student groups with unique interests.

Students are encouraged to become involved in Campus Life campus activities, organizations, and clubs to enrich college life. For more information, contact the Director of CampusLife in RoomC133, Ext. 305, or visit www.richland.edu/campuslife.

## Clubs

A variety of professional, honorary, and social clubs are based at Richland Community College.

The Black Drama Workshop emphasizes plays by Black authors that are performed by Richland students and community members.

The Black Student Association creates unity among African-American students by promoting political, social, and economic awareness in African-American students at Richland and within the African-American community.

The purpose of the College Democrats Club is to introduce students to politicians and the political process, as well as to involve students in political activities within the College district.

The College Republicans Club increases the political involvement of young people through political activity within the Richland Community College District.

The Early Childhood Professionals Club provides educational opportunities for child care students by promoting issues that directly affect childcare workers.

The Fire Science Club exists to promote interest in the Fire Service.

The History Club seeks to advance the historical development and knowledge of Richland Community College, Decatur, and Macon County as well as U.S., Asian, and European history.

The purpose of the H.O.P.E. Club is to provide a forum to discuss the social, educational, and developmental needs of people around the global community. Students will work on projects and perform volunteer work to help make an impact.

The Horticulture Club strives to heighten awareness of the horticulture program at the College and in the community. This club enriches a student's education by attending and organizing educational seminars and by selling plants grown in the greenhouse.

The Intervarsity Christian Fellowship Club encourages Christian fellowship through spiritual, intellectual, physical and social activities to students and faculty.

The purpose of Men of Distinction Club of StudentSupport Services/TRiO is to provide support for each other and to become empowered men through education, knowledge, awareness, skills, appreciation of diversity, and "service to the community." The club goals are to empower men, establish bonds with other TRiO participants, and participate in various activities, fieldtrips, and workshops. Club members are participants in College events and fundraising activities that support local community agencies.

The purpose of the N.A.A.C.P. College Chapter is to promote diversity as an asset by having students from various social and cultural groups come together to discuss issues perpetuated by race, creed, religion, sex or national origin. Further, this club will assist students in their endeavors to understand the cultures of others.

The Performing Arts Workshop (PAW) helps promote the appreciation and support of the performing arts among the student body of Richland Community College.

The Practical Nursing Club performs community services and provides educational opportunities for the Richland community and for others who may benefit or have an interest in nursing as a career.

Richland's chapter of Phi Theta Kappa, a national two-year college honor society, supports four hallmarks-leadership, fellowship, scholarship, and service. Activities to meet these hallmarks are developed by student members. Students with a 3.5 grade point average in at least twelve hours of 100level courses of transferable credit during a specific semester are invited tojoin. Phi Theta Kappa initiates new members each fall and spring.

People Respecting Individual Differences in Everyone (P.R.I.D.E.) provides education surrounding gay, lesbian, bisexual, and transgender (GLBT) issues, seeks to foster a greater awareness and tolerance for GLBT persons and issues, and furnishes social and emotional support for GLBT persons and allies on campus.

Sexual Assault Awareness and Education Organization (SAAEO) provides awareness and education to students, faculty/ staff, and the community about sexual assault and sexual abuse, as well as to provide support for victims, survivors, and significant others of sexual assault/abuse.

The Registered Nursing Club was formed to promote interest and to provide information about nursing and other health careers. Meetings are scheduled monthly throughout fall and spring semesters at atime convenient for the majority of the members. The club sponsors educational and community service programs both on and off campus.

The Surgical Technology Club exists for students interested in the surgical technology field. This club involves participation in community service and educational seminars to bring awareness to the surgical technology field.

Members of Visions of Designendeavor to create and use their inner desires and discoveries as artists to educate and raise awareness about graphic arts to the community around us.

The purpose of the Women In New Seasons (WINS) Club is to provide social and community service opportunities to women who are displaced homemakers due to divorce, widowhood, legal separation or have a completely disabled spouse. The club sponsors opportunities for interaction between members to promote friendship, networking and opportunities for travel, social events and work on community service projects.

The purpose of Women of Worth (WOW) Club of Student Support Services/ TRiO is to provide support for each other and to become empowered women through education, knowledge, awareness, skills, appreciation of diversity, and "service to the community." The club goals are to empower women, establish bonds with other TRiO participants, and participate in various activities, fieldtrips, and workshops. Club members are participants in College events and fundraising activities that support local community agencies.

Members of the X-ray Vision Club help to educate and promote the field of Radiography. The club is involved with community service, educational seminars, and fundraising. Meetings are held monthly throughout the fall and spring semesters at a time that is convenient for most of the members.

Contact the Director of Campus Life, RoomC133, or the club's current advisor for more information.

## Organizations

Licensed Child Development Services are provided for the children of Richland students, staff, and faculty on weekdays whenever the College is open. Preschool activities are available to combine play with learning. These activities include art, music, science, math, motor developmentskills, and language skills. Children ages 2 (toilettrained) to 12 years of age are accepted. School-age children may attend after school and during the evening in addition to attending during the summer.

The Communicatur is the student newspaper and is staffed by student reporters, photographers, and students from Richland's journalism classes. The newspaper is published four to seven times each semester and is available at various locations on and off campus. The Communicatur office is located
in the Campus Life Office, Room C135. Limited scholarships are available to members of the Communicatur editorial board. Story and picture ideas and letters to the editor are always welcome.

The Forensics (Speech) Team competes in intercollegiate competition at state, national, and international levels. The team allows students co-curricular experience in public speaking, oral interpretation, and acting. Past members have achieved national championships, increased self-perception, improved communication skills, and acquired a sense of collegiate achievement.

The Program Board consists of students and faculty who plan and arrange Collegewide events. Unique learning opportunities are provided through seminars, lectures, professional entertainment, tours, and displays.

The Student Ambassador Mentor (S.A.M.) Program helps new students in their transition to higher education and exposes them to the broad educational opportunities and services at Richland. Besides participating in the New Student Orientation Program, Student Ambassador Mentors provide ongoing support to new students in the areas of positive attitude development and relationship-building with faculty, staff, and peers. Student Ambassador Mentors are knowledgeable and can refer students to appropriate College services and staff.

The Student Senate represents the students of Richland through effective communications by promoting unity and fellowship with all members of the College community. The Student Senate strives to represent and adequately interpret student opinion as related to campus policy and to distribute the auxiliary fees to provide a variety of educational and social opportunities for students. Through College-wide elections, senators are elected each fall and spring semester.

The Student Trustee is elected each spring semester by the student body to serve as a non-voting advisory member of the Board of Trustees. The Student Trustee may make and second motions during Board meetings and also serves on the twelvemember Student Senate.

## Student Records and Confidential Information

The Family Educational Rights and Privacy Act of 1974 and its accompanying regulations establish the rights of students, including rights pertaining to their educational records. All information received by the College becomes a part of the student's education recordexcept for information from a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional. Studenteducation records are classified as follows:

1. Directory Information-Name, address, telephone number; date and place of birth; program in which enrolled; participation in officially recognized institutional or extracurricular activities; dates of enrollment; certificates and degrees received; mostrecent educational institution or agency.

Directory information may be released by the College to any person or organization without the student's consent. If a student does not want directory information released, a form must be filed with the Admissions and Records office each term.
2. Confidential Information-All information other than directory information is considered confidential. Examples of confidential items include class schedule, daily attendance, academic record, grade reports, progress reports, high school and college transcripts, and test results; correspondence, including letters of recommendation and comments from counselors and faculty; and application information for financial aid, Illinois Veterans Scholarship, and G.I. Bill benefits.

## Access to Confidential Information by Students

Students may have access to the confidential information in their own records by submitting a written requesttotheStudentServices Center or the Registrar, subject to exceptions under the law. The College will comply with the request within 45 days.

On request, the College will provide students with a list of the types of education records kept, including directory and confidential information.

Richland will provide copies of education records to students at the students' expense and will respond to reasonable requests for explanations and interpretations of their records. Copies of transcripts from high schools or other colleges that are on file cannot be provided. Students also have the right to a hearing to challenge any portion of their education records. Requests for a hearing should be directed to the Vice President of Student and Academic Services.

## Access to Confidential Information by Others

Confidential information contained in a student's records will not be released to other parties without the student's consent. Exceptions are listed, and information is given only with the understanding that such information may not be passed on to a third party without the student's written consent.

The College will maintain a record of all persons other than College personnel who have obtained access to a student's records. The College record will include the legitimate reason that the outside party has for reviewing the student's education record.

The following list includes any persons and agencies who may review students' records:

1. College personnel having a legitimate need for information as a result of their College duties;
2. Colleges, universities, and other academic institutions at which the student wishes to enroll;
3. Agencies and their representatives requesting financial aid information in connection with a student's application for, or receipt of, financial aid;
4. State and local officials to whom the College must release information as required by a state statute or administrative regulation adopted before November 19, 1974;
5. State and federal officials auditing and evaluating federally-supported education programs or enforcing legal requirements related to these programs;
6. Organizations conducting studies for the College, including the development, validation, or administration of predictive tests, administration of student aid programs, and improvement of instruction;
7. Persons acting pursuant to a judicial order or subpoena, providing the College notifies the student before complying;
8. Appropriate persons, if necessary, to protect the health or safety of the studentor others; and
9. Parents of an eligible student who is claimed as a dependent for income tax purposes.

## Withholding Student Information

The College has the right to withhold grade reports, transcripts, certificates and degrees, and other student information if the student has unmet obligations, including financial obligations, to the College.

## Students Rights and Responsibilities

Richland Community College, an open-door institution, recognizes the rights of its students guaranteed by the Constitution of the United States and the Constitution of the State of Illinois. The College further recognizes and identifies students' rights to equal access to all programs, information, freedom of speech, inquiry, assembly, to the peaceful pursuit of an education, and to the reasonable use of services and facilities of the College.

Richland Community College is committed to learning and teaching. As a teaching and learning community, relationships among students, faculty, and staff are marked by mutual respect and appreciation for each other's roles and responsibilities.

Further, Richland Community College strives to maintain an educational environment that supports the academic, professional and/or personal development of all members of the community and identifies responsibilities assigned to students as members of the learning community.

Richland Community College has established a "Statement of Student Rights" and a "Statement of Student Responsibilities" to educate students about the manner in which they are to pursue their own educational objectives as well as support the objectives of others. These statements identify the rights to which students are entitled through membership in the Richland learning community along with the responsible behaviors in which students should be engaged as members of the learning community.

## Statement of Student Rights

As members of Richland's learning community, students are entitled to certain rights and provisions, to include a quality education and quality services. In addition, students have the right to know:

- The College's admissions requirements
- The degrees and certificates offered
- The types of career and personal development resources available
- When classes are offered
- Course requirements
- Policy on class attendance and participation
- Grading policies and procedures
- The cost of attendance
- Financial aid available
- How financial aid eligibility is determined
- How financial aid awards are calculated
- When financial aid is awarded
- The College's and financial aid satisfactory academic progress requirements and their implications
- The College's refund policy
- The College's policies and procedures
- The academic and other support services available
- Student activities available
- Campus crime statistics
- Graduation rates
- Job placement rates
- Emergency procedures
- Building hours
- College operational hours
- How to file a grievance


## Statement of Student Responsibilities

Listed below are the responsibilities that Richland students accept through membership in the College's learning community. Each student should approach academic endeavors, relationships, and personal responsibilities with a strong commitment to personal integrity and mutual respect. As members of the Richland teaching and learning community, students have responsibility to:

1. Read the College Catalog and Student Handbook
2. Become knowledgeable about College policies and procedures
3. Abide by College policies and procedures
4. Be aware of academic and graduation requirements
5. Provide accurate information on College forms
6. Meet financial obligations to the College
7. Attend classes and be on time
8. Complete assignments and exams based upon course syllabus information
9. Participate in class
10. Fulfill their academic responsibilities in an honest and forthright manner
11. Utilize appropriate support services when needed
12. Seek help from faculty when needed
13. Seek out answers to questions
14. Abide by the equipment usage policy
15. Meet published deadlines
16. Notify College officials if a condition exists which is in violation of a student's rights, College policies, rules, standards, and procedures
17. Join/seek out groups and individuals that will help students achieve their goals
18. Abide by state and federal laws
19. Conduct themselves in a responsible manner in and out of the classroom
20. Protect, support, and contribute to a safe environment within the learning community
21. Show regard for the property of the College, its community members and visitors
22. Assist the College infulfilling its administrative responsibilities

## Student Grievance Policy

When a student believes that a condition exists which is in violation of his or her rights, College policies, rules, standards, and procedures, he or she has the right to file a grievance. Refer to the student resolution chart in the Student Handbook and/or the Student Rights and Responsibilities booklet located in the Student Services Center.
A grievance may be categorized as follows:

1. Academic Concerns

- Academic Dishonesty
- Academic Suspension
- Educational Guarantee
- Grade Appeals
- Graduation Requirements
- Other Academic Concerns

2. Americans With Disabilities Act (ac commodations)
3. Discrimination (e.g. age, disability, gender, race, color, sexual orientation, religion)
4. Financial Aid Suspension
5. Family Educational Rights and Privacy Act(confidentiality)
6. Sexual Harassment (by students, staff, or faculty)
7. Student Conduct
8. StudentEmployment
9. Tuition Refunds
10. Others not represented above

A grievance may be resolved through either an informal or formal process. Informal or formal hearings and resolution of complaints will be conducted in a prompt and fair manner without fear of retribution.

Formal hearings are conducted by the College's Judicial Board or by a Special Committee appointed by the President.

The College student grievance process, although encouraged in resolving grievance issues, is not mandatory. Students may seek alternatives in resolving grievances. Procedures forfiling a grievance are available in the StudentServicesCenter, the Student's Rights, Responsibilities, Grievance \& Disciplinary Proceedings booklet, StudentHandbook, and the College Catalog.

## Student Conduct Policy

Students enrolled at Richland Community College are considered by the College to have reached the age of responsible citizenship and are expected to conduct themselves in a responsible manner while on campus.

By the act of registration for classes at the College, students obligate themselves to adhere to the rules and regulations which the institution formulates and publishes in the College Catalog, Student Handbook, and other published materials. Accordingly, students are expected to assume primary responsibility for their own conduct.

Disciplinary action may be imposed upon a student by an instructor or an administrator of the College for gross misconduct that would tend to interfere with educational process, disrupt the normal activities of the institution, or infringe upon the rights of others while the student is on the College premises (owned, leased or rented) or at functions under the sponsorship of the College. In addition, the College reserves the right to remove any individual from the campus who is physically or verbally disrupting a class or disturbing the peace.

Students charged with misconduct or with violation of law and/or College rules and policies may be subject to written reprimand, required restitution, temporary expulsion, disciplinary probation, suspension, or expulsion. Individuals who are not students and who violate these regulations will be considered trespassers and will be treated accordingly.

In addition, charges of a disciplinary nature may be filed against a student by a fellow student.

When an action is taken against a student by a faculty member or other College personnel, the student has aright to a formal hearing. Prior to imposing an expulsion or a suspension of a semester or longer, the College's Judicial Board must conduct a formal hearing unless the student waives this right. Procedures for conducting a hearing will be published and made available to students.

Students removed from the College must apply for readmission through the Vice President of Student and Academic Services.

Richland Community College reserves the righttorequire a psychological or psychiatric examination from any student at any time that such course of action would seem to be in the best interest of the student and/or the College District. Expenses incident to such an examination will be paid by the College.

Students, as citizens, remain subject to the Federal, State and local laws; therefore, the Judicial Board is not intended to replace or modify existing law. The College and its students recognize that violation of these laws may lead to prosecution by agencies or persons in addition to the College.

## Initiation of Grievance or Disciplinary Proceedings

Every attempt will be made to resolve grievances or problems at the point of origin. With the exception of a complaint of discrimination or harassment, including sexual harassment, the following process should be followed. Complaints alleging discrimination and/or harassment, including sexual harassment, must be filed with the Human Resources Office. The process for investigating a complaint of discrimination or sexual harassment may be obtained from the Student Services Center or the Human Resources Office.

## Informal Resolution Process:

First: Contact the faculty or staff member involved at the point of origin or the appropriate administrator to resolve the matter.

Second: Contact the coordinator, director, dean or other appropriate administrator responsible for the area to resolve the matter.

Third: Contact the Vice President over the area. In all cases where appropriate, grievances/complaints will be investigated by the appropriate administrators or third party.

If resolution of the grievance or disciplinary charge is reached informally, a written agreement (if deemed appropriate) outlining the provisions of the resolution andindicating that he or she was aware of but waived the right to a formal resolution must be signed by the student.

Except for grade appeals, a student has the right to bypass the informal process and request a formal hearing. In cases of academic dishonesty and academic suspension, the College has the right to bypass the informal process.

If a student grievance or disciplinary problem cannot be resolved at the informal level, a formal hearing of the Judicial Board or Special Committee appointed by the President may be convened.

## Formal Resolution Process

Formal hearings of the Judicial Board or Special Committee must be coordinated through the appropriate administrator as listed in the Student Resolution chart. The Judicial Board will be convened by the Office of the Vice President of Student and Academic Services. Special Committee hearings will be convened through the President's Office. The Chairperson of the Judicial Board shall preside at the hearing and should rule subject to the advice of the Judicial Board. The Chairperson of the Special Committee shall preside at the hearing and should rule subject to the advice of the Special Committee.

## Academic Dishonesty Policy

Each student is expected to be honest in his/her class work or in the submission of information to the College. The College regards dishonesty in classroom and laboratories and on assignments and examinations and the submission of false and misleading information to the College as a serious offense.

A student who cheats, plagiarizes, or furnishes false, misleading information to the College is subject to disciplinary action up to and including failure of a class or suspension/ expulsion from the College.

## Removal from a Class or the College

The Colleges reserves the right to remove any individual from a class or the College for the following reasons:

1. For physically or verbally disrupting a class or disturbing the peace.
2. For unsatisfactory academic progress.
3. For gross misconduct or any other actions or unlawful conduct which would tend to interfere with the educational process, disrupt the normal activities of the institution, or infringe upon the rights of others while the individual is on the College premises (owned, leased, or rented) or at functions under the sponsorship of the College.

## Tobacco Policy

The policy of Richland Community College is to respect the rights of both the nonsmoker and the smoker in Richland buildings and facilities. When these rights conflict, Richland administrators, faculty, staff, and students should endeavor to find a reasonable accommodation. When such an accommodation is not possible, the rights of the nonsmoker should prevail.

It is the policy of Richland Community College to disallow the use of tobacco products inside College buildings and vehicles. The use of tobacco products is allowed only in designated areas outside the buildings. All remaining areas are non-smoking areas.

Rules and regulations toenforce this policy are determined by an appropriate College committee and communicated to students and staff on a regular basis.

## Substance Abuse Policies

A student shall not possess or use any illegal or controlled drug or substance in either refined or crude form on College property except under the direction of a licensed physician. Any student who violates any provision of federal or state law pertaining to the manufacture, possession, purchase, sale, or use of drugs on College property will be referred to the appropriate civil authority. Irresponsible behavior attributable to any such drug or substance will not be tolerated and will be subject to College disciplinary action, which may include expulsion from the College.

## Intoxicant Use

Possession and use of intoxicants on College property are prohibited. Irresponsible behavior attributable to any such intoxicants will not be tolerated and will be subject to College disciplinary action, which may include expulsion from the College.

## Pamphlets, Counseling

Numerous pamphlets are available throughout the College dealing with drug, substance, and alcohol use and addiction. Counselors in the Student Services Center can make referrals to appropriate agencies.

## Chronic Communicable Disease Policy

A student with chronic communicable diseases may attend school in the regular classroom setting whenever, through reasonable accommodation, the risk of transmission of the disease or the risk of further injury to the student is sufficiently remote in such a setting.

Each student with a chronic communicable disease shall be evaluated by a placement committee that will consist of the President, as chairperson, and other appropriate College personnel, a physician or other consultants selected by the President or a designee, the student's physician, public health personnel, the student, and the student's parents or guardians.

The student's placement shall be determined in accordance with the above standards and upon the following factors: the risk of transmission of disease to others; the health risk to the particular student; and reasonable accommodations that can be made without undue hardship to reduce the health risk to the student and others. The vote of a majority of the committee shall determine the student's placement.

The student shall be re-evaluated at least once a year by the placement committee to determine whether the student's placement continues to be appropriate. The student's medical condition shall be disclosed only to the extent necessary to minimize the health risks to the student and others. The President may establish additional rules and regulations designed to implement this policy.

If the student is handicapped, special arrangements may be made as required by Section 504 of the U.S. Rehabilitation Act of 1973.

Numerous pamphlets are available throughout the College dealing with chronic communicable diseases. Counselors available in the Student Services Center can make referrals forpsychological counseling through the Heritage Behavioral Health Center.

## Sexual Harassment Policy

Employees and students are prohibited from sexually harassing other employees or students.

In the case of sexual harassment of a student by an employee, sexual harassment means

1. Any sexual advance by an employee toward a student.
2. Any request by an employee of a sexual advance or request for sexual favors from a student.
3. Any conduct of a sexual nature by an employee directed toward a student when a. the student's submission to or rejection of such conduct is either explicitly or implicitly a term or condition of the student's grade or the student's participation in any school-sponsored activity, or b. such conduct has the purpose or effect on a student of reasonable sensibilities of creating an intimidating, hostile, or offensive school environment for the student.

In the case of sexual harassment of a student or employee by a student, sexual harassment means

1. Any sexual advance by a student toward anemployee.
2. Any request by a student to an employee for sexual favors from the employee.
3. Any conduct of a sexual nature by a student directed toward anemployee when such conduct has the purpose or effect on an employee of reasonable sensibilities a. of creating an intimidating, hostile, or offensive school environment for the employee, or
b. of influencing either the student's grade or participation in any school-sponsored activity.
4. Sexual harassment prohibited by this policy includes verbal or physical conduct. The terms "intimidating, hostile, or offensive" as used above include conduct that has the effect of humiliation, embarrassment, or discomfort.

Complaints alleging a violation of this policy must be brought to the attention of the Director of Human Resources.

Complaints must be filed with the appropriate school official within 30 days of the date of the alleged harassment.

## Responsible Use of Information Technology Policy

In support of its mission of teaching and community services, Richland Community College provides access to information technology resources for students, faculty, and staff within institutional priorities and financial capabilities.

Access to the College's information technology facilities is a privilege granted to College students, faculty, and staff. The College reserves the rights to extend, limit, restrict, or deny privileges and access to its information resources. Individuals other than College faculty, staff, and students may be permitted access to information technology provided such access does not violate any license or contractual agreement.

All members of the College community who use the College's computing, information, and communication resources must act responsibly. All users of College-owned or College-leased information technology systems must respect the rights of other users, respect the integrity of the physical facilities and controls, and comply with all pertinent licenses and contractual agreements. All users of the technology systems are bound by applicable local, state, and federal laws and regulations.

Information technology provides important means of communication, both public and private. Users will respect the privacy of person-to-person communication in all forms including, but not limited to, voice (telephone), text(electronic mail and file transfer), and image (graphics and television).

College facilities and accounts are to be used for the activities or purposes for which they are assigned. College computing resources are not to be used for commercial purposes without written authorization from the College.

## Possession of Weapons Policy

Possession of weapons on the College campus, on property controlled by the College, at events sponsored by the College, or at events attended while on College business is prohibited unless the individual is an authorized law enforcement officer in the performance of his or her duty. The College may request suitable identification authorizing someone to possess a weapon and may confirm the authorization with authorities.

A weapon is defined as a firearm, dangerous chemical, any explosive device of any description, compressed air guns, pellet guns, BB guns, illegal knives, stun guns, electric shock devices, or any item used in a threatening manner toward another individual. The College reserves the right to further determine the definition of a "weapon" and may prohibit other devices on an individual basis, such as unusual walking canes that may be more of a club, flashlights that may be used as a club, air horns, fluid discharge devices, compressed air devices, etc.

Defensive devices, such as Mace, pepper sprays, etc., will be allowed, if legal, unless used in an offensive manner. Any device defined as a weapon that is required at the College for any purpose must be checked in through the Security Office, and all proper safety requirements must be taken by the responsible individual.

Individuals who violate this policy will be subject to disciplinary sanctions, may be barred from the College, and may face legal prosecution by law enforcement personnel. Being under the influence of drugs and/or alcohol does not excuse the violation of this policy.

## WISE-1

WISE- 1 for students is an Internet program that allows students access to their personal academic records. Students can access their transcripts, project their grade point averages, run a degree audit to see how much of their degree is completed, see their schedule for the current semester, register for classes, see the amount of their bill, and review financial aid information. Students may have a "hold" placed on their records due to a financial obligation to the College. In this instance, the student will be unable to view his or her WISE-1 records. Grades are posted on WISE-1 only. Grades will not be mailed to students unless requested. Visit https:// wise1.richland.edu.



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## Adult Education

AdultEducation offers a variety of courses to help meet the diverse needs of the community. Adult Secondary Education courses prepare students for passing the GED test. (Passing the test demonstrates eligibility for a high school equivalency certificate.) Adult Basic Education courses are available to students who need to review basic skills in reading, writing, and mathematics for personal development or advancement tohigherlevel courses. Job skills courses help students improve opportunities for employment, and parenting classes are provided at selected sites.

To enroll in the program, students must first attend an orientation, which is conducted weekly, or an appointment can be arranged. The session is free and lasts about an hour. Individuals interested in enrolling in the program must be at least 16 . All classes and textbooks for the program are free to students.

## Alumni and Friends Association

The Richland Alumni and Friends Association was founded in 1985 to provide a link between alumni, friends, and the Richland community, and because of its similar goals and purpose, it is a part of the Richland Foundation. Former students, staff members, and friends of Richland are invited to join and to participate in the work of the Association.

Purposes and goals of the Association include advancing the growth and development of the College; promoting the personal, educational, and professional development of alumni; and establishing and encouraging a mutually beneficial relationship between the College and its alumni and friends. For information call(217)875-7211, Ext. 350, or visithttp://alumni.richland.edu.

## Applied Learning Skills (ALS) Program

Applied Learning Skills (ALS) courses are designed to help review academic areas or to reinforce basic skills. ALS courses are one-credit-hour modules that supplementexisting Richland courses. They offer several benefits: flexibility in scheduling class time, a wide range of instructional methods, and a low-pressure method of learning. Students may register for ALS modules at any time through the 10th week of the semester.

In order to participate in this program, students should be able to work on their own and be dedicated and motivated. Students are expected to spend a minimum of 15 hours in the StudentLearning Center. For more information, contact the Director of the Student Learning Center, Ext. 309.

## Continuing and Professional Education Division

The Continuing and Professional Education Division provides a variety of personal and professional training options, from fullday classes to short-term workshops in the evening, during the day, and on Saturdays. Richland can provide training that is customized to fit the specific needs of any business, industry, or individual. It is our priority to serve the needs of the College District's varied population.

Professional Development: options to update knowledge and theory to fulfill job responsibilities, find a new career, or upgrade current position, including Business, Occupational Safety,Computer,Commercial Truck Driver (CDL), and many other areas.

Personal Development: opportunities for self-growth and development of new skills in computer training for home use, sign language, dance, pottery and many other hobby/ leisure activities.

Shilling Community Education Center: The Center features a 325 -seat auditorium, banquet room with seating for 300 , conference rooms, and several classrooms available for use. The facility is available for meetings, programs, teleconferences, performances, and other events. Call (217)875-7211, Ext. 240.

## Circuit Training with a Personal Trainer

Join the growing number of people who are incorporating the services of a personal trainer tokeep them on the road to fitness. This class is designed for one-on-one training. A personal workout will be designed based on individual goals. Cardiovascular equipment and weight training will be used throughout the 6-week course. Call 875-7211, Ext. 324, for Circuit Training availability.

## English as a Second Language Program

English as a Second Language (ESL) courses are for individuals who are native speakers of another language and who need to improve their English speaking, reading, and writing skills for academic or employment purposes. Courses are offered at the prebeginning, beginning, intermediate, and advanced levels. Persons interested inenrolling in these classes should contact the Adult Education office, 875-7211, Ext. 355, for further information. All classes and textbooks for this program are free.

## Extension Center Programming

Credit classes and non-credit workshops and seminars are scheduled in communities throughout Richland's District, including Argenta, Assumption, Blue Mound, Cerro Gordo, Clinton, Forsyth, Illiopolis, Macon, Maroa, Moweaqua, Mt. Zion, Niantic, Stonington, and Warrensburg. General Education Development (GED) and English as a Second Language (ESL) classes are also provided. The Clinton Extension Center is located in Clinton at the Clinton High School (southwestentrance), 1200 Highway 54 West in Clinton. For additional information, call (217)935-6791.

## Fitness Center

With staff assistance, each person develops a personalized fitness program, based on individual goals and abilities. The healthrelated fitness class uses stationary bikes, treadmills, stair climbers, free weights, and universal weight machines to provide a combined aerobic/muscle-toning workout. Cross training ensures more effective results in improving and maintaining personal fitness.

Individual fitness workouts to meet class requirements may be completed any time during Fitness Center hours. We encourage students to use the Center on a daily basis. The Fitness Center is available on a first-come, first-served basis; usually there is no waiting for use of the equipment. Locker room and shower facilities are available. A new Fitness Center will open in late spring 2008.

## Richland Foundation

The Richland Community College Foundation was formally established in 1985 to encourage and receive monetary and in-kind contributions and support for the College. Foundation funds are designated for scholarships, facilities and equipment for the campus, technological innovations, educational and developmental programs, and community service projects. For information, call (217)875-7211, Ext. 350.


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## Student Status and Classification

First-time enrollee-one who has never attended a college or university.

Transferstudent-one who has attended another college before enrolling at Richland.

Re-entering student-one who has attended classes at Richland but has not registered for one or more terms (including the most recent) and has not attended another college since that time. Re-entering students mustreapply by completing an application for admission in order to activate their files.

Freshman-one who has earned 30 or fewer semester hours (or 45 quarter hours) toward a degree or certificate at Richland.

Sophomore-one who has earned more than 30 semester hours (or 45 quarter hours) toward completion of a program at Richland.

Unclassified student-one who has reached junior standing at a college or university or who has earned a degree and is enrolled in selected courses rather than a program of instruction.

High school student-one who is attending high school but who has also enrolled in courses at Richland.

## Full-Time Academic Load

An academic load of 12-17 semester hours is considered normal for a full-time student during regular semesters. During the summer session, 6-8 semester hours are considered a full load.

Part-time students are those students enrolled for less than the normal full load. Students with jobs or other outside commitments should limit their credit loads accordingly.

Students planning an overload of courses (more than 17 semester hours) must have at
least a " B " average for 12 or more hours during the previous semester. All such overloads must be approved by a counselor in the Student Services Center before registration.

## Study Time Required

Two hours or more of outside study for each class hour of lecture/discussion is usually needed for satisfactory performance, although this amount may vary from student to student.

Two-hour laboratories giving one credit hour usually demand an hour of outside work to complete assignments. If three hours or more of laboratory work are required for one credit hour, students should be able to complete assignments during the laboratory period.

Students who plan to work at outside jobs while attending Richland should take study time into consideration when planning their schedules.

## Academic Standards

## Graduation

A cumulative grade point average (GPA) of 2.00 or higher, depending on the program, is required to receive an Associate's Degree or certificate. Specific programs may require a higher program GPA for graduation. Courses numbered below 100 are excluded in the cumulative grade point average but will be included in the semester grade report beginning Spring 2000.

## Probation

A student may be placed on academic probation for failure to achieve the minimum cumulative GPA required for good standing as shown below:

| Cumulative hours | GPA |
| :---: | :--- |
| attempted | required |
| $1-15$ hours | 1.70 |
| $16-30$ hours | 1.85 |
| $31+$ hours | 2.00 |

A student on academic probation is encouraged to meet with a counselor in EnrollmentServicestodiscuss career andeducational goals. The student may wish to utilize the Student Learning Center for tutorial assistance. The counselor may suggest a reduced number of courses to improve chances for success, a different program of study, or repeating courses previously taken with a grade of "D" or "F."

The student must achieve at least a 2.00 GPA during the following semesters after being placed on academic probation until being placed on good standing as illustrated in the previous chart.

## Suspension

Failure to achieve a 2.00 GPA will result in academic suspension from the College for one or more semesters, excluding the Summer term. An appeals procedure is available through the Judicial Board. See the Student Resolution Process Chart in the Student Handbook.

## Health Professions Suspension or Dismissal

Students in radiography, surgical technology, and all nursing programs are required to have a grade of "C" or above in all program courses. In addition, students in the previously mentioned programs must maintain a 2.50 program GPA for admission, progression, and graduation from the program. Program GPA is defined as all prerequisite courses, all general education courses, and all course curriculum required for the degree/ certificate. Failure to maintain a 2.50 will result in dismissal from the program.

## Grading Policy

The following letter grades are used at Richland to represent the student's level of performance in courses numbered 080 or above in this catalog:

A Superior or excellent
B Very good or above average
C Good or average
D Barely passing or below average
F Failure or unsatisfactory

AU Audit (For more information, see "Auditing a Course" in this section.)
CR/X Completed course requirements or did not complete course requirements. CR/X grades are applicable for vocational skills courses and adult education courses.
I Incomplete. All coursework must be finished by the end of each term, unless the instructor agrees in writing to a specified grace period no longer than 60 days after the end of the term. Failure to complete coursework within the 60 -day grace period will result in the grade the student would earn without completing the coursework. A grade of "W" or "AU" is not allowed on an incomplete.
W Withdrew from the College or dropped the course before the beginning of the final examination period.

## Grade Point Average Calculation

A grade point average (GPA) for each student who has received a grade of $\mathrm{A}, \mathrm{B}, \mathrm{C}$, D , or F will be calculated by term and by cumulative total.

Each grade listed above is assigned a quality point value $(A=4, B=3, C=2, D=$ 1 , and $\mathrm{F}=0$ ). The grades $\mathrm{AU}, \mathrm{I}, \mathrm{W}, \mathrm{CR}$, and X do not have point values and are not used to calculate a GPA.

The point value of the grade received is multiplied by the number of credit hours given for the course. The results for each course during a term are totaled, and that sum is divided by the number of semester hours attempted.

If,for example, a studentreceived an A for a 3-hour course and a B for a second 3-hour course, the grade point average would be figured as follows:
$\mathrm{A}=4$ quality points and $4 \times 3 \mathrm{hrs} .=12$
$\mathrm{B}=3$ quality points and $3 \times 3 \mathrm{hrs} .=9$
$9+12=21$ total points
21 divided by 6-(attempted credit hrs.) $=$
3.5 , the grade point average for that term.

Developmental education courses (courses numbered below 100) will not be calculated into the student's overall cumulative GPA.

## Semester Academic Honors

The Semester Academic Honors List includes the names of students who have

1. Completed 12 or more cumulative semester hours; and
2. Completed 6 or more semester hours for the current term; and
3. Attained at least a 3.50 GPA for the currentterm.

## Appealing a Grade

A student who feels he/she has received an unfair or inaccurate grade may appeal through the Judicial Board.

Grade appeals must be filed no later than one year from the last day of the semester for which the grade was received. A student wishing to appeal should follow the procedures set forth in the Student Resolution Process Chart in the Student Handbook under Student Grievance and Disciplinary Proceedings.

## Alternative Delivery of Instruction

Tomeetchanging student needs, Richland Community College offers alternatives to the traditional classes on campus. For those courses offered through the Internet, students must be self-directed, have Internet access and general computer skills, and have sufficient time to complete the work for these sections.

In virtual courses, at least $75 \%$ of instruction is delivered via the Internet. These courses are designed to be accessed from any location where the Internet is available to students. Students musthave a Richland email address to register for a virtual course. Virtual sections are designated as V1, V2, etc. Additional information is available on the Online Learning webpage at www.richland.edu/online/. Students are also able to participate in a wide range of courses offered by Richland through the Illinois Virtual Campus.

In hybrid courses, $\mathbf{2 5}$ to $\mathbf{7 5 \%}$ of instruction is online. Students will attend classes on campus, but much of the work will be completed online. Hybrid sections are designated as Y1, Y2, etc. Students must have a Richland email address to register for a hybrid course. Additional information is available on the Online Learningwebpage at www.richland.edu/online/.

Blended courses are technology-enhanced, with less than $25 \%$ of instruction online. These sections usually include regularly scheduled class meetings through the semester, although the class meetings are less frequent than for a traditional class. Blended sections are designated as B1, B2, etc. Students must have a Richland email address to register for a blended course. Additional information is available on the Online Learning webpage at www.richland.edu/online/.

Independent Study-Participation in a classroom setting is an important part of college education. However, Richland realizes that sometimes scheduling or other conflicts make attending a particularclass difficult. An independent study option is generally available for students meeting the following conditions: the course must be required for graduation or professional certification, and the requested term for independent study and the term of graduation must be the same. Students mustcomplete the IndependentStudy form available in the appropriate division office and discuss the request with the appropriate Dean. If the request is granted, regular meetings in person or online between the student and instructor are held during the arranged term of the course. Only those courses included in the Catalog are available for Independent Study.

A course audit is another alternative for enrollment. Any credit class offered by Richland may be taken as an audit unless otherwise specified. Students wishing to audit a class will be assessed the credit hour rate and other applicable fees and must complete an audit form in the Admissions and Records Office by the 10th day of the Fall/ Spring semester. Change to the grading status cannot be made after the 10th day, and a grade of AU will be assigned at the completion of the course. No credit will be awarded for auditing a course. If auditing Summer term courses, the form must be filed within the first 3 days of the term.

## Dropping a Course

A student may drop a course through the last scheduled day of class before the scheduled final exam for that course and must contact the class instructor as part of the drop procedure. A grade of "W" will be recorded for the course dropped.

## Administrative Drop

Regular attendance is necessary for satisfactory completion of a course. Richland faculty will take roll at each class meeting at least through midterm. Students who miss a class are responsible for work assigned during their absence. Instructors may, at their option, accept late work, but such work may receive a lower grade if accepted late.

At midterm the College will administratively drop any student who has failed to meet the attendance standard as certified by the instructor. This report will be used to determine certain financial aid awards.

A student who fails to attend the first two classes of a course may also be dropped from the class.

The College may drop any student who has unsatisfactory attendance as stated in the course syllabus during the period from the midterm through the last regular week of classes before finals. Faculty certification is required for such action.

Also, a student may be dropped by an instructor for unsatisfactory course progress. However, students must not assume they will be automatically dropped and must follow appropriate procedures for withdrawing from the course.

Students who stop attending a class without officially dropping a class or who are not administratively dropped may receive a grade of " $F$ " for the course.

## Repeating a Course

Students may repeat any course taken at Richland Community College with the understanding that the earlier grade and credit hours will be replaced by the most recent, even if the most recent grade and credit hours are lower. Students should be aware that some colleges include all grades earned in computing grade point averages even if the course has been repeated.

## Class Attendance

Regular attendance is necessary for satisfactory college work. Richland faculty will take attendance at each class meeting.

If a student is absent for one week plus one day (or less, if specified by the instructor in the course outline), his/her name may be sent to the Student Records Office. Students with unsatisfactory attendance will be sent a "stopped attending" letter. At midterm, the College will administratively drop students who have failed to meet the attendance standard as certified by the instructor. See Dropping a Course, page 63.

## Withdrawing from a Course or the College

A student withdrawing from the College is required to settle all obligations, including money owed to the College, and must contact a Student Services Center staff member as part of the withdrawal process. Students are asked to withdraw in person.

A student may withdraw the last scheduled day of class before the scheduled final examination for that course. A grade of "W" will be given for current courses, if the courses are officially dropped.
"Change of Schedule" forms are available in the Student Services Center, Room C129. To withdraw by phone, call 875-7211, Ext. 267.

## Changing Program of Study

All program changes must be processed through the Admissions and Records Office in the Student Services Center. Students who want to change their courses of study are encouraged to discuss their plans with a counselor in the StudentServices Center or an instructor in the new program. Various resources are available in Career Services.

## Graduation

## Graduation Day

Public commencement ceremonies for students who have earned a degree or certificate from Richland are held once a year at the end of the spring semester.

Students who have completed the graduation requirements and received the certificate or degree in the fall semester or current spring semester or who will complete requirements in the following summer session are invited to participate in the graduation ceremony.

## Applying for Graduation

When a student feels that he/she is nearing completion of the requirements for graduation from a program of study, the student is to follow the procedure outlined below to apply for graduation:

1. The student should review the require ments for graduation for the program of study, including courses taken or in progress, grade point average, and other requirements. The student may contact a counselor in the Student Services Center or his/her academic advisor to assist with the review.
2. The student must fill out an Application for Graduation, which may be obtained in the Admissions and Records Office. The form is to be filed during the term immediately preceding the term in which the student expects to graduate.
3. The completed application must be filed with the Business Services Office along with the $\$ 25.00$ graduation fee. This fee is applicable per fiscal year regardless of the number of degrees/certificates to be awarded. A copy of the reviewed application will be returned to the student.
4. The student is encouraged to review the returned copy with an Enrollment Services counselor, his/her academic advisor, or the Dean of Enrollment Services to discuss completion of any unmet requirements.
5. If the student is unable to complete the requirements before the expected graduation date, another"Application for Graduation" must be submitted before the new term of expected graduation.

The Registrar, a counselor, or the Dean of Enrollment Services can answer questions regarding the application for graduation process.

## Constitution Requirement

Richland Community College requires that a student must meet the Constitution Requirement in order to receive the Basic or Advanced Certificate for any occupationaloriented program. Illinois law requires anyone graduating from Richland with an associate's degree to pass an examination covering American patriotism and the principles of representative government, as well as the proper use and display of the American flag. The test also covers the Declaration of Independence, the U.S. Constitution, and the Illinois Constitution.

The requirement may be satisfied in one of two ways:

1. If the required examination was taken and passed in high school, the student's high school transcript must verify that the requirement has been met. (Holders of an Illinois GED certificate may submit an official copy of their test scores or verification from the Superintendent of the Regional Office of Education through which the GED certificate was issued); or
2. Students may obtain study material from the LRC reserves and take the examination through the Testing Center, Room W124.

## Graduating With Two Certificates or Degrees

Richland students may work toward completion of more than one program of study if they so desire.

Students may receive all certificates and AAS degrees for which they have completed the requirements. Only the highest award will be announced at the commencement ceremony.

In order to receive a second transfer/ baccalaureate associate's degree, a student must

1. Complete all graduation requirements for the second degree; and
2. Complete at least an additional ten hours beyond the first degree. (These may be made up of hours in the area of concentration, group requirements, or electives.)

A separate "Application for Graduation" must be submitted for each certificate or associate's degree. A student may earn only one AA degree, one AS degree, one AFA degree and one AES degree.

## Graduating Transfer Students

Many students enter Richland after completing courses at other institutions. In order to give these students credit for previous college work and, at the same time, maintain Richland's standards for graduation, students must complete a total of 15 semester hours of an associate's degree or certificate program at Richland.

Richland students completing occupational certificate programs only offered within the Division of Correctional Education are exempt from this 15 -smester-hour requirement.

If a transfer student completes a course at Richland that is substantially the same as a course for which the student received transfer credit, the hours of transfer credit will be replaced by the hours earned at Richland. Transfer credit will be posted to the student's transcript upon evaluation but will not apply toward a certificate or degree until at least eight hours have been earned at Richland.

## Earning Graduation Honors

When a student applies for graduation, all 100-level course work will be evaluated for graduation academic honors. Students must have earned in class at Richland at least onehalf of the credits needed for a degree or certificate at Richland Community College. In addition, students musthave met Richland's residency requirement, which means completing no fewer than 15 hours at Richland.

Graduation academic honors are based on the student's cumulative grade point average, as follows:

## Cumulative GPA

3.50-3.74 Honors
3.75-3.99 High Honors
4.00 Highest Honors

Effect of Changes in Program on Graduation

From time to time, Richland strengthens and updates the courses in its programs. Students should graduate under the program structure listed in the College Catalog for the year in which they complete their certificate or degree. In some cases, however, some students are nearly finished with work toward a degree when program changes are made, and graduation under the new program may be impractical if requirements have changed.

Therefore, any student may graduate under either the requirements of the current program or those of any of the two preceding College Catalogs during the time the student was enrolled.

If a student wishes to graduate under program provisions more than two College Catalogs old, the Registrar will review the student's Application for Graduation and consult with the appropriate Dean regarding clearance for graduation.

## Effect of Previous Quarter System on Graduation

Up to the end of the summer session 1977, Richland used a quarter system and awarded quarter hours of credit instead of the current method of semesters and semester hours of credit.

Students who attended class at Richland before the Fall Semester 1977 should contact the Registrar, a counselor, or the Dean of Enrollment Services for an evaluation of the quarter hours earned.

## Health Professions Graduation Requirements

Specific graduation requirements have been established for certain health professions programs to meet national and state accreditation standards. Students should discuss these requirements with Health Professions faculty and/or the Dean of Health Professions.

## Registered Nursing

A "C" or better in all program courses including all prerequisites and courses required in the ADN Program.

A Program GPA of 2.50 including all prerequisites and program courses required for the degree.

Completion of all nursing skills in the lab and $76 \%$ of the designated skills must be performed at or above the expected level of competency.

Passing of each required HESI outcome exam with 850 or greater with the specified number of opportunities.

Passing of the HESI exit exam with 850 or greater within the specified number of opportunities.

Meets the standards of the NLN Code of Ethics and the Professional Integrity Policy.

## Practical Nursing

A "C" or better in all prerequisites and program courses.

A Program GPA of 2.50. Program GPA is all prerequisites and program courses required for the certificate.

Completion of all nursing skills in the lab and $76 \%$ of the designated skills must be performed at or above the expected level of competency.

Meets the standards for the NLN code of Ethics and the Professional Integrity Policy.

## Radiography

A "C" or better in all program courses including all prerequisites, general education, and core program courses required by the Radiography Program.

A Program GPA of 2.50 or above in all prerequisites, general education, and program core courses required for the degree.

Completion of all lab competencies with a minimum of $84 \%$.

Completion of all program-required clinical proficiency exams.

Completion of all ARRT-required clinical proficiency exams.

Meets standards of the ARRT/ASRTCode of Professional Ethics.

Return film ID markers or make reimbursement.

Return film badge holder or make reimbursement.

## Surgical Technology

A "C" or better in all program courses including all prerequisites and courses required in the Certificate/AAS Program.

A Program GPA of 2.50, including all prerequisites and program courses required for the certificate/degree.

Completion of all surgical technology skills in the lab/clinical; $100 \%$ of the designated skills must be performed in both lab/ clinical settings.

All skill performances must be at $100 \%$ competency level.

Meets standards of the AST Code of Professional Ethics.

## Transfer of Credits to Other Colleges

Many Richland students continue their education at a senior college or university. In fact, the academic records of Richland transfer students at other institutions are often as good as the academic records of students who began at the senior school.

Illinois senior colleges and universities have cooperated with Richland in making the transfer of Richland students and credit hours earned smooth and easy.

Many Illinois institutions (with the exception of the University of Illinois) have made a"General Education Compact," which states that community college students who have earned an Associate in Arts (AA) or Associate in Science (AS) Degree will meet all lower-division (freshman-sophomore) generaleducation requirements.

Thus, Richland students are guaranteed that their AA or AS Degree will receive full recognition from the schools that have subscribed to the agreement. (Some "compacts" are under review, and departmental requirements at the senior college or university level may affect some courses that the student transfers in.)

For those colleges without such an agreement, Richland students should follow the guidelines for transfer credits listed in that senior college's transfer guide or handbook.

Richland recommends that students planning to transfer meet with a counselor or advisor in the Student Services Center for up-to-date information on transferring Richland credits. Students who plan to transfer to out-of-state schools or schools not covered by the General Education Compact should also contact an advisor at the transfer school.

## Illinois Articulation Initiative

Richland Community College is a participant in the Illinois Articulation Initiative(IAI), a statewide agreement that allows transfer of the completed IllinoisGeneral Education Core Curriculumbetween participating institutions. Completion of the General Education Core Curriculum at any participating college or university in Illinois assures transferring students that lower-division general education requirements for an associate's or bachelor's degree have been satisfied. This agreement is in effect for students entering an associate or baccalaureate degree-granting institution as a first-time freshman in summer 1998 or thereafter.

The following codes are used to identify the general education requirement a qualifying course satisfies: IAI C (Communications), IAIF (Fine Arts), IAIH (Humanities), IAI L (Life Science), IAI M (Mathematics), IAI P (Physical Science), IAI S (Social Sciences). Check the Course Description section of this catalog (beginning on page 175) as to whether a specific Richland course qualifies. IAI information may also be found on the Internet at www.itransfer.org.

The following codes are used to identify the courses that transfer into specific baccalaureate majors:

## IAI Majors

AG - Agriculture
ART- Art/Art Education
BIO-Biological Sciences
BUS - Business
CHM - Chemistry
CLS - Clinical Lab Science
CS - Computer Science
CRJ - Criminal Justice
ECE-Early Childhood Education

EED-Elementary Education
EGL - English
EGR-Engineering
HST - History
MTM-Manufacturing Tech/Machining
MC - Mass Communication
MTH - Mathematics
MUS - Music/Music Education
NUR- Nursing
PLS - Political Science
PSY - Psychology
SED - Secondary Education
SW - Social Work
SOC - Sociology
SPE - Special Education
SPC - Speech Communication
TA - Theatre Arts

## Guarantee of Transfer of Credit

Richland Community College guarantees to those earning the Associate in Arts Degree or the Associate in Science Degree, beginning May 1993, that their courses will transfer to Illinois state colleges or universities as identified and defined in the Course Equivalent Guide in effect at the time of graduation. If a Richland course is taken and successfully completed in compliance with the Course Equivalent Guide or Illinois Articulation Initiative (IAI) and is not accepted in transfer, Richland will reimburse the student the amount of the tuition paid at the time of taking the course.

The graduate, under the agreement to enact this guarantee, will still be responsible for all costs other than the tuition specified.

Conditions for the Guarantee:

1. Transfer of a course means the acceptance of credits for entrance at a senior institution.
2. Classes musthave been taken at Richland Community College no earlier than two years before the attempt to transfer.
3. Any refund request must be made no later than two years after Richland Community College graduation.


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## Dreamwork!



## Programs of Study

Richland Community College's "Open Door" policy allows anyone who believes he or she may benefit from study at the College to enroll. Once students enroll, they have two possible routes.

First, students with diversified needs and interests who are not seeking degrees may take courses in a variety of areas. While these courses may also be part of particular programs, students may select courses that best fit their goals.

Another direction for students is a program of study. A program of study leads to the awarding of appropriate degrees or certificates. Admission to a program of study requires that a student has earned a high school diploma, or a High School Equivalency Certificate based on the GED Test, or meets the "ability to benefit" criteria through a recognized test approved by the U.S. Department of Education. A studentenrolling in a program of study would have several options:

The Associate in Arts (AA) (see page 74), Associate in Science (AS) (see page 76), Associate in Fine Arts (AFA) (see page 78), Associate in Engineering Science (AES) (see page 82), and Associate of Arts in Teaching (AAT) (see page 84 ) degree programs are designed for students planning to continue their formal education at a four-year university or upper-division college to obtain a baccalaureate degree. Those planning to major in natural sciences or mathematics usually follow the AS program, while those in humanities or fine arts will generally seek the AA degree. Those planning to major in social science may select either the AA or AS curriculum.

If the freshman and sophomore requirements cannot be satisfied within the framework of the AA or AS degree requirements for Richland Community College, Richland will consider the individual's eligibility for the appropriate associate's degree if a prior agreement has been made with the college/ university to which the student plans to transfer into the program of study.

Other programs are based on occupational/career offerings and lead to Basic or Advanced Certificates in those fields or the Associate in Applied Science (AAS) Degree (see page 91 ).

The Associates in Arts in Teaching (AAT) in Secondary Mathematics (see page 84) is designed to attract students into high need discipline areas for preparation to transfer into a four-year college/university education program. This program is for students who plan a concentration in secondary mathematics and teacher certification.

General Studies programs are individually structured by each student to meet specific interests or needs and lead to the awarding of a Basic Certificate in a particular field (see page 170) or the Associate in Liberal Studies (ALS) Degree (see page 80).

All programs are designed to stimulate personal growth by offering a basic and/or advanced understanding of the concepts essential to competence in a particular field.

All programs are also designed to provide a broad education by making students aware of the world around them, by opening and stimulating students' minds to initiate and welcome new ideas and techniques, and by providing a solid introduction to a marketable skill. To achieve these goals, all programs include courses of general interest as well as courses in an area of concentration.

## Cooperative Educational Programs with Other Community Colleges

Richland Community College has Cooperative Educational Program agreements with other Illinois community colleges that allow Richland District residents to enroll in a vocational/technical degree and/or certificate not available at Richland. Students are able to enroll in such a program at the cooperating college's in-district tuition rate. The colleges and programs offered are listed below. Richland will not approve a charge-back for a program of study that is available through a cooperative agreement with another community college. (Individuals with questions about a particular program should call Richland's Student Services Center at 875-7211, Ext. 267.)

Students may take all specialized courses at the cooperating college. Related technical and general education courses required in the programs may be taken either at Richland or at the cooperating college. The cooperating college issues all degrees or certificates for successful completion of the programs. Additional information is available from the Director of Admissions at the college offering the program.

## Programs offered for Richland District residents at another college:

 Black Hawk College, Moline:All Occupational/Technical Certificates and Degrees not offered by RCC. Carl Sandburg College, Galesburg:

All Occupational/Technical Certificates and Degrees not offered by RCC. Danville Area Community College, Danville:

All Occupational/Technical Certificates and Degrees not offered by RCC. Elgin Community College, Elgin:

All Occupational/Technical Certificates and Degrees not offered by RCC. Heartland Community College, Bloomington:

All Occupational/Technical Certificates and Degrees not offered by RCC.

## Highland Community College, Freeport:

All Occupational/Technical Certificates and Degrees not offered by RCC.
Illinois Central College, East Peoria:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Illinois Valley Community College, Oglesby:
All Occupational/Technical Certificates and Degrees not offered by RCC.
John Wood Community College, Quincy:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Joliet Junior College, Joliet:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Kankakee Community College, Kankakee:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Kaskaskia College, Centralia:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Kishwaukee College, Malta:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Lake Land College, Mattoon:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Lewis and Clark Community College, Godfrey:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Lincoln Land Community College, Springfield:
All Occupational/Technical Certificates and Degrees not offered by RCC.
McHenry County College, Crystal Lake:
All Occupational/Technical Certificates and Degrees not offered at RCC.
Moraine Valley Community College, Palos Hills:
All Occupational/Technical Certificates and Degrees not offered by RCC.

## Morton College, Cicero:

All Occupational/Technical Certificates and Degrees not offered by RCC.

## 72 Instructional Programs

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## Kankakee District residents at Richland:

All Occupational/Technical Certificates and Degrees not offered by KCC.
Kaskaskia District residents at Richland:
All Occupational/Technical Certificates and Degrees not offered by KC.

## Kishwaukee District residents at Richland:

All Occupational/Technical Certificates and Degrees not offered by KC.
Lake Land District residents at Richland:
All Occupational/Technical Certificates and Degrees not offered by LLC.

## Lewis and Clark District residents at Richland:

All Occupational/Technical Certificates and Degrees not offered by LC.

## Lincoln Land District residents at Richland:

All Occupational/Technical Certificates and Degrees not offered by LLCC.

## McHenry County District residents at Richland:

All Occupational/Technical Certificates and Degrees not offered at MCC.

## Moraine Valley District residents at Richland:

All Occupational/Technical Certificates and Degrees not offered by MVCC.
Morton District residents at Richland:
All Occupational/Technical Certificates and Degrees not offered by MC.
Parkland District residents at Richland:
Heating, Ventilation, Air Conditioning, and Refrigeration - AAS and Certificate
Prairie State District residents at Richland:
All Occupational/Technical Certificates and Degrees not offered by PSC.
Rock Valley District residents at Richland:
All Occupational/Technical Certificates and Degrees not offered by RCC.
Sauk Valley District residents at Richland:
All Occupational/Technical Certificates and Degrees not offered by SVC.
South Suburban District residents at Richland:
All Occupational/Technical Certificates and Degrees not offered by SSC.
Spoon River District residents at Richland:
All Occupational/Technical Certificates and Degrees not offered by SRC.

## Waubonsee District residents at Richland:

All Occupational/Technical Certificates and Degrees not offered by WCC.

## Certified Programs

## Business and Technology Division

National Institute for Automotive Service Excellence (ASE)
Evaluated by the National Automotive Technicians Education Foundation (NATEF)
Association for Healthcare Documentation Integrity

## Health Professions Division

EMT-Basic—Illinois Department of Public Health
EMT-Intermediate-Illinois Department of Public Health
EMT-Paramedic—Illinois Department of Public Health
Certified Nurse Aide Program—Illinois Department of Public Health
ADN-RN is granted accreditation by the National League for Nursing Accrediting Commission (NLNAC).
Surgical Technology Program is granted accreditation by the Commission on Accreditation of Allied Health Educational Programs (CAAHEP, 1361 Park Street, Clearwater, FL 33756 phone: 727-210-2350 web: www.CAAHEP.org)

## 74 Instructional Programs

## Baccalaureate/Transfer Programs

## Associate in Arts

The Associate in Arts (AA) degree is designed to provide two academic years of college study for transfer to a four-year university or upper-division college toward a Bachelor of Arts degree. See the Student Transfer Handbook, available in the Student Services Center, for additional advice.

1. Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.):
a. Communications 9 semester hours
b. Fine Arts/Humanities (at least one course selected from each area) 11-12 semester hours
c. Social Science (selected from 2 or more disciplines) 9-10 semester hours
d. Life/Physical Science (at least one course selected from each area) 7-8 semester hours
e. Mathematics

3-4 semester hours
2. Area of Concentration:
a. Two or more courses completing one or more sequences in a specified subject area such as accounting, English, French, history, psychology, physical education, OR
b. Four or more courses in a broad field such as business, humanities, or social science for the student who does not desire to pursue a specific subject area.
3. General Education - 39-43 semester hours (Courses in the student's area of concentration do not count toward those requirements.)
4. Constitution Requirement (See page 64.)
5. Total Credits Required - 60 semester hours in courses numbered 100 and above. (Students transferring credit to Richland should see regulations concerning transfer students.)
6. Cumulative Grade Point Average - 2.00 ("C") or better for all work applicable toward the degree that was completed at Richland. (See page 61.)

| Associate in Arts (AA) Transfer Academic Plan |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area of Concentration $\qquad$ Designed to provide two academic years of college study for transfer toward a Bachelor of Arts degree at $\qquad$ |  |  |  |  |  |
| General Education Requirements - 39-43 Hrs. <br> Communications: 3 courses ( 9 Hrs.) <br> ENGL101, 102; <br> SPCH101 <br> ("C" or better required for both ENGL101 \& 102 effective Summer 1999) | Course \& Number | RCC | Semester \& Year | Transfer | Total |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Social and Behavioral Sciences: 3 or 4 courses (9-10 Hrs.) <br> (Select from two or more disciplines.) <br> ANTHR 110, 120, 130; ECON231, 232; HIST101, 102; POLS100, 110, 120; <br> PSYCH110, 145, 150, 210; <br> SOCIO110, 150, 200, 225 |  |  |  |  |  |
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| Humanities/Fine Arts: 3 or 4 courses (11-12 Hrs.) <br> (Select at least one course from humanities and at least one course from fine arts.) <br> Humanities - AF AM101, 103, 104; <br> ENGL115, 124, 126, 128, 160, 201, 202, 231, 232, <br> 251, 252; FREN202; GERM202; <br> HIST111, 112, 201, 202, 270; HUMAN100, 201,280; <br> PHIL100, 110, 120, 210, 215, 230; SPAN 202 <br> Fine Arts - AF AM101, 103; <br> ART100, 210, 220, 230; DRAMA150; ENGL140; HUMAN100, 201; MUSIC100, 190 |  |  |  |  |  |
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| Life/Physical Science: 2 courses (7-8 Hrs.) <br> (Select at least one course from life science and at least one course from physical science including at least one <br> laboratory course.) <br> Life Science - BIOL101, 106,120, 210; <br> Physical Science-ASTRO105; CHEM100, 131; <br> EASCI210, 220, 230; PHYSC105; PHYS100, 101, 151 |  |  |  |  |  |
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| Mathematics: 1 course (3-4 Hrs.)MATH110, 112, 113, 121, 122, 160, 170, 171, 190,221 |  |  |  |  |  |
|  |  |  |  |  |  |
| Area of Concentration (Hours vary) <br> (See page 86 for Area of Concentration suggestions.) |  |  |  |  |  |
|  |  |  |  |  |  |
| Electives: Must be transfer courses (Hours vary) |  |  |  |  |  |
| Total Hours - (60 Required - Minimum of 15 hrs . at Richland) |  |  |  |  |  |

2.0 cumulative GPA required for all Richland degrees

This degree fulfills the IAI general eduction requirements.
It is strongly recommended that students consult with an academic advisor at both Richland and their transfer institution.
Constitution requirement must be met in order to fulfill degree requirements.-Constitution Requirement Met $\square$

## 76 Instructional Programs

## Associate in Science

The Associate in Science (AS) degree is designed to provide two academic years of college study for transfer to a four-year university or upper-division college toward a Bachelor of Science degree. See the Student Transfer Handbook, available in the StudentServices Center, for additional advice.

1. Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.):
a. Communications 9 semester hours
b. Fine Arts/Humanities (at least one course selected from each area) 9-10 semester hours
c. Social Science
(selected from 2 or more disciplines) 9-10 semester hours
d. Life/Physical Science
(at least one course selected from each area) 7-8 semester hours
e. Mathematics 7-8 semester hours
2. Area of Concentration:
a. Two or more courses completing one or more sequences in a specified subject area such as accounting, geography, psychology, physical education, physics, or any other specific subject area except those listed in "b" and "c" below; OR
b. Four or more courses, completing one or more sequences, in the specific subject areas of biology, chemistry, or mathematics; OR
c. Four or more courses in a broad field, other than those listed in "b" above, such as business, general science, or social science for the student who does not desire to pursue a specific subject area.
3. General Education - 41-45 semester hours (Courses in the student's area of concentration do not count toward those requirements.)
4. Constitution Requirement (See page 64.)
5. Total Credits Required - 60 semester hours in courses numbered 100 and above. (Students transferring credit to Richland should see regulations concerning transfer students.)
6. Cumulative Grade Point Average - 2.00 ("C") or better for all work applicable toward the degree that was completed at Richland. (See page 61.)

## Associate in Science (AS) Transfer Academic Plan

| Area of Concentration $\qquad$ Designed to provide two academic years of college study for transfer toward a Bachelor of Science degree at $\qquad$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (College or University). |  |  |  |  |  |
| General Education Requirements - 41-45 Hrs. | Course \& Number | RCC | Semester \& Year | Transfer | Total |
| Communications: 3 courses (9 Hrs.)ENGL101, 102;SPCH101 (Required)("C" or better required for both ENGL101 and 102effective Summer 1999) |  |  |  |  |  |
|  |  |  |  |  |  |
| Social and Behavioral Sciences: <br> 3 or 4 courses ( $9-10$ Hrs.) <br> (Selected from two or more disciplines.) <br> ANTHR110, 120, 130; ECON 231, 232; <br> HIST101, 102; POLS100, 110, 120; <br> PSYCH 110, 145, 150, 210; <br> SOCIO110, 150, 200, 225 |  |  |  |  |  |
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| Humanities/Fine Arts: 3 or 4 courses ( $\mathbf{9 - 1 0}$ Hrs.) <br> (Select at least one course from humanities and at least one course from fine arts.) <br> Humanities - AF AM101, 103, 104; <br> ENGL115, 124, 126, 128, 160, 201, 202, <br> 231,232,251, 252; FREN202; GERM202 <br> HIST111, 112, 201, 202, 270; HUMAN100, 201; <br> PHIL100, 110, 120, 210, 215, 230; SPAN202 <br> Fine Arts - AF AM101, 103; <br> ART100, 210, 220, 230; DRAMA150; ENGL140; <br> HUMAN100, 201; MUSIC100, 190 |  |  |  |  |  |
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| Life/Physical Science: 2 courses (7-8 Hrs.) <br> (Select at least one course from life science and at least one course from physical science including at least one laboratory course.) <br> Life Science - BIOL101, 210 <br> Physical Science - ASTRO105, CHEM100, 131; <br> EASCI210, 220, 230; PHYSC105; PHYS100, 101, <br> 151 |  |  |  |  |  |
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| Mathematics: $\mathbf{2}$ courses (7-8 Hrs.)MATH110, 112, 113, 121, 122, 160, 170, 171, 190,221 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Area of Concentration (See page 86 for Area of Concentration suggestions.) |  |  |  |  |  |
|  |  |  |  |  |  |
| Electives: Must be transfer courses. |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Hours - (60 Required - Minimum of 15 hrs . at Richland $)$ |  |  |  |  |  |

2.0 GPA required for all Richland degrees.

It is strongly recommended that students consult with an academic advisor at both Richland and their transfer institution.

Constitution requirement must be met in order to fulfill degree requirements. - Constitution Requirement Met $\square$

## 78 Instructional Programs

## Associate in Fine Arts

The Associate in Fine Arts (AFA) is designed to provide two academic years of college study for transfer to a four-year university or upper-division college toward a Bachelor of Fine Arts degree. See the Student Transfer Handbook, available in the Student Services Center, for additional advice.

1. Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.):
a. Communications 9 semester hours
b. Fine Arts/Humanities 6 semester hours
c. Social Science (selected from 2 or more disciplines)
d. Life/Physical Science

6 semester hours
e. Mathematics

7-8 semester hours
3-4 semester hours
2. Required Art Courses - ART101, 102, 111, 112, 113, 210, 220, and 230.
3. Art Electives -9 semester hours selected from ART105, 115, 116, 117, 118, 119, 120, 121, $122,123,124,125,126,127,151,152,160,240,251,252$
4. General Education - 40-42 semester hours (Courses in the student's area of concentration do not count toward those requirements.)
5. Constitution Requirement (See page 64.)
6. Total Credits Required - 64-66 semester hours in courses numbered 100 and above (Students transferring credit to Richland should see regulations concerning transfer students.)
7. Cumulative Grade Point Average - 2.00 ("C") or better for all work applicable toward the degree that was completed at Richland (See page 61.)

## Associate in Fine Arts (AFA) Transfer Academic Plan


2.0 cumulative GPA required for all Richland degrees

It is strongly recommended that students consult with an academic advisor at both Richland and their transfer institution.
This degree does not fulfill the IAI general education requirements.
Constitution requirement must be met in order to fulfill degree requirements. Constitution Requirement Met $\square$

## 80 Instructional Programs

## Associate in Liberal Studies (ALS)

The curriculum is designed for students who desire up to two years of college study for their personal development. It is also designed to provide students an initial opportunity to pursue various areas of interest and subsequently to select a more specific educational objective, such as a particular occupational program or a baccalaureate-oriented associate degree.

Both baccalaureate-oriented and occupational-oriented courses may be taken as a part of this program. Not all courses may transfer.

Graduation requirements for the Associate in Liberal Studies (ALS) degree are completion of the following:

1. Group requirements:
a. Communication Skills

9 semester hours
b. Humanities

10 semester hours
c. Social Sciences

10 semester hours
d. Natural Science and Mathematics

10 semester hours
2. General Electives

10 semester hours
May include occupational-oriented courses
3. Constitution Requirement (See page 64.)
4. Total Credits Required

60 semester hours in courses numbered 100 and above
(Students transferring credit to Richland should see regulations concerning transfer students.)
5. Cumulative Grade Point Average - 2.00 ("C") or better for all work applicable toward the degree that was pursued at the College.

## Associate in Liberal Studies (ALS)

This degree is not designed to transfer to a four-year university.
Designed for students who desire up to two years of college study for personal development

| General Education Requirements - 39 Hrs.  <br> Number RCC Semester <br> \& Year Transfer Total <br> Communications: 3 courses (9 Hrs.) <br> ENGL101, 102; <br> SPCH101      <br>       <br>       <br> Natural Science and Math: (10 Hrs.) <br> (Biology, Chemistry, Mathematics, Physics, <br> Earth Science, Physical Science)      <br>      Humanities: (10 Hrs.) <br> (African-American Studies, Art, Drama, <br> English, Foreign Language, History, <br> Humanities, Literature, Music, Philosophy) |
| :--- |

2.0 GPA required for all Richland degrees

Constitution requirement must be met in order to fulfill degree requirements. Constitution Requirement Met

## Associate in Engineering Science (AES)

The Associate in Engineering Science degree is designed to provide the student with the general education, math, science and engineering courses required by the College of Engineering (COE) at the University of Illinois Champaign (UIUC) campus. Students who complete this sequence and are transferring to the COE at UIUC will be able to transfer as juniors. While the general education requirements listed will satisfy the requirements of most senior institutions, students should identify as early as possible the institutions to which they will be applying for transfer to determine the specific requirements of those institutions for the freshman and sophomore years. The sequence of courses should be carefully planned with assistance from an advisor with a specific four-year institution in mind.
Note: The general education requirements listed below do not include all the courses prescribed by the IAI Core General Education Curriculum. Be aware that completing the AES Degree requirements will not automatically meet the general education requirements of most public and private colleges and universities in Illinois. The courses in this degree will lead to junior status in a major field, but students may need to complete additional general education requirements to officially achieve official junior status at the senior institution of their choice.

Associate in Engineering Science (68 credit hours) (ICCB Code: 0003)

| COURSES | Cr. Hrs. | AES |  |
| :--- | :--- | :---: | :---: |
| ECON 231: | Macroeconomics | 3 | X |
| ECON 232: | Microeconomics | 3 | X |
| ENGL 101: | Composition 1 (C or better) | 3 | X |
| ENGL 102: | Composition 2 (C or better) | 3 | X |
| CHEM 131: | General Chemistry 1 | 4 | X |
| CHEM 132: | General Chemistry 2 | 5 | X |
| ENGR 110: | Engineering Graphics | 3 | X |
| ENGR 211: | Statics | 4 | X |
| ENGR 212: | Dynamics | 4 | X |
| MATH 121: | Calculus and Analytic Geometry 1 | 5 | X |
| MATH 122: | Calculus and Analytic Geometry 2 | 4 | X |
| MATH 221: | Calculus and Analytic Geometry 3 | 4 | X |
| MATH 230: | Differential Equations | 4 | X |
| PHYS 151: | Mechanics and Wave Motions | 4 | X |
| PHYS 152: | Electricity and Magnetism | 4 | X |
| PHYS 153: | Thermodynamics \& Modern Physics | 4 | X |
| Computer Science Electives (CS 251 or CS 281) | 4 | X |  |
| Humanities |  | 3 | X |
| Total |  | $\mathbf{6 8}$ |  |

X = Required
Suggested full-time Associate in Engineering Science
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  |  | 2nd Semester Semester |  |
| :--- | :--- | :--- | :--- | :--- |
| CHEM 131 F,S |  |  | CHEM 132 |  |


| 4th Semester |  |
| :--- | ---: |
| ECON 232 | F,S,Su |
| ENGR 212 | S |
| MATH 230 | S |
| PHYS 153 | S |

ECON 232 F,S,Su
ENGR 212 S
PHYS 153 S

## Associate in Engineering Science (AES) Transfer Academic Plan


2.0 GPA required for all Richland degrees

It is strongly recommended that students consult with an academic advisor at both Richland and their transfer institution.
Constitution requirement must be met in order to fulfill degree requirements. - Constitution Requirement Met $\square$

## Associate of Arts in Teaching (AAT)

The Associates of Arts in Teaching (AAT) program is designed to attract students into high need discipline areas for preparation to transfer into a four-year college/university education program. The program will be guided by the Illinois Professional Teaching Standards, Core Language Arts, and Core Technology Standards, as well as by the College's core values (Commitment, Respect, Excellence, Accountability and Diversity). The AAT student will spend a minimum of fifteen hours of field experience in a variety of school settings with a minimum of eight hours in a concentration area. A criminal background check may be required in order to participate in field experiences.

Additional graduation requirements for completion of AAT degree programs include a "C" or better in all program courses, a cumulative grade point average of 2.5 , passing score on the Illinois Basic Skills Test, completion of documented field experience hours, and submission of a program portfolio. It is recommended that students take the Illinois Basic Skills Test prior to the accumulation of 45 semester hours of credit.

In addition to the College's general admission application, students mustsubmit an AAT degree application for admission to the Teacher Education office/advisor. Admission to courses will be based upon having met the prerequisite for each course in the program sequence. AAT students will be advised by the Teacher Education program advisor and/or designated academic advising staff members and will not be permitted to self-advise. Students must meet admission requirements prior to applying to the AAT program.

While enrolled in Introduction to Public Education or Introduction to Early Childhood Education, students will be required to complete fifteen clock hours of field experience in a variety of environments in the $\mathrm{P}-12$ school system. Other education courses may also require students to complete field experiences for a total of up to thirty hours of documented experiences upon graduation. Prior to submission of the graduation application, students must submit a portfolio that includes a reflection of educational experiences, artifacts demonstrating teaching standards addressed, and verification of documented field experience hours.

## Associate of Arts in Teaching - Secondary Mathematics Program

The AAT Secondary Mathematics program is designed to attract students who plan a concentration in secondary mathematics and teacher certification. In order to graduate from the AAT program, students must complete the curriculum outlined for the AAT Secondary Mathematics Program. Students will spend a minimum of fifteen hours of field experience in a variety of school settings with a minimum of eight hours in the secondary mathematics environment. The program will be guided by the Illinois Professional Teaching Standards, Core Language Arts Standards, and Core Technology Standards, as well as by the College's core values (Commitment, Respect, Excellence, Accountability and Diversity).(See AAT Degree Program descriptionfor additional graduation requirements.)

1. Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.): Students should follow the AAT degree curriculum plan when selecting courses.
a. Communications
b. Fine Arts/Humanities
c. Social Science
d. Life/Physical Science (at least one course selected from each area)
e. Mathematics (see AAT-Math academic plan)
2. Professional Education Core:

ED 100, 105, 200; PSYCH 145
3. Constitution Requirement: (See page 64.)
4. Total Credits Required: 64 semester hours

Cumulative Grade Point Average: 2.5 or better for all work applicable toward the degree that was completed at Richland. (See page 61.)

## AAT Secondary Mathematics Transfer Academic Plan Area of Concentration

Designed to provide two academic years of college study for transfer toward a Bachelor degree

| General Education Requirements - 64 Hrs. |  <br> Number | RCC | Semester <br> \& Year | Transfer | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Communications (9 Hrs.): <br> ENGL 101, 102; <br> SPCH 101 <br> (*2.5 cumulative GPA required for both <br> ENGL 101 and 102) |  |  |  |  |  |
| Social \& Behavioral Sciences (9 Hrs.): <br> (Select from three disciplines) <br> POL S110; PSYCH 110; SOCIO 110 or 200 |  |  |  |  |  |
| Humanities/Fine Arts (8-9 Hrs.): <br> (Select from 2 disciplines) <br> ENGL 115; HIST 201, 202, 270; PHIL 215 <br> ART 100; MUSIC 100 |  |  |  |  |  |
| Life/Physical Science (7-8 Hrs.): <br> (Select one from life science and one course from <br> physical science including at least one laboratory <br> course.) |  |  |  |  |  |
| Life Science - BIOL 101, 210 <br> Physical Science - ASTRO 105; CHEM 100; EASCI <br> 210, 220, 230; PHY S 105; PHYS 100, 111, 151 |  |  |  |  |  |
| Mathematics (4 Hrs.): <br> Math 113 |  |  |  |  |  |
| Required Education Courses (25 Hrs.): <br> ED 100, 105, 200; <br> MATH 121, 122, 221; <br> PSYCH 145 |  |  |  |  |  |
| Total Credit Hours - 64 Required <br> 2.5 GPA required for AAT degree. |  |  |  |  |  |

It is strongly recommended that students consult with an academic advisor both at Richland and their transfer institution.
Constitution, passing score on Illinois Basic Skills Test, Documented Field Experience Hours and Digital Portfolio requirements must be met in order to fulfill degree requirements.

Note: It is recommended that students also take MATH 240, Intro to Linear Algebra, if schedule permits.

## Areas of Concentration Suggestions for Baccalaureate Transfer Programs

Students planning to pursue a bachelor's degree with a major in one of the areas listed are offered the following suggestions regarding courses to be included during their first two years of study.

These suggestions are designed for students who have not yet selected a four-year college. In all cases, any student who has chosen the college or university to which he/she intends to transfer should consult that institution's catalog or transfer handbook in planning a program.

For each area of concentration, the customary associate's degree is designated.

Accounting (AA or AS)
Area of Concentration: ACCT 101, 102;
ECON 231, 232
Other suggested courses: MATH 160, 170, 171, 190; CIS 110
African-American Studies (AA or AS)
Area of Concentration: AF AM101, 102, 103, 104, 105
Agriculture (AS)
Area of Concentration: AGRIC106, 130, 210; HORT 100
Anthropology (AA or AS)
Area of Concentration: ANTHR 110, 120, 130
Art (AA)
Area of Concentration: ART 101, 102, 111,112 , and at least two courses from those listed below
Other suggested courses: ART 113, 114, $115,116,117,118,119,120,121,122$, $123,124,125,126,127,128,129,131$, $140,145,151,152,210,220,230,240$, 251, 252
Biology (AS)
Area of Concentration: BIOL 101, 102, 201, 202, 210, 220
Other suggested courses: CHEM131, 132
Business (AA or AS)
Area of Concentration: ACCT 101, 102; BUS 231; ECON 231, 232
Other suggested courses: IT 105 or CIS 110; MATH 116, 160, 170, 190, and above; psychology
Business - International (AA or AS)
Area of Concentration: ACCT 101, 102; ECON 225, 231, 232; HIST 112, 202; CIS 110
Other suggested courses: MATH 160, 170, 190
Chemistry (AS)
Area of Concentration: CHEM131, 132, 201, 202

Other suggested courses: MATH121, 122
Computer Science (AS)
Area of Concentration: BIOL 101 or 210; CS 105, 161, 230, 251, 281; MATH 121, 122, 210, 221; PHYS 151, 152, 153
Dentistry See Pre-Dentistry.

## Drama

See Speech and Drama.
Earth Science (AS)
Area of Concentration: EASCI210, 220, 230
Economics (AA or AS)
Area of Concentration: ECON 231, 232
Other suggested courses: ECON 225; MATH 160, 170, 190, plus courses in sociology and political science

## Education

See Teacher Education.
Engineering (AES)
See Associate in Engineering Science.
English (AA)
Area of Concentration: (a selection of four of the following) ENGL 115, 124, 126, $128,140,150,160,201,202,231,232$, 251, 252, 260, 261, 270
Other suggested courses: courses in economics, foreign language, history, literature, or political science
Foreign Language (AA)
Area of Concentration: two years of study in the chosen language
Other suggested courses: one sequence in United States or ancient or European history and literature courses
General Science (AS)
Area of Concentration: BIOL 101, 102 or CHEM 131, 132 or PHYS 101, 102 plus three or more science courses in addition to one of the one-year sequences listed above, selected from the fields of biology, chemistry, or physics

History (AA)
Area of Concentration: HIST 101, 102, 105, and either HIST111, 112; or HIST201, 202
Other suggested courses: courses in economics, foreign language, history, literature, or political science
Journalism (AA)
Area of Concentration: JOURN 101, 102, 110
Mathematics (AS)
Area of Concentration: MATH 121, 122, 221, plus one additional mathematics course
Other suggested courses: CHEM 131, 132; PHYS 151, 152, 153
Medicine
See Pre-Medicine.
Philosophy (AA)
Area of Concentration: PHIL 100, 110, 120, 200, 210, 215, 220, 230
Other suggested courses: humanities and/ or history courses
Physics (AS)
Area of Concentration: PHYS 151, 152, 153
Other suggested courses: CHEM 131, 132; MATH 121, 122, 221, 230
Political Science/Pre-Law (AA or AS)
Area of Concentration: POL S100, 110, 120
Other suggested courses: ECON 231, 232; HIST 101, 102; PHIL 110, 130
Pre-Dentistry (AS)
Students planning to enter dentistry school should consult the entrance requirements of the school they plan to attend.
Pre-Forestry (AS)
Area of Concentration: General Science, including BIOL 101, 102, 210; CHEM 131, 132
Other suggested courses: MATH 117; PHYS 101; and courses in accounting, business, and economics
Since the study of special forestry courses generally comes during the third and fourth years of a bachelor's degree program, students desiring a B.S. in forestry should select General Science as their area of concentration at Richland.

## Pre-Medicine (AS)

Students planning to enter medical school should consult the entrance requirements of the institution they plan to enter.

## Pre-Veterinary (AS)

For purposes of identifying an area of concentration at Richland, biology is recommended as an area of concentration. Other suggested courses: CHEM 131, 132
Psychology (AA or AS)
Area of Concentration: PSYCH110, plus two or more from the following: PSYCH $130,150,200,210,250,260,280$
Other suggested courses: MATH 160 , 170 , or 190 and other social science
Sociology (AA or AS)
Area of Concentration: SOCIO110, plus three or more from the following: SOCIO 125, 130, 135, 141, 150, 200
Other suggested courses: MATH 170
Speech and Drama (AA)
Area of Concentration: Three or more courses from DRAMA $150,160,170$; SPCH110, 210, 230
Teacher Education (AA, AS, AAT, or AAS)

To teach in Illinois public schools, teachers must be certified by the State of Illinois. To transfer into an approved baccalaureate program as a junior in early childhood, elementary, secondary, or special education, students must complete a minimum of 60 semester credits (up to a maximum of 64 semester credits). Community college students are strongly encouraged to complete an Associate in Arts or Associate in Science degree prior to transfer. A minimum grade point average of 2.5 (on a 4.0 scale) and passage of a Basic Skills Test (reading, writing, grammar and math) prior to admission to a teacher education program. Information on testing dates and registration materials is available in the Student Services Center.

Students planning to earn a Bachelor of Arts degree or a degree from a college of arts and sciences should be alerted to the probable need to complete a foreign language and should complete their foreign language requirement before transfer.

## 88 Instructional Programs

Early Childhood Education (AA, AS, AAS)

Area of Concentration: ENGL101, SPCH101, PSYCH110, PSYCH150, SOCIO200, plus fine arts and math elec tives.
Other suggested courses: ECE101, 103, 110, 111, 203; ED105, 220
Paraprofessional Educator (AAS)
Area of Concentration: ED100, 200, 220; ENGL101; SPCH101; PSYCH110,150; SOCIO200, plus fine art, math, physical science, and U.S. History electives.
Other suggested courses: ECE110, 111; ED105, 107, 108, 109
Elementary Education (AA or AS)
Area of Concentration: ED100, 200, 220; ENGL 101, 102; SPCH101; PSYCH 150; SOCIO200, plus fine art, life science, math, physical science, U.S. History, non-U.S. History, and literature electives.
Other suggested courses: ECE110, 111; ED102, 105, 107, 108,109; and HLTH120. Some schools may require a foreign language course. Students must complete up to nine sophomore-level semester credits in one academic discipline (such as mathematics, science, English, or social science).
Secondary Education (AA or AS)
Area of Concentration: ED100, 200, 220; ENGL 101, 102; SPCH101; POL S110; PSYCH145; SOCIO200; plus fine art, life science, math, physical science, U.S. History, nonU.S. History, and literature electives. Other suggested courses: ECE110, 111; ED102, 105, 107, 108, 109; and HLTH120. Some schools may require a foreign language course. Students must complete up to nine sophomore-level semester credits in one academic discipline (such as art, computer science, music, mathematics, science, English, social science, or speech).

## Secondary Education (AAT)

Students concentrating in Mathematics should follow the requirements of the AAT listed on page 84.
Special Education (AA or AS)
Area of Concentration: ED100, 200,
220; ENGL 101,102; SPCH101; POL S
110; PSYCH145; SOCIO200; plus fine art, life science, math, physical science, U.S. History, Non-U.S. History, and literature electives.
Other suggested courses: ECE110, 111; ED102, 105, 107, 108, 109; and HLTH120. Some schools may require a foreign language course. Students must complete up to nine sophomore-level semester credits in one academic discipline (such as mathematics, science, English, social science, or speech).

## Articulated 2+2 Degree Programs

Articulated $2+2$ programs are designed for Richland students who intend to transfer to another institution to complete a four-year degree after earning an associate's degree at Richland.

The Transfer Center and counselors in the Student Services Center provide extensive transfer information on Richland's associate degree transfer curriculum (2+2) articulated agreements with various baccalaureate institutions.

## Benedictine University

- Business
- Psychology


## DeVry University

- Technical Management

Eastern Illinois University

- Industrial Technology and Surgical Technology
- RN to BSN

Franklin University, Columbus, Ohio

- Business Administration
- Computer Science
- Health Services Administration
- Public Safety Management
- Management Information Systems
- Technical Management

Greenville College, Greenville, Illinois

- Organizational Leadership


## Millikin University

- Accounting
- Business Management
- Early Childhood Education
- Marketing

Robert Morris College

- Graphic Arts

Southern Illinois University, Carbondale

- Automotive Technology
- Electronics Management
- Information Systems Technology

University of Illinois, Springfield

- Accounting
- Management
- Computer Science
- English
- History
- Liberal Studies
- Mathematics
- Philosophy


## Guaranteed Transfer Agreement

Richland Community College and the University of Illinois, Urbana-Champaign haveformed acooperative relationship through a guaranteed transfer agreement. Any student who has completed the prescribed Guaranteed Transfer Agreement at RCC (with the required 2.50 GPA and foreign language requirement) and submits required application and supporting documentation will automatically be admitted to UIUC at the junior level in the prescribed field of study in the College of Agricultural, Consumer, and Environmental Sciences (ACES).

University of Illinois, Urbana-Champaign

- Agriculture
- Agribusiness
- Animal Science
- Communication and Education
- Crop Science
- Food Science
- ForestScience
- Horticulture
- Human Development
- Natural Resource and Environmentall Sciences
- TechnicalSystems Management


## Partnership for College and Career Success

Partnership for College and Career Success (PCCS) at Richland Community College includes the Associate and Applied Science (AAS) degree programs of study that lead to high skill/high wage careers in occupational and technical fields. PCCS programs of study are developed through strong partnerships between business/industry and the educational partners. By working through a designated program of study of academic and technical courses, student in grades 9 through 14 are prepared to enter their chosen career field with the skills necessary to compete in tomorrow's global job market.

Students can enter a program of study as early as their freshman year inhigh school and can complete their program at the community college level. Some programs also lead to a four-year degree offered at various college and universities. Most programs of study include courses that provide college credit earned while in high school with dual credit. PCCS is designed to smooth the transition from high schools to higher education or the workplace. In the Richland Community College District, area high schools and the Decatur Area Technical Academy offer a wide variety of courses, programs, and activities leading to an AAS degree program.

The Director of Workforce Program Development oversees the PCCS programs of study at Richland and is available at (217) 875-7211, Ext. 223, to assist students with supportive services and information, including dual credit courses and transitions to further education and/or the workplace. Faculty advisors from the various RCC programs may assist students with information about specific degree programs.

## Occupational and Technical Programs

Richland Community College strives to provide educational opportunities to enable individuals to become contributing members of the workforce. The workplace has changed with new work hours and work patterns due to improved telecommunications and computer technologies. Sixty-five percent of new jobs will require post-secondary education and training below the baccalaureate level, and $75 \%$ of the current workforce needs training. The information supply available doubles every five years.

The mission of the occupational and technical programs at Richland is to provide students the opportunities to choose, prepare for, and advance in their careers and vocations. This mission is accomplished by integrating technical education and academic education to provide the skills and education needed for living in a global society, competing in the workforce, and being receptive to lifelong learning.

A number of the occupational programs are articulated with four-year institutions to allow for the completion of a four-year degree in an additional two years if desired. To meet the broad range of studentobjectives, Richland Community College offers several types of instructional programs:

## Basic Certificate

A basic certificate is an award for satisfactory completion of a series of courses totaling 30 semester credit hours or less. Those programs that have only a basic certificate are designed to provide the necessary skills to obtain an entry-level position. For programs that have a basic certificate as part of a degree, the certificate is an award for satisfactorily completing a series of courses.

## Advanced Certificate

An advanced certificate is awarded for satisfactory completion of a series of courses or curriculum totaling 50 semester credit hours or less. This certificate is designed to provide the technical skills that would prepare an individual for initial employment in the job setting or for those currently employed and in need of advanced study.

## Associate in Applied Science

An Associate in Applied Science (AAS) degree is an award for the satisfactory completion of a prescribed curriculum of 60 semester credit hours or more intended to prepare individuals foremployment in a specific field. It also serves those persons already employed in the field who desire to improve their competencies and achieve an associate's degree. A number of the AAS degrees have been articulated (page 89) and/or capstoned (see below) with four-year institutions for completion of a Bachelor's degree.

## Capstone Options

Some occupational programs and/or courses transfer to senior institutions although they are not designed specifically for transfer. Southern Illinois University at Carbondale, for example, offers the Capstone Option allowing students who have earned two-year occupational degrees the option of pursuing a bachelor's degree without losing credits already earned. Students planning to transfer should consulta Richland counselor or advisor for additional information.

## Graduation Requirements

Graduation requirements for the Basic Certificate or the Advanced Certificate in any occupational-oriented program are the completion of

1. The program as outlined in this Catalog. (Students transferring credit to Richland should see regulations under Admissions, page 20.)
2. Constitution Requirement (See page 64.)
3. Cumulative Grade Point Average- 2.00
("C" or better for all work applicable toward the certificate or degree that was pursued at the College. (See page 61.)

## 92 Instructional Programs

## Course Prerequisites

Many of the following programs are designed to serve students with no previous study or experience in the program area.

In order that students who have acquired knowledge in occupational program fields through high schools or whose work experience may benefit from that knowledge, the College recognizes such education through credit evaluation programs. (See "Credit Evaluation Programs," page 21.) Transfer of college creditto Richland is explained under Admissions, page 20.

If any student pursuing an occupationaloriented programhas abackground thatmakes any listed course(s) inappropriate, two options are recommended:

1. The student may earn credit for the course(s) through proficiency examination(s) or advanced placement in an approved sequence; if such proficiency credit is awarded, it will shorten the total time required to complete the program.
2. If a student needs to complete a sequence of courses so that proficiency credit for one or more courses will not reduce the total time required to complete the program, he or she is encouraged to earn proficiency credit and enroll in other courses that would increase his or her competencies beyond the minimum requirements for the program.

## Course Sequences

All students enrolled in one of the certificate programs and part-time students in the AAS curriculum are encouraged to pursue their respective programs by taking general and related courses along with their special interest courses rather than taking all courses in the order listed. The appropriate prerequisite experiences should be completed prior to enrolling in a course having prerequisites.

## Group/General Education Requirements for Occupational Certificates and AAS Degrees

Several programs require some study in courses that satisfy certain Group Requirements.
Meets both General Education \& Group Requirements

## Communications

ENGL 101, 102, 110, 114, 220, 222
SPCH 101, 110, 120, 140, 210, 230
(A grade of "C" or better in ENGL 101 is required for AAS degree.)

## Humanities

AF AM101, 102, 103, 104, 105
ARAB 115
CHIN 101, 102, 201, 202
ENGL115, 124, 126, 128, 150,160,
201,202, 231, 232, 240, 251, 252
FREN101, 102, 201, 202
GERM101, 102, 201, 202
HIST111, 112, 201, 202, 270, 290
HUMAN 100, 201, 280
PHIL100, 106, 110, 120, 200, 210, 215,
220, 230
SPAN101, 102, 198, 201, 202
Fine Arts
AF AM 101, 102, 103
ART 100, 210, 220, 230, 240
DRAMA150
ENGL140, 240
HUMAN 100, 201
MUSIC100, 190

Mathematics
MATH104, 106, 110, 111, 112, 113,
$116,117, \mathbf{1 2 1}, \mathbf{1 2 2}, 160,170,171,190$,
210, 221, 230, 240

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Natural/Life/Physical Science
    AGRIC130
    ASTRO105
    BIOL101, 102, 201, 202, 210, }22
    CHEM100, 110, 131, 132, 201, 202
    EASCI 210, 220, 230
    ELTRN110
    ECE110 (ECE only)
    HORT100
    PHY S 105
    PHYS100, 101, 102, 151, 152, 153
```


## Social Science

```
ANTHR110, 120, 130
ECON 225, 231, 232
ED 100, 101, 102, 105, 107, 108, 199, 200
HIST101, 102, 105
P REL100, 110
POL S 100, 110, 120
PSYCH 100, 110, 130, 145, 150, 200, 210, 220, 250, 260, 280
SOCIO100, 105, 110, 125, 130, 135, 141, 150, 200, 210, 225
SOC S199, 280
Bold print indicates IAI-approved general education classes.
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## 94 Instructional Programs

## Occupational Program Degree Requirements

Accounting (Cert., AAS) ..... Page 95
Agribusiness (AAS) ..... Page 96
Automotive Technology (Cert., AAS) ..... Page 97
Business (AAS, Cert.) ..... Page 99
Banking
Management
Marketing
CDL Truck Driver Training (Cert.) (See Transportation) ..... Page 165
Criminal Justice (Basic Cert., Adv. Cert., AAS) ..... Page 103
Criminal Justice: Corrections (Adv. Cert., AAS) ..... Page 103
Culinary Arts (Cert, AAS) ..... Page 107
Drafting \& Design Engineering (Basic Cert., Adv. Cert., AAS) ..... page 109
Early Childhood Education (Basic Cert., AAS) ..... Page 110
Electronics (Basic Cert., Adv. Cert., AAS) ..... Page 113
Biomedical Option (AAS) ..... Page 114
Emergency Medical Technology (Basic Cert., Adv. Cert., AAS) ..... Page 115
Engineering Technology (Cert., AAS) ..... Page 117
CNC Technology
Electrical Systems
Instrumentation Systems
Facilities Management
Fluid Power Systems
Mechanical Systems
Machine Repair
Manufacturing Engineering Technology
Fire Science (Basic Cert., Adv. Cert., AAS) ..... Page 128
Graphic Arts (Cert., AAS) ..... Page 130
Heating, Ventilation, Air-Conditioning, \& Refrigeration (Cert., AAS) ..... Page 132
Horticulture (Cert., AAS) ..... Page 134
Hospitality Management (Cert., AAS) ..... Page 136
Information Technology (Cert., AAS) ..... Page 138
Desktop Support Technician
Network Technology
Programmer/Analyst
Nurse Assistant (Cert.) ..... Page 144
Nursing (ADN, AAS) ..... Page 145
Office Technology (Cert., AAS) ..... Page 149
Administrative Assistant-Accounting
Administrative Assistant-General
Administrative Assistant-Legal Office
Medical Office Specialist-GeneralMedical Office Specialist-Coding
Medical Office Specialist-Transcription
Paraprofessional Educator (Teacher Assistant) (AAS) ..... Page 111
Pharmacy Technician (Cert.) ..... Page 156
Practical Nursing (Cert., State Licensure) ..... Page 157
Radiography (AAS) ..... Page 160
Surgical Technology (Cert., AAS) ..... Page 163
Teacher Assistant (See Paraprofessional Education) ..... Page 111
Transportation (Basic Cert.) ..... Page 165
Welding Technology (Cert., AAS) ..... Page 166

These are occupational training programs. Some of the courses may not transfer to four-year institutions.

## Accounting

General Description: The Accounting AAS program prepares students for entry-level positions such as bookkeeper, accounting clerk, assistant auditor or income tax preparer. These positions help companies manage their financial data. These positions exist in most companies, in bookkeeping and accounting firms, and in government organizations. In larger organizations, positions may be specialized such as payroll clerk, accounts receivable clerk, or accounts payable clerk.
Aptitudes: Accounting requires the ability to understand and interpret rules, work with data, use logic to apply rules to a variety of situations, work with numbers, and be precise while working within set standards. Problem solving, organization, and computer skills are also necessary.
Outlook: This is a large occupation in Illinois and throughout the country. Over the next several years, increased positions due to economic growth are expected to be mostly offset by automation of some functions. Although net growth in positions will be slow, many openings are expected to occur as current workers leave this occupation.

This is an occupational training program. Some of the courses may not transfer to four-year institutions.

For those interested in pursuing a certificate or degree, the following options are available: - Associate in Applied Science - Accounting (64 Credit Hours) (ICCB Code: AAS 0040)

- Accounting Specialist Certificate (49 Credit Hours) (ICCB Code: C 035A)
- Advanced Accounting Certificate ( 30 Credit Hours) (ICCB Code: C 035B)
- Basic Accounting Certificate (14 Credit Hours) (ICCB Code: C 035C)

$\left.$| Accounting <br> COURSES |  | Credit <br> Hours | AAS <br> Acct. | Acct Spec. <br> Certificate | Adv. Acct. <br> Certificate |
| :--- | :---: | :---: | :---: | :---: | :---: | | Basic Acct. |
| :---: |
| Certificate | \right\rvert\,

X = Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for AAS degree.

## Suggested full-time Accounting AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.
$\frac{\text { 1st Semester }}{\text { ACCT } 101 \text { F S.Su }}$
BUS 100 F,S,Su
BUS 110 F,S,Su
CIS 110 F,S,Su
ENGL 101 F,S,Su
$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring

2nd Semester
ACCT 211 S
IT 120 S
P REL 100 F,S
P REL 110 S
SPCH 101 F,S,Su
Su=summer $\quad$ AN=as needed

3rd Semester
ACCT 201 F
ACCT 210 F
BUS 200 F
BUS 231 F,S
ECON 231 F,S,Su
4th Semester
ACCT 202 S
ACCT 205 S
BUS 232 S
BUS 290 F,S,Su
ECON 232 F,S

## Agribusiness

General Description: As the world's largest commercial industry, Agriculture provides more career opportunities than any other industry. The Agribusiness degree incorporates hands-on learning with classroom instruction to provide a foundation of knowledge for the vast career opportunities in the Agribusiness industry. This program includes several specialties to meet students' needs-from specific skill training courses to two-year degree programs designed by local businesses for immediate employment. With a program located literally in the middle of "America's Agribusiness Center," this program offers resources that are unique from those of any other college district.
Aptitudes: If you are interested in computers or chemistry, seeds or sales, animals or apples, machinery or marketing, fertilizers or farming, there is a career opportunity in Agribusiness for you. We have a place for those with non-farm backgrounds as well as those with farm backgrounds.
Outlook: Almost 25\% of the people employed in Illinois work in Agribusiness, an increase from $20 \%$ a decade earlier. As the use of technology increases, so do the job opportunities in Agribusiness. The demand for Agribusiness graduates is in high demand not only locally but globally as well. New specialties are under development.

For those interested in pursuing a certificate or degree, the following options are available:

- Associate in Applied Science - Agribusiness (61 credit hours) (ICCB Code: AAS 2063)

| Agribusiness COURSES | Credit <br> Hours | Agribusiness <br> AAS |  |
| :--- | :---: | :---: | :---: |
| ACCT 100: | Accounting Fundamentals (or ACCT 101*) | 3 | X |
| AGRIC 195: | Contemporary Issues in Agribusiness | 3 | X |
| AGRIC 232: Agricultural Economics (formerly AGRIC 120) | 3 | X |  |
| AGRIC 251: Agricultural Commodities (formerly AGRIC 121) | 3 | X |  |
| AGRIC 290: | Work Experience Practicum \& Seminar (or AGRIC 295) | 3 | X |
| BUS 100: | Business Fundamentals | 3 | X |
| BUS 110: | Business Mathematics (or MATH 104) | 3 | X |
| BUS 220: | Cost Management (formerly HOSP 102) | 4 | X |
| BUS 225: | Small Business Development (formerly BUS 125) | 3 | X |
| BUS 231: | Business Law Principles | 3 | X |
| BUS 232: | Business Law \& Ethics | 3 | X |
| BUS 240: | Marketing Fundamentals (formerly BUS 124) | 3 | X |
| BUS 250: | Selling \& Sales Management (formerly BUS 146) | 3 | X |
| CIS 110: | Business Applications | 3 | X |
| ECON 231: | Macroeconomics | 3 | X |
| ECON 232: | Microeconomics | 3 | X |
| ENGL 10: | Communicating in the Workplace (or ENGL 101*) | 3 | X |
| P REL 100: | Human Relations | 3 | X |
| P REL 110: | Supervision | 3 | X |
| SPCH 120: | Business \& Professional Speaking (or SPCH 101*) | 3 | X |
| Total |  |  | $\mathbf{6 1}$ |

[^1][^2]
## Suggested full-time Agribusiness AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| $l$ |  |
| :--- | :--- |
| 1st Semester |  |
| ACCT 100 | F,S,Su |
| BUS 100 | F,S,Su |
| BUS 110 | F,S,Su |
| CIS 110 | F,S,Su |
| ENGL 110 | F,S,Su |


| 2nd Semester |  |
| :--- | :--- |
| AGRIC 195 | S |
| BUS 220 | S |
| P REL 100 | F,S |
| P REL 110 | S |
| SPCH 120 | F,S,Su |


| 3rd Semester |  |
| :--- | :--- |
| AGRIC 251 | F |
| BUS 231 | F,S |
| BUS 240 | F |
| BUS 250 | F |
| ECON 231 | F,S,S |

4th Semester
AGRIC 232 S
AGRIC 290 F,S,Su
BUS 225 S
BUS 232 S
ECON 232 F,S
$\mathrm{F}=$ fall $\mathrm{S}=$ spring
$\mathrm{Su}=$ summer
AN=as needed

## Automotive Technology

General Description: The Automotive Technology Program provides students with an opportunity to obtain a solid foundation of knowledge, experience, and skills that will assist in job entry and career advancement in the automotive industry. Current automotive trends indicate that the automobile will continue to experience changes including expanded use of electronics and computerized controls for improving engine performance, fuel efficiency, on-board diagnostics, exhaust emissions, and passenger comfort and safety. These changes will require persons knowledgeable and highly skilled in specialized areas of automotive technology.

The Automotive Technology Program has achieved master certification by the National Institute for Automotive Service Excellence (NATEF). Instruction is offered in all eight areas of ASE certification - engine repair, automatic transmission/transaxles, manual drive trains and axles, steering and suspension, brakes, electrical/electronic systems, heating and air conditioning, and engine performance. All graduates are encouraged to complete the certification process by taking the ASE certification tests.
Aptitudes: Students in the Automotive Technician Program need good reasoning skills and diagnostic skills. They also need good hand-eye coordination and the ability to perceive objects in two- or three-dimensional form.
Outlook: This is a large occupational field in Illinois that is expected to have many job openings
each year. Education and experience are essential to succeed because of rapidly changing technology.
This is an occupational training program. Some of the courses may not transfer to four-year institutions.

A uniform shirt and an approved set of tools are required for this program. Contact the Business and Technology Division, 875-7211, Ext. 436, for details.

For those interested in pursuing a certificate or degree, the following options are available:

- Associate in Applied Science - Automotive Technology (64 Credit Hours) (ICCB Code: AAS 0071)
- Senior Automotive Repair Technician Certificate (45 Credit Hours) (ICCB Code: BC 0069)
- Certificate—Automotive Service Specialist Certificate (7 Credit Hours) (ICCB Code: C 071A)
- Certificate—Automotive Performance Specialist Certificate (19 Credit Hours) (ICCB Code: C 071B)
- Certificate—Automotive Brake, Steering, and Suspension Specialist (15 Credit Hours) (ICCB Code: C 071C)
- Certificate—Automotive HVAC Specialist (10 Credit Hours) (ICCB Code: C 071D)
- Certificate—Automotive Engine Rebuilder (11 Credit hours) (ICCB Code: C 071E)
- Certificate-Automotive Transmission and Driveline Specialist (15 Credit Hours) (ICCB Code: C 071F)

| Automotive COURSES | Credit Hours | AAS | Sr Tech Cert | Serv Spec Cert | Perform Spec Cert | Brake Steer/ Susp Cert | $\begin{aligned} & \text { HVAC } \\ & \text { Cert } \end{aligned}$ | Eng. Reb. Cert | Trans/Driveline Cert |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AUTO 101: Basic Theory | 3 | X | X | X | X | X | X | X | X |
| AUTO 102: Electrical Systems | 4 | X | X | X | X | X | X | X | X |
| AUTO 201: Suspension and Steering Alignment | 4 | X | X |  |  | X |  |  |  |
| AUTO 202: Heating and Air Conditioning | 3 | X | X |  |  |  | X |  |  |
| AUTO 203: Fuel and Emission Systems | 4 | X | X |  | X |  |  |  |  |
| AUTO 204: Engine Repair | 4 | X | X |  |  |  |  | X |  |
| AUTO 205: Manual Drive Train and Axles | 4 | X | X |  |  |  |  |  | X |
| AUTO 206: Automatic Transmissions and Transaxles | 4 | X | X |  |  |  |  |  | X |
| AUTO 207: Advanced Automotive Electronics | 4 | X | X |  | X |  |  |  |  |
| AUTO 208: Automotive Brakes | 4 | X | X |  |  | X |  |  |  |
| AUTO 209: Advanced Drivability Problem Diagnosis | 4 | X | X |  | X |  |  |  |  |
| AUTO 290: Automotive Internship | 3 | X |  |  |  |  |  |  |  |
| CIS 110: Business Applications (or PHYS 100*) | 3 | X |  |  |  |  |  |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |  |  |  |  |
| MATH 104: Technical Mathematics (or MATH 110*) | 4 | X |  |  |  |  |  |  |  |
| P REL 100: Human Relations (or PSYCH 110*) | 3 | X |  |  |  |  |  |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |  |  |  |  |  |
| AAS Group Requirements/Electives <br> To be selected from areas of Communications, Humanities, Fine Arts, Mathematics, Natural/Life/Physical Science, and/or Social Science. | 3 | X | X |  |  |  |  |  |  |
| Subtotal |  | 3 | 3 |  |  |  |  |  |  |
| Total |  | 64 | 45 | 7 | 19 | 15 | 10 | 11 | 15 |

[^3]
## Suggested full-time Automotive Technology AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AUTO 101 | F | AUTO 201 | S | AUTO 203 | AN | AUTO 205 | AN |
| AUTO 102 | F | AUTO 202 | Su | AUTO 204 | AN | AUTO 206 | AN |
| ENGL 110 | F,S,Su | AUTO 207 | S | AUTO 208 | AN | AUTO 209 | AN |
| MATH 104 | F,S,Su | CIS 110 | F,S,Su | P REL 100 | F,S | AUTO 290 | AN |
| Gen Ed Elec | F,S,Su | SPCH 120 | F,S,Su |  |  |  |  |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Business

General Description: The Business Instructional Area consists of an AAS degree in Business with a specialization in either Banking, Management or Marketing. Students working to earn the Business AAS degree must complete the required business core courses, the required courses for the desired specialization, and specified general education requirements. A certificate is also available with a specialization in one of the following areas: Banking, Management, Marketing, or Entrepreneurship. Certificates are occupational training programs. Some of the courses may not transfer to four-year institutions.
Aptitudes: For management, people- and task-oriented skills are required. Good math skills and the ability to communicate effectively, both verbally and in writing, are necessary. The marketing field requires people who are self-motivated and have an enthusiastic manner. Good communication skills, the ability to work with others, and organizational skills are also important.
Outlook: Management is a large occupational field in Illinois. Most openings are in retail management and the hospitality industry. In marketing, most openings are in retail management and in all types of sales.

This is an occupational training program. Some of the courses may not transfer to four-year institutions.

For those interested in pursuing a certificate or degree, the following options are available:

- Associate in Applied Science - Business with three specialty options (62-64 credit hours) (ICCB Code: AAS 038C)
- Certificate - Banking (20 credit hours) (ICCB Code: C 038J)
- Certificate - Management Specialist (48 credit hours) (ICCB Code: C 038G)
- Certificate - Marketing Specialist (47 credit hours) (ICCB Code: C 038I)
- Certificate - Entrepreneur (31 credit hours) (ICCB Code: C 038H)


## Suggested full-time Business-Marketing AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| Business COURSES | Credit Hours | $\begin{gathered} \text { AAS } \\ \text { Banking } \end{gathered}$ | $\begin{aligned} & \text { AAS } \\ & \text { Mgmt } \end{aligned}$ | $\begin{gathered} \text { AAS } \\ \text { Marketing } \end{gathered}$ | Banking Cert. | Mgmt. Spec Cert | Marketing Spec Cert | Entrepreneur Cert |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCT 100: Accounting Fundamentals | 3 |  |  |  |  |  |  |  |
| ACCT 101: Financial Accounting | 4 | X | X | X |  | X | X |  |
| ACCT 102: Managerial Accounting Fundamentals (or ACCT 211*) | 4 | X | X | X |  | X | X |  |
| ACCT 130: Tax Accounting | 3 |  |  |  |  |  |  |  |
| ACCT 201: Intermediate Accounting 1 | 4 |  |  |  |  |  |  |  |
| ACCT 202: Intermediate Accounting 2 | 4 |  |  |  |  |  |  |  |
| ACCT 205: Small Business Accounting | 3 |  |  |  |  |  |  | X |
| ACCT 211: Managerial Cost Accounting 1 | 3 |  |  |  |  |  |  |  |
| BUS 100: Business Fundamentals | 3 | X | X | X |  | X | X |  |
| BUS 102: TellerFundamentals | 2 | X |  |  | X |  |  |  |
| BUS 110: Business Mathematics (or MATH 104) | 3 | X | X | X | X | X | X |  |
| BUS 200: Customer Service Fundamentals | 3 | X | X | X | X | X | X | X |
| BUS 220: Cost Management (formerly HOSP 102) | 4 |  | X |  | X | X |  | X |
| BUS 221: Security \& Loss Prevention (formerly HOSP 213) | 3 | X | X |  | X | X |  | X |
| BUS 225: Small Business Development (formerly BUS 125) | 3 |  | X | X |  | X | X | X |
| BUS 231: Business Law Principles | 3 | X | X | X |  | X | X |  |
| BUS 232: Business Law \& Ethics | 3 | X | X | X |  | X | X |  |
| BUS 233: Business Law for Entrepreneurs | 3 |  |  |  |  |  |  | X |
| BUS 240: Marketing Fundamentals (formerly BUS 124) | 3 | X | X | X |  | X | X |  |
| BUS 245: Integrated Marketing Communications | 3 |  |  | X |  |  | X |  |
| BUS 250: Selling \& Sales Management (formerly BUS 146) | 3 | X | X | X | X | X | X |  |
| BUS 255: Principles of Banking | 3 | X |  |  | X |  |  |  |
| BUS 280: Strategic Decision Making | 3 |  |  |  |  |  |  | X |
| BUS 281: Strategic Performance for Productivity | 3 |  |  |  |  |  |  | X |
| BUS 282: Strategic Tax Management | 3 |  |  |  |  |  |  | X |


| Business | COURSES cont. | Credit Hours | AAS Banking | AAS Mgmt | $\begin{gathered} \text { AAS } \\ \text { Marketing } \end{gathered}$ | Banking Cert. | Mgmt. Spec Cert | Marketing Spec Cert | Entrepreneur Cert |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 283: | Finance \& Insurance | 3 | X |  | X | X |  | X | X |
| BUS 290: | Work Experience Practicum \& Seminar (or BUS 295) | 3 | X | X | X |  |  |  |  |
| CIS 110: | Business Applications | 3 | X | X | X | X | X | X |  |
| ECON 231: | Macroeconomics | 3 | X | X | X |  |  |  |  |
| ECON 232: | Microeconomics | 3 | X | X |  |  |  |  |  |
| ENGL 110: | Communicating in the Workplace (or ENGL 101*) | 3 | X | X | X |  |  |  |  |
| P REL 100: | Human Relations | 3 | X | X | X |  | X | X |  |
| P REL 110: | Supervision | 3 | X | X | X |  | X | X |  |
| SPCH 120: | Business and Professional Speaking (or SPCH 101*) | 3 | X | X | X |  |  |  |  |
| Total |  |  | 64 | 63 | 62 | 20 | 48 | 47 | 31 |

$X=$ Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for AAS degree.

## 102 Instructional Programs

Suggested full-time Banking AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  |  | 3rd Semester |  |  | 4th Semester |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| ACCT 101 | F,S,Su | ACCT 102 | F,S | BUS 200 | F | BUS 221 | S |  |  |
| BUS 100 | F,S,Su | BUS 102 | S | BUS 231 | F, S | BUS 225 | S |  |  |
| BUS 110 | F,S,Su | P REL 100 | F,S | BUS 240 | F | BUS 232 | S |  |  |
| CIS 110 | F,S,Su | P REL 110 | S | BUS 250 | F | BUS 290 | F,S,Su |  |  |
| ENGL 110 | F,S,Su | SPCH 120 | F,S,Su | ECON 231 | F, S, Su ECON 232 | F,S |  |  |  |
| F=fall | S=spring | Su=summer | AN=as needed |  |  |  |  |  |  |

Suggested full-time Marketing AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| ACCT 101 | F,S,Su | ACCT 102 | F,S | BUS 200 | F | BUS 225 | S |  |  |  |
| BUS 100 | F,S,Su | BUS 283 | S | BUS 231 | F,S | BUS 232 | S |  |  |  |
| BUS 110 | F,S,Su | P REL 100 | F,S | BUS 240 | F | BUS 245 | S |  |  |  |
| CIS 110 | F,S,Su | P REL 110 | S | BUS 250 | F | BUS 290 | F,S,Su |  |  |  |
| ENGL 101 | F,S,Su | SPCH 120 | F,S,Su | ECON 231 | F,S,Su | ECON 232 | F,S |  |  |  |
| F=fall | S=spring |  | Su=summer |  |  |  |  |  |  | AN=as needed |

Suggested full-time Management AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  |  | 3rd Semester |  |  | 4th Semester |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| ACCT 101 | F,S,Su | ACCT 102 | F,S | BUS 200 | F | BUS 220 | S |  |  |
| BUS 100 | F,S,Su | BUS 221 | S | BUS 231 | F,S | BUS 225 | S |  |  |
| BUS 110 | F,S,Su | P REL 100 | F,S | BUS 240 | F | BUS 232 | S |  |  |
| CIS 110 | F,S,Su | P REL 110 | S | BUS 250 | F, | BUS 290 | F,S,Su |  |  |
| ENGL 101 | F,S,Su | SPCH 120 | F,S,Su | ECON 231 | F,S,Su | ECON 232 | F,S |  |  |
| F=fall | S=spring | Su=summer | AN=as needed |  |  |  |  |  |  |

Child Care and Education (See Early Childhood Education)

## Computer Integrated Manufacturing (See Engineering Technology Section)

## Criminal Justice

General Description: The Criminal Justice Careers Program offers preparation for a broad range of career opportunities in the expanding Criminal Justice field. Careers in criminal justice offer interesting and intense work and provide high pay and excellent benefits and retirement programs. The RCC Criminal Justice Careers Program offers basic and advanced certificates as well as an AAS degree. There are four areas of concentration, each leading to a different criminal justice career path for individuals with different abilities, aptitudes, and/or interests. Areas of concentration include Patrol Officer, Correctional Officer, Probation and Parole Officer, and Emergency Telecommunications Specialist. Work in these specialized fields ranges from the delivery of emergency response and investigative services provided by the Emergency Telecommunications Specialist and Patrol Officer to the close monitoring and accountability systems for those accused or convicted of crimes managed by the Correctional Officer and Probation and Parole Officer.
Aptitudes: Although the career focus may be different for each of the areas of concentration, they each require individuals with the ability to make sound judgments and rational decisions, to perform well under high stress conditions, to observe and recall details, and to communicate effectively, both verbally and in writing. Good physical fitness and health are also required.
Outlook: The job availability in all of the Criminal Justice Careers Program areas of concentration is stable and expanding. Career opportunities are filled through competitive testing with those candidates possessing higher performance abilities provided through higher education.

This is an occupational training program. Some courses may not transfer to four-year institutions.
For those interested in pursuing this concentration, the following options are available:

- Associate in Applied Science - Criminal Justice ( 60 Credit Hours) (ICCB Code: AAS 0020)
- Associate in Applied Science - Criminal Justice Corrections (60 Credit Hours) (ICCB Code: AAS 0028)
- Advanced Certificate - Criminal Justice Emergency Telecommunications Specialist (45 Credit Hours) (ICCB Code: C 019A)
- Advanced Certificate - Criminal Justice Correctional Officer (45 Credit Hours) (ICCB Code: C 019B)
- Advanced Certificate - Criminal Justice Patrol Officer (45 Credit Hours) (ICCB Code: C0019)
- Certificate - Criminal Justice Emergency Telecommunications Specialist (21 Credit Hours) (ICCB Code: C 019C)
- Certificate - Criminal Justice Correctional Officer (21 Credit Hours) (ICCB Code: C 019D)
- Certificate - Criminal Justice Probation and Parole Officer (21 Credit Hours) (ICCB Code: C 019E)
- Certificate - Criminal Justice Patrol Officer (21 Credit Hours) (ICCB Code: C 019F)


## 104 Instructional Programs

Associate in Applied Science - Criminal Justice (60 Credit Hours) (ICCB Code: AAS 0020)

| Criminal Justice COURSES | Credit Hours | Criminal Justice AAS |
| :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X |
| CRJ 110: Criminal Justice Fundamentals | 3 | X |
| CRJ 112: Investigative Report Writing | 3 | X |
| CRJ 113: Criminal Investigation | 3 | X |
| CRI 114: Criminal Law | 3 | X |
| CRJ 116: Probation/Parole | 3 | X |
| *CRJ 125: Patrol Procedures (or CRJ 126 or CRJ 128) | 3 | X |
| CRJ 200: Youth, the Law, \& Police Intervention | 3 | X |
| CRJ 210: Law Enforcement \& Community Relations | 3 | X |
| CRJ 290: Work Experience Practicum \& Seminar (or CRJ 295) | 3 | X |
| ENGL 101: Composition 1 | 3 | X |
| HLTH 120: Wellness \& Healthful Living | 3 | X |
| POL S 120: Politics in States and Communities | 3 | X |
| PSYCH110:Introduction to Psychology | 3 | X |
| SOCIO110: Introduction to Sociology | 3 | X |
| SOCIO130: Criminology | 3 | X |
| SPCH 12O: Business \& Professional Speaking | 3 | X |
| Subtotal |  | 51 |
| Directed Electives: Choose 9 credit hours from the options below: |  |  |
| Communications Group Requirement |  | Y |
| Humanities/Fine Arts Group Requirement |  | Y |
| Mathematics Group Requirement |  | Y |
| Natural/Life/Physical Science Group Requirement |  | Y |
| Subtotal |  | 9 |
| Total |  | 60 |

* Students pursuing a career as a Patrol Officer should take CRJ 125: Patrol Procedures. Students pursuing a career as an Emergency Telecommunications Specialist should take CRJ 126: Emergency Telecommunications. Students pursuing a career as a Corrections Officer should take CRJ 128: Corrections Fundamentals.
$\mathrm{X}=$ Required
$\mathrm{Y}=$ Directed Electives


## Suggested full-time Criminal Justice AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| $\underline{1 s t}$ Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CRJ 110 | F, S | CRJ 112 | AN | CRJ 114 | AN | CRJ 113 | S |
| CIS 110 | F,S,Su | *CRJ 125 | S | CRJ 200 | F | CRJ 116 | S |
| ENGL 101 | F,S,Su | PSYCH 110 | F,S,Su | CRJ 210 | F | HLTH 120 | F,S |
| SOCIO110 | F,S,Su | SPCH 120 | S | POL S 120 | F, S | SOCIO 130 | F,S |
| ELEC |  | ELEC |  | ELEC |  | CRJ 290 | AN |
| $\mathrm{F}=$ fall | S=spring | $\mathrm{Su}=$ summer | AN=as | eeded |  |  |  |

For those interested in pursuing a certificate or degree, the following three career-laddering options are available:
-Associate in Applied Science - Criminal Justice: Corrections (60 Credit Hours) (ICCB CODE: AAS 0028)
-Advanced Certificate - Correctional Officer (45 Credit Hours) (ICCB CODE: C 019B)
-Certificate - Correctional Officer (21 Credit Hours) (ICCB Code: C 019D)

| Criminal Justice COURSES | Credit Hours | CRJ/ Corr. AAS | CRJ/Corr.Officer Adv. Cert | CRJ/Corr. Officer Cert |
| :---: | :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X | X | X |
| CRJ 110: Criminal Justice Fundamentals | 3 | X | X | X |
| CRJ 112: Investigative Report Writing | 3 |  | X | X |
| CRJ 113: Criminal Investigation | 3 |  | X | X |
| CRI 114: Criminal Law | 3 | X | X | X |
| CRJ 116: Probation/Parole | 3 | X |  |  |
| CRJ 128: Corrections Fundamentals | 3 | X | X | X |
| CRJ 130: Juvenile Delinquency | 3 | X |  |  |
| CRJ 132: Institutional Behavior in Corrections | 3 | X |  |  |
| CRJ 134: Correctional Counseling \& Treatment | 3 | X |  |  |
| CRJ 200: Youth, the Law, \&Police Intervention | 3 |  | X |  |
| CRJ 210: Law Enforcement \& Community Rel. | 3 |  | X |  |
| $\begin{array}{ll}\text { CRJ 290: } & \text { Work Experience Practicum } \\ & \& \text { Seminar (or CRJ 295) }\end{array}$ | 3 | X |  |  |
| ENGL 101: Composition 1* | 3 | X | X |  |
| HLTH 120: Wellness \& Healthful Living | 3 |  | X | X |
| POL S 120: Politics in States \& Communities | 3 |  | X |  |
| PSYCH 110: Introduction to Psychology | 3 | X | X |  |
| PSYCH 145: Human Growth \& Development | 3 | X |  |  |
| PSYCH 210: Social Psychology | 3 | X |  |  |
| PSYCH 280:Abnormal Psychology | 3 | X |  |  |
| SOCIO 110: Introduction to Sociology | 3 | X | X |  |
| SOCIO 130: Criminology | 3 | X | X |  |
| SOCIO 135: The Study of Substance Abuse | 3 | X |  |  |
| SPCH 101: Principles of Speech | 3 | X |  |  |
| SPCH 120: Business \& Professional Speaking | 3 |  | X |  |
| Subtotal |  | 54 | 45 | 21 |
| Directed Electives: (Choose 6 credit hrs. from the options below): |  |  |  |  |
| Communications Group Requirement <br> Humanities Group Requirement <br> Mathematics Group Requirement <br> Natural/Life/Physical Science Group Requirement |  | Y |  |  |
|  |  | Y |  |  |
|  |  | Y |  |  |
|  |  | Y |  |  |
| Subtotal |  | 6 |  |  |
| Total |  | 60 | 45 | 21 |

$\mathrm{X}=$ Required
Y = Directed Electives, select as desired
*A grade of "C" or better in English 101 is required for an AAS degree.
Suggested full-time Criminal Justice: Corrections AAS sequence
Note: Students who start in January may not finish in two-year time frame. Recommended sequence begins in the fall.

1st Semester

| CRJ 110 | F,S |
| :--- | :--- |
| CRJ 128 | F |

ENGL 101 F,S,Su
PSYCH110 F,S,Su
SOCIO110 F,S,Su

2nd Semester
CIS 110 F,S,Su
CRJ 130 S
PSYCH 210 F, S
SOCIO $130 \mathrm{~F}, \mathrm{~S}$
SPCH 101 F,S,Su

3rd Semester
CRJ 114 AN
CRJ 132 F
PSYCH 145 F, S, Su CRJ 290 AN
SOCIO 135 F,S PSYCH 280 F,S,Su
$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## 106 Instructional Programs

For those interested in pursuing a certificate or degree, the following two career-laddering options are available:
-Advanced Certificate - Criminal Justice Emergency Telecommunications Specialist (45 Credit Hours) (ICCB Code: C 019A)
-Certificate - Criminal Justice Emergency Telecommunications Specialist (21 Credit Hours) (ICCB Code: C 019C)

| Criminal Justice COURSES | Credit Hours | CRJ Emergency Telecom. | CRJ Emergency Telecom. |
| :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X | X |
| CRJ 110: Criminal Justice Fundamentals | 3 | X | X |
| CRJ 112: Investigative Report Writing | 3 | X | X |
| CRJ 113: Criminal Investigation | 3 | X | X |
| CRI 114: Criminal Law | 3 | X |  |
| CRJ 126: Emergency Telecommunications | 3 | X | X |
| CRJ 200: <br> Police Intervention | 3 | X |  |
| CRJ 210:  <br>  Community Relations | 3 | X |  |
| ENG 101: Composition 1 | 3 | X |  |
| HLTH 120: Wellness \& Healthful Living | 3 | X | X |
| POL S 120: Politics in States \& Communities | 3 | X |  |
| PSYCH 110: Introduction to Psychology | 3 | X |  |
| SOCIO 110: Introduction to Sociology | 3 | X |  |
| SOCIO 130: Criminology | 3 | X |  |
| SPCH 120:  <br>  Professional Speaking | 3 | X | X |
| Total |  | 45 | 21 |

$\mathrm{X}=$ Required

For those interested in pursuing a certificate or degree, the following three career-laddering options are available:
-Advanced Certificate - Criminal Justice Patrol Officer (45 Credit Hours) (ICCB Code: C 0019)
-Certificate - Criminal Justice Patrol Officer (21 Credit Hours) (ICCB Code: C 019F)
-Certificate - Criminal Justice Probation and Parole Officer (21 Credit Hours)
(ICCB Code: C 019E)

| Criminal Justice COURSES | Credit Hours | CRJ Patrol Officer Adv. Cert. | CRJ Patrol Officer Cert. | CRJ Probation \& Parole Officer Cert. |
| :---: | :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X | X | X |
| CRJ 110: Criminal Justice Fundamentals | 3 | X | X | X |
| CRJ 112: Investigative Report Writing | 3 | X | X | X |
| CRJ 113: Criminal Investigation | 3 | X | X | X |
| CRI 114: Criminal Law | 3 | X | X | X |
| CRJ 116: Probation/Parole | 3 |  |  | X |
| CRJ 125: Patrol Procedures | 3 | X | X |  |
| CRJ 200: Youth, the Law, <br> \& Police Intervention  | 3 | X |  |  |
| $\begin{array}{ll}\text { CRJ 210: } & \text { Law Enforcement \& } \\ & \text { Community Relations }\end{array}$ | 3 | X |  |  |
| ENGL 101: Composition 1 | 3 | X |  |  |
| HLTH 120: Wellness \& Healthful Living | 3 | X | X | X |
| POL S 120: Politics in States \& Commun. | 3 | X |  |  |
| PSYCH 110: Introduction to Psychology | 3 | X |  |  |
| SOCIO 110: Introduction to Sociology | 3 | X |  |  |
| SOCIO 130: Criminology | 3 | X |  |  |
| SPCH 120:  <br>  Professional Speaking | 3 | X |  |  |
| Total |  | 45 | 21 | 21 |

X =Required

## Culinary Arts

General Description: This program prepares individuals for an exciting career as a chef, cook, and/ or food preparation worker for a variety of hospitality industries including hotels, restaurants, convention centers, hospitals, and corporate dining facilities. The curriculum covers all aspects of culinary preparation including meats, poultry, fish, vegetable, sauces, soups, bread and pastry baking, desserts, specialty cooking and international cuisine. Hands-on experience in all facets of culinary preparation and presentation is emphasized throughout the curriculum. Further, coursework emphasizing the development of supervisory and managerial responsibilities such as sanitation, menu planning, management, cost control, purchasing, cooking, baking, and restaurant operations are also provided. Specific skills aimed at creating recipes; managing the kitchen; ordering supplies; measuring, mixing, and cooking ingredients according to specified recipes; familiarity with the various types of kitchen equipment and instruments; knife skills, cutting, chopping, slicing, and dicing; and, directing the duties of other kitchen employees are developed throughout the entire program of study.
Individuals who are not interested in working for restaurants or food service kitchens may also benefit from this program. Personal chefs, for example, plan and prepare meals in private homes according to a client's personal preferences and dietary needs - which is an emerging occupation Further, research chefs combine culinary skills with specific skills in food science to test new formulas, develop recipes, experiment with flavors and presentation, and test new products for chain restaurants, food growers, and manufacturers.
Students may pursue an Associate of Applied Science Degree or several career focused certificates such as food preparation worker, baking \& pastry, chef assistant, and/or culinary management. If you've always been a purveyor of fine cuisine and enjoy utilizing creativity in your cooking, then the culinary arts program may interest you!
Aptitudes: Course work is demanding, physically and academically. Classes require stamina, an ability to work under pressure, and exceptional teamwork skills aimed at providing exceptional guest service.
Career Outlook: According to the Federal Bureau of Labor Statistics, job openings for chefs, cooks, and food preparation workers are expected to be plentiful through 2014. Further, the National Restaurant Association estimates that 75,000 people are needed annually for jobs that do not exist today. Further, they estimate that 60,000 additional chefs are needed each year in the United States. Opportunities for graduates are abundant and diverse in all areas of direct food preparation and management in the hospitality industry.

These are occupational training programs. Some of the courses may not transfer to four-year institutions.

For those interested in pursuing a certificate or degree, the following career-laddering options are available:

- Associate in Applied Science - Culinary Arts (65 Credit Hours) (ICCB Code: AAS 2200)
- Certificate - Food Preparation (9 Credit Hours) (ICCB Code: C 220D)
- Certificate - Baking and Pastry (19 Credit Hours) (ICCB Code: C 220C)
- Certificate - Chef's Assistant (26 Credit Hours) (ICCB Code: C 220B)
- Certificate - Culinary Management (50 Credit Hours) (ICCB Code: C 220A)

| Culinary Arts: COURSES | Credit <br> Hours | Culinary Arts AAS | Food Prep Cert. | Baking \& Pastry Cert. | Chef Asst Cert. | Cul Mgmt Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110: $\begin{aligned} & \text { Business Mathematics } \\ & \text { (or Math 104) }\end{aligned}$ | 3 | X |  |  |  | X |
| BUS 121: $\begin{aligned} & \text { Purchasing \& Product } \\ & \text { Identification }\end{aligned}$ | 3 | X |  |  |  | X |
| BUS 220: Cost Management | 3 | X |  | X |  | X |
| BUS 260: Hospitality Nutrition | 3 | X |  |  |  | X |
| BUS 262: Dining Room Management | 3 | X |  |  |  | X |
| BUS 263: Catering \& Banquet Mgmt. | 3 | X |  |  |  | X |
| BUS 290: Work Experience Practicum | 3 | X |  |  |  | X |
| CA 105: Culinary Fundamentals | 4 | X | X | X | X | X |
| CA 115: Culinary Applications | 4 | X | X | X | X | X |
| CA 120: Baking Fundamentals | 4 | X |  | X | X | X |
| CA 200: Meat, Poultry, and Fish | 3 | X |  |  | X | X |
| CA 210: Garde Manger | 3 | X |  |  | X | X |
| CA 220: Pastry Fundamentals | 3 | X |  | X | X | X |
| CA 230: International Cuisine | 4 | X |  |  | X | X |
| CIS 110: $\begin{aligned} & \text { Business Applications for } \\ & \\ & \text { Microcomputers }\end{aligned}$ | 3 | X |  |  |  | X |
| ENGL 110:Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |  |
| HOSP 110: Food Service Sanitation | 1 | X | X | X | X | X |
| P REL 110: Supervision | 3 | X |  |  |  |  |
| SPCH 120: $\begin{aligned} & \text { Business \& Professional } \\ & \text { Speaking (or SPCH 101*) }\end{aligned}$ | 3 | X |  |  |  |  |
| General Education Electives | 6 | X |  |  |  |  |
| Total |  | 65 | 9 | 19 | 26 | 50 |

X - Required
*Students considering transfer options should take this course.
-A grade of "C" or better in ENGL 101 is required for the AAS degree.

## Suggested full-time Culinary Arts AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110 | F,S | BUS 121 | S | BUS 220 | F | BUS 262 | S |
| CA 105 | F | CA 115 | S | BUS 260 | F | BUS 263 | F |
| ENGL 110 | F,S,Su | CA 120 | S | CA 200 | F | BUS 290 | AN |
| CIS 110 | F,S,Su | P REL 110 | S | CA 220 | F | CA 210 | S |
| HOSP 110 | F,S,Su | Gen Ed Elec | F,S,Su | Gen Ed Elec | F,S,Su | CA 230 | S |
| SPCH 120 | F,S,Su |  |  |  |  |  |  |
| $\mathrm{F}=$ fall | $\mathrm{S}=$ sprin | $\mathrm{Su}=$ summer | $\mathrm{AN}=\mathrm{as}$ | eded |  |  |  |

## Drafting \& Design Engineering

General Description: The Drafting \& Design Engineering Program introduces students to fundamentals of drafting, working drawing production, various media used in the drafting room, manufacturing processes, and other specialties that will enhance employment opportunities. It is designed both for persons currently employed in industry and for those desiring initial employment as an industrial drafter. The work is done indoors at all kinds of manufacturing firms.
Aptitudes: Drafters must be precise, accurate workers and be self-directed. They need good math skills, including geometry, and the ability to visualize objects in two and three dimensions.
Outlook: In Illinois, this field is growing faster than the average for all occupations.
These are occupational training programs. Some of the courses may not transfer to four-year institutions.

For those interested in pursuing a certificate or degree, the following three career-laddering options are available:
-Associate in Applied Science - Drafting \& Design Engineering (63 Credit Hours) (ICCB Code: AAS 0113)
-Advanced Certificate - Drafting \& Design (34 Credit Hours) (ICCB Code: AC 0112)
-Basic Certificate - AutoCAD (13 Credit Hours) (ICCB Code: BC 0114)

| Drafting \& Design Eng. COURSES | Credit Hours | Drafting \& Design Eng. AAS | Drafting \& Design Cert. | AutoCAD Cert. |
| :---: | :---: | :---: | :---: | :---: |
| DRAFT 101: Drafting Fundamentals | 4 | X | X | X |
| DRAFT 102: Industrial Drafting | 4 | X | X |  |
| DRAFT 110: Technical Design | 3 | X |  |  |
| DRAFT 120: Technical Graphics | 2 | X | X |  |
| DRAFT 130: Tool Design Drafting | 4 | X |  |  |
| DRAFT 210: Microstation | 3 | X | X |  |
| DRAFT 215: AutoCAD | 3 | X | X | X |
| DRAFT 220: Intermediate CAD | 3 | X | X | X |
| DRAFT 230: Advanced CAD | 3 | X |  | X |
| DRAFT 236: Pro-Engineer | 4 | X | X |  |
| DRAFT 290: Work Experience <br>  Practicum (or DRAFT 295) | 3 | X | X |  |
| ENGL 101: Composition 1* | 3 | X |  |  |
| ENGR 110: Engineering Graphics | 3 | X | X |  |
| ENGT 252: CAM Applications | 3 | X |  |  |
| IT 105: Information Technology System. | 3 | X |  |  |
| MATH 117: Trigonometry (or MATH 104) | 3 | X | X |  |
| PHYS 100: Physics of the Modern World | 4 | X |  |  |
| SPCH 101: Principles of Speech | 3 | X |  |  |
| Subtotal |  | 58 | 32 | 13 |
| Drafting Elective: <br> (Select a minimum of 3 credit hours) DRAFT 235: Solid Modeling (3-D) | 3 | Y | Y |  |
| DRAFT 242: Commercial Architecture | 3 | Y | Y |  |
| DRAFT 243: Structural Steel Detailing | 3 | Y | Y |  |
| DRAFT 244: Concrete Detailing | 3 | Y | Y |  |
| DRAFT 245: Residential Architecture | 3 | Y | Y |  |
| AAS Group Requirements/Electives (Select 3 credit hours from options below.) To be selected from areas of Communications, Humanities, Fine Arts, Mathematics, Natural/Life/Physical Science, and/or Social Science. (See page 93) | 3 | X |  |  |
| Subtotal |  | 3 | 3 |  |
| Total |  | 64 | 35 | 13 |

X = Required
$\mathrm{Y}=$ Drafting Elective, select as desired
A grade of "C" or better in ENGL 101 is required for the AAS degree.

## Suggested full-time Drafting \& Design AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

## 110 Instructional Programs

| 1st Semester |  |  |
| :--- | :--- | :--- |
| DRAFT |  |  |
| DRAF | F,S |  |
| DRAFT | 215 | F,S,Su |
| ENGL 101 | F,S,Su |  |
| MATH | 117 | F,S,Su |
| SPCH 101 | F,S,Su |  |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring


DRAFT 102 S
DRAFT 110 S
DRAFT 130 S

IT 105 F,S
3rd Semester

| DRAFT 120 |
| :--- |
| F |
| DRAFT 230 |
| $\mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ |
| DRAFT 210 |
| $\mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ |
| DRAFT 236 |
| ENGR $110 \quad \mathrm{~F}$ |

## 4th Semester

DRAFT 290 F,S,Su
DRAFT Elec F,S,Su
ENGT 252 S
Gen Ed Elec F,S,Su
PHYS 100 F
DRAFT 290 F,S,Su

## Early Childhood Education

General Description: Childcare, preschool, kindergarten, and elementary school teachers and workers play a vital role in the development of children. What children learn and experience during their early years can shape their views of themselves and the world and can affect their later success or failure in school, work, and their personal lives. Teachers and workers in these settings introduce children to mathematics, language, science, social studies, learning in general, and social and behavioral skills. They use games, music, artwork, films, books, computers, and other tools to teach basic skills.
Aptitudes: Childcare, preschool, kindergarten, and elementary school teaching (like all teaching) require a variety of skills and aptitudes, including a talent for working with children; organizational, administrative, and recordkeeping abilities; communication skills; the power to influence, motivate, and train others; patience; and creativity.
Outlook: Job opportunities in this field are expected to increase as demands increase for qualified workers in expanding childcare and early childhood education settings, although opportunities will vary somewhat by geographic area and subject taught. (Excerpts above taken from Occupational Outlook Handbook, 2004-2005)
This is an occupational training program. Some courses may not transfer to four-year institutions.

| Early Childhood Edu. COURSES | Credit Hours | ECE AAS Degree ICCB Code: AAS 0011 | $\begin{gathered} \text { ECE Basic Cert. } \\ \text { ICCB Code: } \\ \text { BC } 0009 \end{gathered}$ | ECE AAS Degree Director Spec. ICCB Code: AAS 0011 |
| :---: | :---: | :---: | :---: | :---: |
| ECE 101: Introduction to Early Childhood Education | 3 | X | X | X |
| ECE 103: Child Guidance | 2 | X |  | X |
| ECE 110: $\begin{aligned} & \text { Health, Nutrition, \& } \\ & \text { Safety for Young Children }\end{aligned}$ | 3 | X |  | X |
| ECE 111: Children's Literature | 3 | X | X | X |
| ECE 112: $\begin{aligned} & \text { Math \& Science } \\ & \text { for Young Children }\end{aligned}$ | 3 | X | X |  |
| ECE 113: $\begin{aligned} & \text { Art, Music, \& Drama } \\ & \text { for Young Children }\end{aligned}$ | 3 | X | X |  |
| ECE 114: Play Activities for Young Children | 3 | X | X | X |
| ECE 115: Infant \& Toddler Dev. | 3 | X | X | X |
| ECE 203: Child, Family, \& Community | 3 | X |  | X |
| ECE 210: Curriculum Design/Early Childhood | 3 | X | X | X |
| ECE 220: Child Care Admin. \& Org. | 3 |  |  | X |
| ECE 230: Early Childhood Prog. Mgmt. | 4 |  |  | X |
| ECE 235: Early Childhood Business Mgmt. | 3 |  |  | X |
| $\begin{array}{ll}\text { ECE 290: } & \text { Observation/Clinical } \\ & \text { Experiences \& Seminar }\end{array}$ | 1-3 | X |  | X |
| ED 105: Using Technology in the Classroom 1 | 3 | X |  | X |
| ED 108: The Multicultural Classroom |  |  |  | X |
| ED 220: The Exceptional Child | 3 | X |  | X |
| ENGL 101: Composition 1* | 3 | X | X | X |
| PSYCH 110:Introduction to Psychology | 3 | X | X | X |
| PSYCH 150:Child Psychology | 3 | X | X | X |
| SOCIO 200:Marriage \& the Family | 3 | X |  | X |
| SPCH 101: Principles of Speech | 3 | X |  | X |
| Subtotal |  | 51-53 | 30 | 57-59 |
| Directed Electives: |  |  |  |  |
| ECE 102 | 2 | X |  |  |
| Fine Arts | 3 | X |  |  |
| Math Elective (MATH 110 or MATH 113) | 4 | X |  | X |
| Subtotal |  | 9 |  | 4 |
| Total |  | 60-62 | 30 | 63-65 |

*A grade of "C" or better in ENGL 101 is required for the AAS degree.
Other Graduation Requirements:

1. Portfolio Development Met.
2. Evidence of CPR Training.

Suggested full-time Early Childhood Education AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  |  | 3rd Semester |  |  | 4th Semester |  |
| ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| ECE 101 | F,S,Su |  | ECE 110 | F, S |  | ECE 203 | AN | ECE 102 |  | AN

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Education Paraprofessional Education (Teacher Assistant)

General Description: The Paraprofessional Educator (Teacher Assistant) program is designed to prepare individuals to assist a teacher in the regular classroom setting or in providing instruction and supervision to special student populations, such as bilingual/bicultural students, special education students, adult learners, and students learning English. The program will include regulations regarding teacher assistant responsibilities in general classroom supervision, discipline and behavior management, tutorial techniques, and carrying out related tasks. It is designed to satisfy state requirements for teacher assistants and to meet the skills required for assisting teachers in the classroom. Aptitudes: Teacher assistants should enjoy working with children from a wide range of cultural backgrounds and be able to handle classroom situations with fairness and patience. Teacher assistants also must demonstrate initiative and a willingness to follow a teacher's directions. They must have good writing skills and be able to communicate effectively with students and teachers. Teacher assistants who speak a second language, especially Spanish, are in great demand to communicate with growing numbers of students and parents whose primary language is not English.
Outlook: Employment of teacher assistants is expected to grow faster than average occupations through 2010, with a projected increase of 21 to $35 \%$. Many school districts report shortages of teachers.

This is an occupational training program. Some courses may not transfer to four-year institutions.

## 112 Instructional Programs

| Paraprof. Ed. COURSES | Credit <br> Hours | Parapro.E. AAS Degree <br> ICCB Code: Pending |
| :--- | :---: | :---: |
| ECE 110: Health, Nutrition, and Safety for Young Children | 3 | X |
| ECE 111: Children's Literature | 3 | X |
| ECE 113: Art, Music, and Drama for Young Children | 3 | X |
| ED 100: Introduction to Public Education | 3 | X |
| ED 102: Field Experience in Education | 2 | X |
| ED 105: Using Technology in the Classroom I | 3 | X |
| ED 107: Art for Elementary School Teachers | 3 | X |
| ED 108: The Multicultural Classroom | 3 | X |
| ED 109: Principals of Reading | 3 | X |
| ED 200: Educational Psychology | 3 | X |
| ED 220: The Exceptional Child | 3 | X |
| ENGL 101: Composition 1* | 3 | X |
| PSYCH 110: Introduction to Psychology | 3 | X |
| PSYCH 150: Child Psychology | 3 | X |
| SOCIO 200: Marriage and the Family | 3 | X |
| SPCH 101: Principles of Speech | 3 | X |
| Subtotal $\quad$ Directed Electives: |  | $\mathbf{4 7}$ |
| Fine Arts (ART or MUSIC 100 recommended) | 3 |  |
| Math (MATH 110 or 113 recommended) | Y |  |
| Physical Science (Earth Science recommended) | 4 | Y |
| U.S. History | 4 | Y |
| Subtotal | 4 | Y |
| Total |  | $\mathbf{1 5}$ |

## X= Required <br> Y= Directed Electives; select as desired.

*A grade of "C" or better in ENGL 101 is required for the AAS degree.
Other Graduation Requirements:

1. Portfolio Development Met.
2. Required number of classroom observation hours completed.

## Suggested full-time Paraprofessional Educator AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence beings in the fall.

1st Semester
ECE 113 AN
ED 100 F,S,Su
ENGL 101 F,S,Su
PSYCH110F,S,Su
SPCH 101 F,S,Su

2nd Semester
ED 105 F,S,Su
ED 109 S
PSYCH 150 F,S,Su
SOCIO 200 F,S,Su
MATH Elect F,S,Su

3rd Semester
4th Semester
ECE 111 AN
ED 102 AN ED 107 AN
ED 108 Su ED 200 F,S,Su
ED $220 \quad$ F,S,Su
US Hist Elect F,S,Su Phys Sci Elect F,S,Su
$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Electrician

Description: This program prepares the student for a career as a construction or maintenance electrician. As a student pursues this program, he or she will coordinate apprenticeship training with additional college-level requirements for an Associate in Applied Science degree. This is a restricted entry program that is intended only for National Electrical Contractors Association (NECA) and the International Brotherhood of Electrical Workers Local Union 146 (IBEW) employees. For further information, contact Steve Wrigley at (217)877-4604.

## Electronics

The AAS Electronics Degree has been suspended. The College will no longer admit new students into this program. Students who were enrolled in this program prior to Fall 2006 will have until May 2009 to complete all program requirements.
General Description: Graduates of the AAS Program in Electronics are highly skilled technicians capable of finding interesting and challenging employment in a wide variety of technical fields. The following job titles are typical of the positions in which graduates recently have been placed: computer and telecommunications field engineer, broadcast engineer, consumer electronics service technician, and radar and aviation electronics specialist. Electronics technicians work both in the field and at the service bench. Major employers include computer and business machine companies, telecommunications firms, manufacturing companies, electronic service centers, railroads, and governmental agencies.
Aptitudes: Prospective electronics technicians need above-average skills in mathematics. They should expect challenging work that requires great attention to details and keeping up with a rapidly advancing technology. The ability to communicate ideas clearly and to follow instructions to the letter is also needed.
Outlook: In Illinois, above-average growth is expected for this occupation.
These are occupational training programs. Some courses may not transfer to four-year institutions.
For those interested in pursuing a certificate or degree, the following three career-laddering options are available:

- Associate in Applied Science - Electronics (67 Credit Hours) (ICCB Code: AAS 0014)
- Advanced Certificate - Electronics (44 Credit Hours) (ICCB Code: AC 0013)
- Basic Certificate - Electronics (22 Credit Hours) (ICCB Code: BC 0012)

| Electronics COURSES | Credit <br> Hours | AAS | Advanced <br> Certificate | Certificate |
| :--- | :---: | :---: | :---: | :---: |
| ELTRN 110: Introduction to Electricity and Electronics | 2 | X | X | X |
| ELTRN 111: Circuit Analysis | 3 | X | X | X |
| ELTRN112: Electronic Devices and Circuits | 5 | X | X | X |
| ELTRN 120: Fundamentals of Servicing | 2 | X | X | X |
| ELTRN 160: Digital Electronics | 4 | X | X | X |
| ELTRN 210: Advanced Electronic Devices \& Circuits | 3 | X | X |  |
| ELTRN 211: Pulse, Digital, \& Switching Circuits | 5 | X | X |  |
| ELTRN 212: Communications Systems | 5 | X | X |  |
| ELTRN 240: Introduction to Microprocessors | 3 | X | X |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X | X |  |
| MATH 104: Technical Mathematics (or MATH 116) | 4 | X | X | X |
| MATH 117: Trigonometry | 3 | X | X |  |
| AAS Group Requirements/ Electives |  |  |  |  |
| To be selected from areas of Communications Math |  |  |  |  |
| and/or Natural Science, or Social Science and/or <br> Humanities/Fine Arts | 25 | X |  |  |
| Total |  | $\mathbf{6 7}$ | $\mathbf{4 2}$ | $\mathbf{2 0}$ |

## $X=$ Required

A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Electronics AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

## 114 Instructional Programs

1st Semester
ELTRN110 F
ELTRN111 F
ENGL 110 F,S,Su
MATH 104 F,S,Su
Gen Ed Elec F,S,Su ( 8 cr .)

2nd Semester
ELTRN 112 S
ELTRN 120 S
ELTRN 160 S
MATH 117 S,F,Su Gen EdElec F,S,Su (8 cr.)

3rd Semester
ELTRN 210 F
ELTRN 211 F
Gen Ed Elec F,S,Su
(8 cr.)

## 4th Semester

ELTRN 212 S
ELTRN 240 S
Gen Ed Elec F,S,Su (8 cr.)

F=fall $\quad$ S=spring $\quad$ Su=summer $\quad A N=$ as needed

## Electronics - Biomedical Option

The AAS Electronics Biomedical Degree has been suspended. The College will no longer admit new students into this program. Students who were enrolled in this program prior to Fall 2006 will have until May 2009 to complete all program requirements.
General Description: The biomedical electronics option is a specialized program offered to prepare the student for a variety of positions working with medical equipment. Upon completion of the curriculum and intensive hospital internship, the student will be well prepared to perform and document preventive and corrective maintenance on a variety of medical devices. This program will also help prepare the student for the BMET certification exam of the International Certification Commission for Clinical Engineering and Biomedical Technology (ICC).
Aptitudes: Prospective biomedical electronics technicians need above-average skills in mathematics. They should expect challenging work that requires great attention to details and keeping up with a rapidly advancing technology. The ability to communicate ideas clearly and to follow instructions to the letter is also needed.
Outlook: This is a small occupation in Illinois that is expected to grow faster than the average. Graduates may need to relocate to find job opportunities.

These are occupational training programs. Some of the courses may not transfer to four-year institutions.

- Associate in Applied Science - Electronics Biomedical (67 Credit Hours) (ICCB Code: AAS 0015)

| Electronics -Biomedical COURSES | Credit <br> Hours | AAS |
| :---: | :---: | :---: |
| BIOL 101: Concepts of Biology 1 | 4 | X |
| BIOL 201: Human Anatomy and Physiology 1 | 4 | X |
| BIOL 202: Human Anatomy and Physiology 2 | 4 | X |
| ELTRN 110: Introduction to Electricity and Electronics | 2 | X |
| ELTRN 111: Circuit Analysis | 3 | X |
| ELTRN 112: Electronic Devices and Circuits | 5 | X |
| ELTRN 120: Fundamentals of Servicing | 2 | X |
| ELTRN 160: Digital Electronics | 4 | X |
| ELTRN 210: Advanced Electronic Devices \& Circuits | 3 | X |
| ELTRN 211: Pulse, Digital, \& Switching Circuits | 5 | X |
| ELTRN 212: Communications Systems | 5 | X |
| ELTRN 240: Introduction to Microprocessors | 3 | X |
| ELTRN 295: Electronics Internship | 5 | X |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |
| MATH 116: College Algebra | 4 | X |
| MATH 117: Trigonometry | 3 | X |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Math and/or Natural Science, or Social Science and/or Humanities/Fine Arts | 8 | X |
| Total |  | 67 |

A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Electronics Biomedical AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIOL 101 F,S,Su | BIOL 201 | F,S | BIOL 202 | F,S | ELTRN 212 | S |
| ELTRN 110F | ELTRN 112 | S | ELTRN 210 | F | ELTRN 240 | S |
| ENGL 111 F , | ELTRN 120 | S | ELTRN 211 | F | ELTRN 295 | F,S,Su |
| ENGL 110 F,S,Su | ELTRN 160 | S | Gen Ed Elec F | F,S,Su | Gen EdElec | F,S,Su |
| MATH $116 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | MATH 117 | F,S,Su |  | (5 cr.) |  |  |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Electronics Systems (See Engineering Technology)

## Emergency Medical Services

General Description: The Emergency Medical Services Program includes a series of emergency medical technology (EMT) courses that lead either to a basic or advanced certificate or to an associate's degree in Emergency Medical Services at the paramedic level. The curriculum meets the criteria established by the Illinois Department of Public Health, Division of Emergency Medical Services and Highway Safety. The program prepares individuals to provide emergency assistance and basic or advanced life support in out-of-the-hospital settings to critically ill and/or injured persons and to prepare the patient for transport to the nearest medical facility. A combination of educational methods will be used including theory instruction and demonstration and practice of life-saving skills for simulated and real emergency situations. Physicians specializing in emergency medicine, paramedics, and registered nurses who have advanced education in medical and trauma management provide instruction. An EMT-B license is required to advance in the EMT program.
Aptitudes: The student entering emergency medical technology must be a caring and self-disciplined individual. The field requires academic knowledge, clinical expertise, critical thinking skills, physical stamina, personal integrity, and the ability to act competently in confined areas and under stressful situations. The student must be physically and mentally able to perform all required skill tasks. The student must be able to lift and move supplies, equipment, and the patient in the course of action. The student must possess adequate visual, hearing, and communication skills to competently perform the duties of the profession. Students must be willing to continue their education throughout their career to keep their license and skills updated and current.
Outlook: Average job opportunities are available in hospitals, ambulance services, and fire, police, or industrial rescue squad departments.

These are occupational training programs. Some courses may not transfer to four-year institutions.
For those interested in pursuing a certificate or degree, the following three career-laddering options are available:

- Associate in Applied Science - Paramedic (64 Credit Hours) (ICCB Code: AAS 2071)
- Advanced Certificate - Emergency Medical Technology - Intermediate (22 Credit Hours)
(ICCB Code: AC 2072)
- Basic Certificate - Emergency Medical Technology - Basic (11 Credit Hours)
(ICCB Code: BC 2073)


## 116 Instructional Programs

| Emergency Medical Services COURSES | Credit Hours | Emergency <br> Medical <br> Services <br> Paramedic <br> AAS | Emergency <br> Medical <br> Technology <br> Intermediate <br> Certificate | Emergency <br> Medical <br> Technology <br> Basic <br> Certificate |
| :---: | :---: | :---: | :---: | :---: |
| EMT 120: EMT Basic | 6 | X | X | X |
| EMT 140: EMT Intermediate 1 | 7 |  | X |  |
| EMT 150: EMT Intermediate 2 | 4 |  | X |  |
| EMT 200: Paramedic 1 | 7 | X |  |  |
| EMT 220: Paramedic 2 | 6 | X |  |  |
| EMT 240: Paramedic 3 | 9 | X |  |  |
| EMT 260: Paramedic 4 | 7 | X |  |  |
| EMT 290: Paramedic 5 | 5 | X |  |  |
| HLTH 140:Medical Terminology | 3 | X | X | X |
| MATH 106: Math for Health Careers | 2 | X | X | X |
| BIOL 101: Concepts of Biology 1 * | 4 | X |  |  |
| ENGL 101: Composition 1 (or ENGL 110) | 3 | X |  |  |
| SOCIO 110: Introduction to Sociology | 3 | X |  |  |
| PSYCH 110: Introduction to Psychology | 3 | X |  |  |
| Subtotal |  | 58 | 22 | 11 |
| Directed Electives: (Select one course of 3 credit hours) PREL 100: Human Relations | 3 | Y |  |  |
| PREL 110: Supervisory Techniques \& Personnel Development | 3 | Y |  |  |
| FIRE 270: Management 1 | 3 | Y |  |  |
| Subtotal |  | 3 |  |  |
| AAS Group Requirements/ Electives: To be selected from area of Humanities | $\begin{aligned} & \hline 3 \\ & 3 \\ & \hline \end{aligned}$ | X |  |  |
| Subtotal |  | 3 |  |  |
| Total |  | 64 | 22 | 11 |

* Must have been completed in the last five (5) years
$\mathrm{X}=$ Required $\quad \mathrm{Y}=$ Directed Electives, select as desired
A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Emergency Medical Services - AAS sequence

| Fall <br> Semester | Spring <br> Semester | Summer <br> Semester | Fall <br> Semester | Spring <br> Semester | Summer <br> Semester |
| :--- | :--- | :--- | :--- | :--- | :--- |
| EMT 120 | EMT 200 | EMT 220 | EMT 240 | EMT 260 | EMT 290 |
| HLTH 140 | PSYCH 110 |  | ENGL 101 or 110 <br> ESCIO 110 <br> MATH 106 | SOCIO 101 <br> Bumanities Elec. |  |

## Energy Distribution

General Description: This program prepares the student for a career in the power generation and transmission industry. As a student pursues this program, he or she will coordinate apprenticeship training in the areas of lineman, natural gas operator, polyphase meter, power engineering, and substation operator with additional college-level requirements for an Associate in Applied Science degree. This is a restricted entry program that is primarily intended for AmerenIP employees. For further information, contact Connie Garrett at (217)532-8235.

## Engineering Technology

General Description: The Engineering Technology program is an integrated, cross-disciplinary degree program that prepares the student for a career as an engineering technician in a manufacturing or industrial environment. Due to the high level of integration in this program, the student may choose from several career paths (concentrations), including careers in BioProcess CNC Technology, Electrical Systems, Facilities Management, Fluid Power Systems, Instrumentation Systems, Machine Repair, Manufacturing Engineering Technology, and Mechanical Systems. While each concentration contains a unique set of courses overall, each contains the same general education and technical core courses.
The classrooms and laboratories are equipped with modern and commonly used industrial components, tools, machines, and systems. While attention is given to classroom theory, hands-on skills required for success in this rapidly growing field are especially emphasized. Upon successful completion of this program, the student will be ready to install, maintain, troubleshoot, and repair modern industrial systems. Major employers are automated industrial plants, processing plants, contractors, field service centers, technical sales, and training centers.
Aptitudes: According to the Illinois Career Information System, Engineering Technicians are people who tend to

- Consider achievement important. They like to see the results of their work and to use their strongest abilities. They like to get a feeling of accomplishment from their work.
- Consider good working conditions important. They like jobs offering steady employment and good pay. They want employment that fits their individual work style. They may prefer doing a variety of tasks, working alone, or being busy all the time.
- Consider relationships important. They like to work in a friendly, non-competitive environment. They like to do things for other people. They prefer jobs where they are not pressured to do things that go against their sense of right and wrong.
- Have realistic interests. They like work activities that include practical, hands-on problems and solutions. They like to work with plants, animals, and physical materials such as wood, tools, and machinery. They often prefer to work outside.
- Have investigative interests. They like work activities that have to do with ideas and thinking. They like to search for facts and figure out solutions to problems mentally.
- Have conventional interests. They like work activities that follow set procedures, routines, and standards. They like to work with data and detail. They prefer working where there is a clear line of authority to follow.
Outlook: Nationally and statewide, these positions are expected to grow about as fast as average through 2012. However, locally, the manufacturing industry is currently experiencing a shortage of skilled technicians - especially in the CNC, instrumentation, and maintenance technician areas.

These are occupational training programs. Some courses may not transfer to four-year institutions

## Engineering Technology - BioProcess Operator

(New Specialty - Contact Student Services Center at 217/875-7211, Ext. 267.

## Engineering Technology - CNC Technology Specialty

General Description: This specialty prepares the student for employment as a CNC operator or CNC Programmer. These skilled jobs require the ability to set up and operate high tech computer-controlled (CNC) machines. These computerized, highly automated machines cut, shape, drill, or otherwise modify metal or plastic parts for all segments of industry. CNC operators typically set up, tend, and perform minor maintenance on the machines. CNC programmers determine machining processes and tooling and fixturing requirements and write, modify, and adjust the programs that control the CNC machines. Technicians may also perform routine maintenance and repair the machines when they break down. In some environments, technicians may operate and program the machines as well.

[^4]
## 118 Instructional Programs

| Engineering Tech.-CNC Tech. Spec. COURSES | Credit Hours | CNC Tech AAS | CNC Operator Certificate | CNC Tech Certificate |
| :---: | :---: | :---: | :---: | :---: |
| DRAFT 236: Pro-Engineer or Draft 215 | 4 | X |  | X |
| ENGT 100:Industrial Processes (formerly MFG 120) | 3 | X |  | X |
| ENGT 101:Motor Control Fundamentals (formerly ELTRN 109) | 4 | X |  | X |
| ENGT 102:Blueprint Reading (formerly MFG 100) (or DRAFT101) | 3 | X | X | X |
| ENGT 103:Fluid Power Fundamentals (formerly MEC S 112) | 3 | X |  | X |
| ENGT 104:CNC Fundamentals (formerly CIM 102) | 3 | X | X | X |
| ENGT 105:Occupational Safety (formerly IND S 100) | 3 | X | X | X |
| ENGT 150:Machining Fundamentals (formerly MACH 101) | 2 | X | X | X |
| ENGT 151:Cutting \& Workholding (formerly MACH 102) | 2 | X | X | X |
| ENGT 160:Metrology | 2 | X | X | X |
| ENGT 200:Industrial Materials (formerly MFG 110) | 3 | X | X | X |
| ENGT 213:Robotic Fundamentals (formerly ROBOT 101) | 3 | X | X | X |
| ENGT 250:CNC Turning (formerly MACH 201) | 3 | X | X | X |
| ENGT 251:CNC Milling (formerly MACH 202) | 3 | X | X | X |
| ENGT 252:CAM Applications (formerly CIM 101) | 3 | X |  | X |
| ENGT 260:Quality Fundamentals | 3 | X |  | X |
| ENGT 299:Systems Integration (or ENGT 290 or ENGT 295) | 3 | X |  |  |
| ENGL 110:Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |
| MATH 104: Technical Mathematics (or MATH 110*) | 4 | X |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |
| WELD 195: Industrial Welding Fundamentals | 3 | X |  | X |
| Social Science Elective (ECON 231 recommended) | 3 | X |  |  |
| General Education Electives (PHYS 100 recommended) | 3 | X |  |  |
| Total |  | 69 or 68 | 27 | 49 or 50 |

X = Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Engineering Technology - CNC Technology Specialty AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester |  | 3 rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGT 100 F | DRAFT 236 | F,S,Su | ENGT 200 | F | ENGT 252 | S |
| ENGT 101 F | ENGT 102 | F,S | ENGT 250 | F | ENGL 110 | F,S,Su |
| ENGT 103 F,S | ENGT 105 | S | ENGT 251 | F | ENGT 213 | S |
| ENGT 104 F | ENGT 150 | S | ENGT 260 | F | WELD 195 | F,S,Su |
| MATH 104 F,S,Su | ENGT 151 | S | SPCH 120 | F,S,Su | Gen Ed Elec. | F,S,Su |
|  | ENGT 160 | S | Soc. Scien | F,S,Su |  |  |
| $\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring | Su=summer $\quad$ AN=as needed |  |  |  |  |  |

## Engineering Technology - Electrical Systems Specialty

General Description: This specialty prepares the students to repair install, maintain, and fix complex electrical equipment found in the manufacturing environment. In addition, they help plan, install, and test the setup of new equipment. Many may travel to customer sites to maintain and/or repair equipment.

For those interested in pursuing this specialty, the following options are available:

- Associate in Applied Science - Engineering Technology - Electrical Systems Specialty (68 Credit Hours) (ICCB Code: AAS 3000)
-Certificate - Industrial Maintenance ( 27 Credit Hours) (ICCB Code: C 300B)
- Certificate - Electrical Systems (52 Credit Hours) (ICCB Code: C 300D)

| Eng. Tech.-Elect. Sys. Spec. COURSES | Credit Hours | Elec. Systems AAS | Ind. Main. Certificate | Elec. Systems Certificate |
| :---: | :---: | :---: | :---: | :---: |
| DRAFT 215: AutoCAD (or ENGT 102) (formerly MFG 100) | 3 | X | X | X |
| ENGT 100: Industrial Processes (formerly MFG 120) | 3 | X | X | X |
| ENGT 101: Motor Control Fundamentals | 4 | X | X | X |
| ENGT 103: Fluid Power Fundamentals | 3 | X | X | X |
| ENGT 104: CNC Fundamentals | 3 | X | X | X |
| ENGT 105: Occupational Safety | 3 | X | X | X |
| ENGT 111: Motor Control Applications (formerly ELTRN 113) | 4 | X | X | X |
| ENGT 130: Power Transmission Fundamentals | 4 | X | X | X |
| ENGT 210: PLC Fundamentals (formerly ELTRN 204) | 4 | X |  | X |
| ENGT 211: PLC Applications | 3 | X |  | X |
| ENGT 212: Motor Control Systems | 4 | X |  | X |
| ENGT 213: Robotic Fundamentals (formerly ROBOT 101) | 3 | X |  | X |
| ENGT 214: Motion Control Applications (formerly ELTRN 231) | 3 | X |  | X |
| ENGT 215: Motion Control Systems | 3 | X |  | X |
| ENGT 232: Rigging \& Cranes (formerly MEC S 230) | 2 | X |  | X |
| ENGT 299: Systems Integration | 3 | X |  | X |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |
| MATH 104: Technical Mathematics (or MATH 110*) | 4 | X |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |
| Social Science Elective (ECON 231 recommended) | 3 | X |  |  |
| General Education Electives (Phys 100 recommended | 3 | X |  |  |
| Total |  | 68 | 27 | 52 |

X = Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.

## Suggested full-time Engineering Technology - Electrical Systems Specialty AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

## 120 Instructional Programs

1st Semester
ENGT 100 F
ENGT 101 F
ENGT 103 F,S
ENGT 104 F
MATH 104 F,S,Su
2nd Semester
DRAFT 215
F,S,Su
ENGL 110
E,S,Su
ENGT 105
E
ENGT 111
S
ENGT 130

2nd Semester
DRAFT 215 F,S,Su
ENGL 110 F,S,Su
ENGT 105 S
ENGT 111 S
ENGT 130 S

| 3rd Semester |  |
| :--- | :--- |
| ENGT 210 | F |
| ENGT 212 | F |
| ENGT 213 | F |
| ENGT 214 | F |
| Soc Science F,S,Su |  |
| Elec. |  |

4th Semester
ENGT 211 S
ENGT 215 S
ENGT 232 S
ENGT 299 S
SPCH 120 F,S,Su
Gen Ed Elec. F,S,Su
$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Engineering Technology - Facilities Maintenance Specialty

General Description: This comprehensive AAS Engineering Technology - Facilities Maintenance Specialty program is designed to prepare students for work in the commercial maintenance area. Today's commercial facilities are high technology environments demanding a special set of skills. This program is a blend of courses taken from the electrical, mechanical, and HVAC disciplines designed to prepare students for success in this challenging environment.

For those interested in pursuing this specialty, the following options are available:

- Associate in Applied Science - Engineering Technology - Facilities Maintenance Specialty (66 Credit Hours) (ICCB Code: AAS 3000)
- Basic Certificate - Building Maintenance (26 Credit Hours) (ICCB Code: C 300J)
- Certificate - Facilities Maintenance Technician (50 Credit Hours) (ICCB Code: C 300K)

| Eng. Tech.-Facilities Maintencance Spec. COURSES | Credit Hours | AAS Engt. Tech. | Facilities Maint. Cert. | Building Maint. Cert. |
| :---: | :---: | :---: | :---: | :---: |
| DRAFT 215: $\begin{array}{ll}\text { AutoCAD (or ENGT } 102 \text { ) } \\ \text { (formerly MFG 100) }\end{array}$ | 3 | X | X |  |
| ENGT 101: $\begin{aligned} & \text { Motor Control Fundamentals } \\ & \text { (formerly ELTRN 109) }\end{aligned}$ | 4 | X | X | X |
| ENGT 103: $\begin{aligned} & \text { Fluid Power Fundamentals } \\ & \text { (formerly MEC S 112) }\end{aligned}$ | 3 | X | X | X |
| ENGT 105: $\begin{aligned} & \text { Occupational Safety } \\ & \text { (formerly IND S 100) }\end{aligned}$ | 3 | X | X | X |
| ENGT 111: $\begin{aligned} & \text { Motor Control Applications } \\ & \text { (formerly ELTRN 113) }\end{aligned}$ | 4 | X | X | X |
| ENGT 120:Process Control Fundamentals <br> (formerly ELTRN 201) | 3 | X | X |  |
| ENGT 212: $\begin{aligned} & \text { Motor Control Systems } \\ & \text { (formerly ELTRN 151) }\end{aligned}$ | 4 | X | X |  |
| ENGT 232:Rigging \& Cranes <br> (formerly MEC S 230) | 2 | X | X |  |
| $\begin{array}{ll}\text { ENGT 290: } & \text { Work Experience Practicum } \\ & \& \text { Seminar (or ENGT 295) }\end{array}$ | 3 | X | X |  |
| ENGL 110: Communicating in the Workplace | 3 | X |  |  |
| HVAC 100: Refrigeration Fundamentals | 3 | X | X | X |
| HVAC 102: Refrigeration Applications | 3 | X | X | X |
| HVAC 106: Tools \& Piping | 3 | X | X | X |
| HVAC 140: Troubleshooting Air Conditioning Systems | 3 | X | X | X |
| HVAC 242: Residential Heating Systems | 3 | X | X |  |
| HVAC 250: Commercial Air Conditioning | 3 | X | X |  |
| HVAC 252: Commercial Heating Systems | 3 | X | X |  |
| MATH 104: Technical Mathematics (or MATH 110*) | 4 | X |  |  |
| SPCH 120:Business \& Professional Speaking <br> (or SPCH 101*) | 3 | X |  |  |
| Social Science Elective (ECON 231 recommended) | 3 | X |  |  |
| General Education Electives (PHYS 100 recommended) | 3 | X |  |  |
| Total |  | 66 | 50 | 26 |

X = Required

* Students who are considering transfer options should take this course.

A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Engineering Technology - Facilities Maintenance Specialty AAS sequence Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGT 101 | F | ENGT 105 | S | ENGL 110 | F, S, Su | Draft 215 | F, S |
| ENGT 103 | F, S | ENGT 111 | F, S | ENGT 212 | F | ENGT 232 | S |
| HVAC 100 | F | ENGT 120 | S | HVAC 242 | F, S | ENGT 290 | F, S |
| HVAC 102 | F | HVAC 106 | S | SPCH 120 | F, S, Su | HVAC 250 | S |
| MATH 104 | F, S, Su | HVAC 140 | S | Soc. Science F, S, Su Elec. |  | HVAC 252 <br> Gen Ed. Elec. | F, S, Su F, S, Su |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Engineering Technology - Fluid Power Systems Specialty

General Description: This concentration prepares the student for designing, assembling, testing, troubleshooting, servicing, and selling fluid power systems. Typically, students will find careers as mobile hydraulics technicians, industrial hydraulics technicians, or pneumatics technicians. Students completing this concentration will be especially attractive to employers who use a high degree of automation. Several professional certifications exist for individuals who are skilled in fluid power. This concentration is suited for students who want to integrate scientific principles and practical energy transmission systems.

For those interested in pursuing this specialty, the following options are available:

- Associate in Applied Science - Engineering Technology - Fluid Power Systems Specialty
(68 Credit Hours) (ICCB Code: AAS 3000)
- Basic Certificate - Industrial Maintenance (27 Credit Hours) (ICCB Code: C 300B)
- Basic Certificate - Fluid Power Systems (52 Credit Hours) (ICCB Code: C 300E)

| Eng. Tech. - Fluid Power Sys. Spec. COURSES | Credit Hours | Fluid Power Systems AAS | Industrial Maintenance Cert. | Fluid <br> Power Systems Cert. |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} \text { DRAFT 215: } & \text { AutoCAD (or ENGT 102) } \\ & \text { (formerly MFG 100) }\end{aligned}$ | 3 | X | X | X |
| ENGT 100: Industrial Processes (formerly MFG 120) | 3 | X | X | X |
| ENGT 101: $\begin{aligned} & \text { Motor Control Fundamentals } \\ & \text { (formerly ELTRN 109) }\end{aligned}$ | 4 | X | X | X |
| ENGT 103: $\begin{aligned} & \text { Fluid Power Fundamentals } \\ & \text { (formerly MEC S 112) }\end{aligned}$ | 3 | X | X | X |
| ENGT 104: CNC Fundamentals (formerly CIM 102) | 3 | X | X | X |
| ENGT 105: Occupational Safety (formerly IND S 100) | 3 | X | X | X |
| ENGT 111: $\begin{aligned} & \text { Motor Control Applications } \\ & \text { (formerly ELTRN 113) }\end{aligned}$ | 4 | X | X | X |
| ENGT 120: $\begin{aligned} & \text { Process Control Fundamentals } \\ & \text { (formerly ELTRN 201) }\end{aligned}$ | 3 | X |  | X |
| ENGT 130: $\begin{aligned} & \text { Power Transmission Fundamentals } \\ & \text { (formerly MEC S 101) }\end{aligned}$ |  | 4 | X | X X |
| ENGT 212: $\begin{aligned} & \text { Motor Control Systems } \\ & \text { (formerly ELTRN 151) }\end{aligned}$ |  | 4 | X | X |
| ENGT 231: Piping Fundamentals (formerly MEC S 240) | 2 | X |  | X |
| ENGT 233: Lubrication Systems (formerly MEC S 220) | 2 | X |  | X |
| ENGT 234: Pump Applications (formerly MEC S 210) | 2 | X |  | X |
| ENGT 240: $\begin{aligned} & \text { Hydraulic Applications } \\ & \text { (formerly MEC S 110) }\end{aligned}$ | 3 | X |  | X |
| ENGT 241: Pneumatic Applications (formerly MEC S 111) | 3 | X |  | X |

## 122 Instructional Programs

| Eng. Tech. - Fluid Power Sys. Spec. | Fluid <br> Power <br> Credit <br> Hours | Industrial <br> AAS | Fluid <br> Pointenance <br> Cowtificate |
| :--- | :---: | :---: | :---: | :---: |
| Systems |  |  |  |
| Certificate |  |  |  |$|$

X = Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Engineering Technology - Fluid Power Systems Specialty AAS sequence Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGT 100 | F | DRAFT 215 | $\mathrm{F}, \mathrm{S}, \mathrm{Su}$ | ENGL 110 | F,S,Su | ENGT 120 | S |
| ENGT 101 | F | ENGT 105 | S | ENGT 212 | F | ENGT 231 | S |
| ENGT 103 | F,S | ENGT 111 | F, S | ENGT 233 | F | SPCH 120 | F, S, Su |
| ENGT 104 | F | ENGT 130 | S | ENGT 234 | F | ENGT 242 | S |
| MATH104 | F,S,Su | ENGT 240 | S | ENGT 241 | F | ENGT 299 | S |
| Soc. Science | F,S,Su | Gen Ed. Elec. | F,S,Su |  |  |  |  |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Engineering Technology - Instrumentation Systems Specialty

General Description: This specialty prepares the student to install, calibrate, maintain, tune, troubleshoot, and repair instrumentation, components, and control loops in such industries as food processing, pharmaceuticals, aluminum, chemical manufacturing, semiconductor manufacturing, petroleum refining, pulp and paper, and power generation.

For those interested in pursuing this specialty, the following options are available:
-Associate in Applied Science - Engineering Technology - Instrumentation Systems Specialty
(68 Credit Hours) (ICCB Code: AAS 3000)
-Basic Certificate - Industrial Maintenance ( 27 Credit Hours) (ICCB Code: C 300B)
-Basic Certificate - Instrumentation (52 Credit Hours) (ICCB Code: C 300F)

| Eng. Tech.- Insturmentation Systems Spec. COURSE | Credit <br> Hours | Instru. Systems AAS | Industrial Maintenance Certificate | Instru. Certificate |
| :---: | :---: | :---: | :---: | :---: |
| DRAFT 215:AutoCAD (or ENGT 102) (formerly MFG 100) | 3 | X | X | X |
| ENGT 100: Industrial Processes (formerly MFG 120) | 3 | X | X | X |
| ENGT 101: Motor Control Fundamentals (formerly ELTRN 109) | 4 | X | X | X |
| ENGT 103: Fluid Power Fundamentals (formerly MEC S 112) | 3 | X | X | X |
| ENGT 104: CNC Fundamentals (formerly CIM 102) | 3 | X | X | X |
| ENGT 105: Occupational Safety (formerly IND S 100) | 3 | X | X | X |
| ENGT 111: Motor Control Applications (formerly ELTRN 113) | 4 | X | X | X |
| ENGT 120: Process Control Fundamentals (formerly ELTRN 201) | 3 | X |  | X |
| ENGT 130: Power Transmission Fundamentals (formerly MEC S 101) | 4 | X | X | X |
| ENGT 210: PLC Fundamentals (formerly ELTRN 204) | 4 | X |  | X |
| ENGT 211: PLC Applications | 3 | X |  | X |
| ENGT 212: Motor Control Systems (formerly ELTRN 151) | 4 | X |  | X |
| ENGT 214: Motion Control Applications (formerly ELTRN 231) | 3 | X |  | X |
| ENGT 220: Process Control Applications | 3 | X |  | X |
| ENGT 231:Piping Fundamentals (formerly MEC S 240) | 2 | X |  | X |
| ENGT 299: Systems Integration (or ENGT 290 or ENGT 295) | 3 | X |  | X |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |
| MATH 104:Technical Mathematics (or MATH 110*) | 4 | X |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |
| Social Science Elective (ECON 231 recommended) | 3 | X |  |  |
| General Education Electives (PHYS 100 recommended) | 3 | X |  |  |
| Total |  | 68 | 27 | 52 |

X = Required

* Students who are considering transfer options should take this course.

A grade of "C" or better in ENGL 101 is required for the AAS degree.]
Suggested full-time Engineering Technology - Instrumentation Systems Specialty AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  |  | 2nd Semester |  | 3rd Semester |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Engineering Technology - Machine Repair Specialty

General Description: This specialty prepares students to maintain and repair machinery in a plant or factory. They are also responsible for situating and installing new machines. This concentration is suited for students who have an interest in monitoring, diagnosing, and repairing complex machine tools such as CNC machining centers, feedback control fabrication equipment, plastics molding equipment, and industrial robots. Machine repair technicians are skilled with hand tools, and diagnostic instruments, and consistently employ best maintenance practices.

For those interested in pursuing this specialty, the following options are available:

- Associate in Applied Science - Engineering Technology - Machine Repair Specialty (69 Credit Hours) (ICCB Code: AAS 3000)
- Basic Certificate - Industrial Maintenance (27 Credit Hours) (ICCB Code: C 300B)
- Basic Certificate - Machine Repair (53 Credit Hours) (ICCB Code: C 300G)

| Eng. Tech.- Machine Repair Spec. <br> COURSES | Credit <br> Hours | Machine <br> Repair <br> AAS | Industrial <br> Maintenance <br> Certificate | Machine <br> Repartificate |
| :--- | :---: | :---: | :---: | :---: |
| DRAFT 215: Auto Cad (or Engt 102) <br> ENGT 100: Industrial Processes (formerly MFG 120) <br> ENGT 101: Motor Control Fundamentals <br> (formerly ELTRN 109) | 3 | X | X | X |
| ENGT 102: Blueprint Reading (formerly MFG 100) |  |  |  |  |
| (or DRAFT 215) |  |  |  |  |$\quad \mathrm{X}$ X

$X=$ Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Engineering Technology - Machine Repair Specialty AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGT 100 F | ENGL 110 | F,S,Su | ENGT 214 | F | ENGT 215 | S |
| ENGT 101 F | ENGT 102 | F, S | ENGT 230 | F | ENGT 231 | S |
| ENGT $103 \mathrm{~F}, \mathrm{~S}$ | ENGT 105 | S | ENGT 233 | F | ENGT 232 | S |
| ENGT 104 F | ENGT 111 | S | SPCH 120 | F,S,Su | ENGT 235 | S |
| MATH $104 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | ENGT 130 | S | WELD 195 | F,S,Su | ENGT 242 | S |
|  |  |  | Social Science |  | ENGT 299 | S |
|  |  |  | Elec. | F,S,Su | Gen Ed. E | F,S,S |

F=fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Engineering Technology - Manufacturing Engineering Technology Specialty <br> General Description: This specialty prepares the students to work with engineers so that they may

 design, test, and assess products for purposes of making their company's products better, faster, safer, and less expensive. They make sketches and rough layouts, record data, make computations, analyze results, and write reports. Manufacturing Engineering Technicians work closely with production and engineering to set up, inspect, and troubleshoot production processes and machines. They identify and select materials based on production requirements and work closely with computer-aided design equipment (CAD/CAM). Further, they may conduct time studies, complete cost estimates, utilize computer software to aid in solving manufacturing problems, formulate plant layout requirements, understand management control systems, justify and select quality equipment and automated systems, and design a total product manufacturing system.For those interested in pursuing this specialty, the following options are available:
Associate in Applied Science - Engineering Technology - Manufacturing Engineering Technology Specialty (66 Credit Hours) (ICCB Code: AAS 3000)

- Basic Certificate - Industrial Maintenance (27 Credit Hours) (ICCB Code: C 300B)
- Basic Certificate - Manufacturing Engineering Technology (47 Credit Hours) (ICCB Code: C 300 H )

| Eng. Tech. - Manufacturing Eng. Tech. Spec. COURSES | Credit Hours | Manu. Engineering Technology AAS | Industrial Maintenance Certificate | Manu. Engineering Technology Certificate |
| :---: | :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X |  | X |
| DRAFT 215: AUTO CAD | 3 |  | X |  |
| DRAFT 236: Pro-Engineer or DRAFT 215 | 4 | X | X | X |
| ENGT 100: Industrial Processes (formerly MFG 120) | 3 | X | X | X |
| ENGT 101: $\begin{aligned} & \text { Motor Control Fundamentals } \\ & \text { (formerly ELTRN 109) }\end{aligned}$ | 4 | X | X | X |
| ENGT 102:Blueprint Reading <br> (formerly MFG 100) (or DRAFT 101) | 3 | X |  |  |
| ENGT 103: $\begin{aligned} & \text { Fluid Power Fundamentals } \\ & \text { (formerly MEC S 112) }\end{aligned}$ | 3 | X | X | X |
| ENGT 104: CNC Fundamentals (formerly CIM 102) | 3 | X | X | X |
| ENGT 105: Occupational Safety (formerly IND S 100) | 3 | X | X | X |
| ENGT 111: $\begin{aligned} & \text { Motor Control Applications } \\ & \text { (formerly ELTRN 113) }\end{aligned}$ | 4 | X | X | X |
| ENGT 130: $\begin{array}{ll}\text { Power Transmission Fundamentals } \\ \text { (formerly MEC S 101) }\end{array}$ | 4 | X | X | X |
| ENGT 160: Metrology | 2 | X |  | X |
| ENGT 200: Industrial Materials (formerly MFG 110) | 3 | X |  |  |
| ENGT 213: $\begin{aligned} & \text { Robotic Fundamentals } \\ & \text { (formerly ROBOT 101) }\end{aligned}$ | 3 | X |  | X |
| ENGT 252: CAM Applications (formerly CIM 101) | 3 | X |  |  |
| ENGT 260: $\begin{array}{ll}\text { Quality Fundamentals } \\ & \text { (formerly PROD C 130) }\end{array}$ | 3 | X |  | X |
| ENGT 299:Systems Integration <br> (or ENGT 290 or ENGT 295) | 3 | X |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |

## 126 Instructional Programs

| Eng. Tech. - Manufacturing Eng. Tech. Spec. <br> COURSES (continued) | Credit <br> Hours | Manu. <br> Engineering <br> Technology <br> AAS | Industrial <br> Maintenance <br> Certificate | Manu. <br> Engineering <br> Technology <br> Certificate |
| :--- | :---: | :---: | :---: | :---: |
| MATH 104: Technical Mathematics (or MATH 110*) | 4 | X |  |  |
| SPCH 120: Business \& Professional Speaking |  |  |  |  |
| (or SPCH 101*) |  |  |  |  |

X = Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Engineering Technology - Manufacturing Engineering Technology Specialty AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGT 100 F | ENGT $102 \mathrm{~F}, \mathrm{~S}$ | DRAFT 236 | F,S,Su | CIS 110 | F,S,Su |
| ENGT 101 F | ENGT 105 S | ENGL 110 | $\mathrm{F}, \mathrm{S}, \mathrm{Su}$ | ENGT 252 | S |
| ENGT $103 \mathrm{~F}, \mathrm{~S}$ | ENGT 111 S | ENGT 200 | F | SPCH 120 | F,S,Su |
| ENGT 104 F | ENGT 130 S | ENGT 213 | F | Gen Ed. Elec. F,S,Su |  |
| MATH 104 F,S,Su | ENGT 160 S | ENGT 260 | F |  |  |
|  |  | Soc. Science | F,S,Su |  |  |
|  |  | Elec. |  |  |  |
| $\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring | $\mathrm{Su}=$ summer | as needed |  |  |  |

## Engineering Technology - Mechanical Systems Specialty

General Description: The Mechanical Systems Specialty prepares the student to install, monitor, troubleshoot, and repair mechanical systems found in industrial plants, public buildings, and utility stations. This concentration is suited for students interested in areas such as rigging and cranes, mechanical drives, compressors, pump systems, pipe systems, and lubrication systems. An emphasis is placed on predictive maintenance technologies as this is becoming a popular method to streamline industrial maintenance operations. Students will use various instruments to collect and analyze data from mechanical systems.

For those interested in pursuing this specialty, the following options are available:

- Associate in Applied Science - Engineering Technology - Mechanical Systems Specialty (67

Credit Hours) (ICCB Code: AAS 3000)

- Basic Certificate - Industrial Maintenance ( 27 Credit Hours) (ICCB Code: C 300B)
- Basic Certificate - Mechanical Systems (51 Credit Hours) (ICCB Code: C 300I)

| Eng. Tech.- Mechanical Sysems Spec. COURSES | Credit Hours | Mech. Systems AAS | Industrial <br> Maintenance Certificate | Mech Systems Certificate |
| :---: | :---: | :---: | :---: | :---: |
| DRAFT 215: AutoCAD (or ENGT 102) (formerly MFG 100) | 3 | X | X | X |
| ENGT 100: Industrial Processes (formerly MFG 120) | 3 | X | X | X |
| ENGT 101: Motor Control Fundamentals | 4 | X | X | X |
| ENGT 103: Fluid Power Fundamentals (formerly MEC S 112 | 3 | X | X | X |
| ENGT 104: CNC Fundamentals (formerly CIM 102) | 3 | X | X | X |
| ENGT 105: Occupational Safety (formerly IND S 100) | 3 | X | X | X |
| ENGT 111: Motor Control Applications (formerly ELTRN 113) | 4 | X | X | X |
| ENGT 130: Power Transmission Fundamentals (formerly MEC S 101) | 4 | X | X | X |
| ENGT 150: Machining Fundamentals (formerly MACH 101) | 2 | X |  | X |
| ENGT 230: Power Transmission Applications | 3 | X |  | X |
| ENGT 231: Piping Fundamentals (formerly MEC S 240) | 2 | X |  | X |
| ENGT 232: Rigging \& Cranes (formerly MEC S 230) | 2 | X |  | X |
| ENGT 233: Lubrication Systems (formerly MEC S 220) | 2 | X |  | X |
| ENGT 234: Pump Applications (formerly MEC S 210) | 2 | X |  | X |
| ENGT 235: Industrial Machinery Repair (formerly MEC S 201) | 2 | X |  | X |
| ENGT 242: Fluid Power Systems (formerly MEC S 250) | 3 | X |  | X |
| ENGT 299: Systems Integration | 3 | X |  | X |
| ENGL 110: Communicating in the Workplace (or ENGL $101^{*}$ ) | 3 | X |  |  |
| MATH 104: Technical Mathematics (or MATH 110*) | 4 | X |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |
| WELD 195: Industrial Welding Fundamentals | 3 | X |  | X |
| Social Science Elective (ECON 231 recommended) | 3 | X |  |  |
| General Education Elective (PHYS 100 recommended) | 3 | X |  |  |
| Total |  | 67 | 27 | 51 |

$X=$ Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Engineering Technology - Mechanical Systems Specialty AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGT 100 F | DRAFT 215 | F,S,Su | ENGL 110 | F, S, Su | ENGT 231 | S |
| ENGT 101 F | ENGT 105 | S | ENGT 230 | F | ENGT 232 | S |
| ENGT 103 F,S | ENGT 111 | S | ENGT 233 | F | ENGT 235 | S |
| ENGT 104 F | ENGT 130 | S | ENGT 234 | F | ENGT 242 | S |
| MATH 104 F,S,Su | ENGT 150 | S | WELD 195 | F,S,Su | ENGT 299 | S |
|  |  |  | Soc. Science | F,S,Su | SPCH 120 | F,S,Su |
|  |  |  | Elec. |  | Gen Ed. Ele | .F,S,Su |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Fire Science

General Description: This program offers an in-depth study of Fire Science and safety with opportunities to specialize. It is designed for the pre-employment student, the employed firefighter, or the volunteer firefighter who is seeking to augment present job skills. The broad educational background prepares students for employment as highly specialized and thoroughly schooled Fire Science and safety technicians. In addition to the required Fire Science courses, students are able to select a field of specialization including fire science education, fire investigation, and emergency rescue-technician. Jobs require performing heavy work indoors and outdoors for prolonged periods under dangerous conditions.
Aptitudes: Excellent health, physical stamina, agility, good vision, stability, mental alertness, and a mechanical aptitude are all needed. An ability to work well with others and to follow orders is important.
Outlook: Average employment growth is expected in Illinois. Most openings will come from a need to replace current workers. Competition is keen for firefighter positions.

This is an occupational training program. Some courses may not transfer to four-year institutions.
For those interested in pursuing this concentration, the following options are available:

- Associate in Applied Science - Fire Science (62 Credit Hours) (ICCB Code: AAS 0017)
- Advanced Certificate - Fire Science Technology Specialist (42 Credit Hours) (ICCB Code: AC 017A)
- Certificate - Fire Technician (15 Credit Hours) (ICCB Code: BC 017C)
- Certificate - Fire Company Officer (15 Credit Hours) (ICCB Code: BC 017B)
- Certificate - Fireground Commander (9 Credit Hours) (ICCB Code: BC 017E)
- Certificate - Fire Inspector (9 Credit Hours) (ICCB Code: BC 017D)

A grade of "C" or better in English 101 is required for an AAS degree.
Suggested full-time Fire Science AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1 st Semester | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRE 110 F | FIRE 112 | S | FIRE 130 | F | FIRE 230 | S |
| FIRE 111 F | FIRE 113 | S | FIRE 170 | F | FIRE 250 | S |
| ENGL 110 F,S,Su | FIRE 120 | S | FIRE 200 | F | FIRE 280 | S |
| PSYCH100 F,S | MATH104 | F,S,Su | FIRE 270 | F | SPCH 101 | F,S,Su |
| CIS 110 F,S,Su | SOCIO 110 | F,S,Su | FIRE ELEC | AN |  |  |
| $\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring | $\mathrm{Su}=$ summer | $\mathrm{AN}=\mathrm{a}$ | ded |  |  |  |


| Fire Science COURSES | Credit Hours | Fire Science AAS | Technology Spec. Adv. Cert. | Fire Company Officer Cert. | Fire Technician Cert | Fireground Commander Cert. | Fire Inspector Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL110: Communicating in the Workplace | 3 | X |  |  |  |  |  |
| CIS 110: Business Applications for Microcomputers | 3 | X |  |  |  |  |  |
| FIRE 110: Introduction to Fire Science (Mod .A) | 4 | X | X |  | X |  |  |
| FIRE 111: Techniques of Firefighting $1(\operatorname{Mod}$ B) | 4 | X | X |  | X |  |  |
| FIRE 112: Techniques of Firefighting $2(\operatorname{Mod} \mathrm{C})$ | 4 | X | X |  | X |  |  |
| FIRE 113: Techniques of Firefighting 3 (Mod C Extension) | 3 | X | X |  | X |  |  |
| FIRE 120: Fire Prevention Principles 1 | 3 | X | X | X |  |  | X |
| FIRE 130: Fire Service Laws \& Regulations | 3 |  | X |  |  |  | X |
| FIRE 140: Fire Service Instructor-Basic | 3 |  |  | X |  |  |  |
| FIRE 170: Rescue/Roadway Extrication | 3 | X | X |  |  |  |  |
| FIRE 200: Tactics and Strategy | 3 | X | X | X |  | X |  |
| FIRE 210: Tactics and Strategy II | 3 | X | X |  |  | X |  |
| FIRE 230: Fire Service Hydraulics | 4 | X | X |  |  |  |  |
| FIRE 250: Hazardous Materials | 3 | X | X |  |  |  |  |
| FIRE 260: Fire Investigation | 3 |  |  |  |  |  | X |
| FIRE 270: Management 1 | 3 | X | X | X |  | X |  |
| FIRE 280: Management 2 | 3 | X | X | X |  |  |  |
| MATH 104: Technical Mathematics (or MATH 117) | 4 | X |  |  |  |  |  |
| PSYCH100: Practical Psychology | 3 | X |  |  |  |  |  |
| SOCIO 110: Introduction to Sociology (or SOCIO100) | 3 | X |  |  |  |  |  |
| SPCH 101: Principles of Speech | 3 | X |  |  |  |  |  |
| Subtotal |  | 59 | 43 | 15 | 15 | 9 | 9 |
| Directed Electives: <br> Select 3 credit hours for AAS |  |  |  |  |  |  |  |
| FIRE 130: Fire Service Laws and Regulations | 3 | Y |  |  |  |  |  |
| FIRE 140: Fire Service Instructor-Basic | 3 | Y |  |  |  |  |  |
| FIRE 220: Fire Instructor II | 3 | Y |  |  |  |  |  |
| FIRE 260: Fire Investigation | 3 | Y |  |  |  |  |  |
| FIRE 285: Fire Science Management III | 3 | Y |  |  |  |  |  |
| FIRE 286: Fire Service Management IV | 3 | Y |  |  |  |  |  |
| FIRE 297: Fire Science Technologies | 3 | Y |  |  |  |  |  |
| Subtotal |  | 3 |  |  |  |  |  |
| Total |  | 62 | 43 | 15 | 15 | 9 | 9 |

## Graphic Arts

General Description: Graphic designers plan, analyze, and create visual solutions to communications problems. They use a variety of print, electronic, and film media and technologies to execute a design that meet clients' communication needs. They consider cognitive, cultural, physical, and social factors in planning and executing designs appropriate for a given context. Graphic designers use computer software to develop the overall layout and production design of magazines, newspapers, journals, corporate reports, and other publications. They also produce promotional displays and marketing brochures for products and services, design distinctive logos for products and businesses, and develop signs and signage systems-called environmental graphics-for business and government. An increasing number of graphic designers are developing material for Internet Web pages, computer interfaces, and multimedia projects. Graphic designers also produce the credits that appear before and after television programs and movies.
Aptitudes: Creativity is crucial in all design occupations. Individuals in the design field must be creative, imaginative, and persistent and must be able to communicate their ideas in writing, visually, and verbally. Designers need to be well read, open to new ideas and influences, and quick to react to changing trends. Problem-solving skills and the ability to work independently and under pressure are important traits. People in this field need self-discipline to start projects on their own, to budget their time, and to meet deadlines and production schedules. Good business sense and sales ability also are important, especially for those who freelance or run their own business.
Outlook: Among the design specialties, graphic designers are projected to provide the most new jobs. Demand for graphic designers should increase because of the rapidly expanding market for Webbased information and expansion of the video entertainment market, including television, movies, video, and made-for-Internet outlets. (Information from Occupational Outlook Handbook, 20042005.)

This is an occupational training program. Some courses may not transfer to four-year institutions.

| Graphic Arts COURSES | Credit Hours | Graphic <br> Arts AAS <br> ICCB Code: <br> AAS0122 | Graphic Arts Certificate ICCB Code: C2122 | Graphics Arts Desktop Pub. Specialty ICCB Code: C2123 | Graphics Arts <br> Multimedia Specialty ICCB Code: C2124 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ART 101: Introduction to Drawing | 3 | X | X | X | X |
| ART 111: Design 1 | 3 | X | X | X | X |
| ART 125: Photography: Black and White | 3 | X |  | X |  |
| ART 127: Digital Photography | 3 | X |  |  | X |
| ART 140: Principles of Graphic Design | 3 | X | X | X | X |
| ART 145: Typography | 3 | X |  | X | X |
| ART 151: Computer Graphics 1 | 3 | X | X | X | X |
| ART 152: Computer Graphics 2 | 3 | X | X | X | X |
| ART 160: 3-D Computer Design/Multimedia | 3 | X |  |  | X |
| ART 230: Art History 3: Modern Art | 3 | X |  |  |  |
| ART 240: History of Design | 3 | X |  | X |  |
| ART 251: Computer Graphics 3 | 3 | X |  | X | X |
| ART 252: Graphics Arts 4: <br> Self-Promotion/Portfolio Prep. | 3 | X |  |  |  |
| ART 290: Work Experience/Internship | 2-5 | X |  |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |
| MATH 110: Concepts of Mathematics (or MATH 116) | 4 | X |  |  |  |
| P REL 100: Human Relations | 3 | X |  |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101)* | 3 | X |  |  |  |
| Subtotal |  | 54-57 | 15 | 27 | 27 |
| Directed Electives (9 hours): Choose at least one business course and two additional courses from the following: <br> ART 102: Introduction to Drawing 2 | 3 | Y |  |  |  |
| ART 112: Design 2 | 3 | Y |  |  |  |
| ART 113: Figure Drawing 1 | 3 | Y |  |  |  |
| ART 126: Photography 2: Black and White | 3 | Y |  |  |  |
| ART 261: Illustration | 3 | Y |  |  |  |
| BUS 100: Introduction to Business | 3 | Y |  |  |  |
| BUS 225: Small Business Management | 3 | Y |  |  |  |
| BUS 240: Marketing Fundamentals | 3 | Y |  |  |  |
| BUS 245: Integrated Marketing Communications | 3 | Y |  |  |  |
| DRAFT 215: AutoCad | 3 | Y |  |  |  |
| Subtotal |  | 9 | 0 | 0 | 0 |
| Total |  | 63-66 | 15 | 27 | 27 |

X= Required $\quad$ Y=Directed Elective
*Students who are considering transfer options should take this course.
*A grade of "C" or better in ENGL 101 is required for the AAS degree.

## Suggested full-time Graphic Arts AAS sequence

Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  |  | 2nd Semester |  |  | 3rd Semester |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## Heating, Ventilation, Air-Conditioning, \& Refrigeration

General Description: This program is designed to prepare students for a career in the heating, ventilation, air conditioning and refrigeration industry. Toward this end, the comprehensive curriculum blends "leading-edge" HVACR theory with a large amount of practical, hands-on experiences for the purpose of developing confident, professional HVACR technicians/installers. In addition, this program is ideal for existing technicians/installers who need a thorough review of HVACR fundamentals or experienced technicians/installers who would like a refresher course. This program has three primary areas of concentration: Residential Heating \& Air Conditioning, Commercial Heating \& Air Conditioning, and Refrigeration. Additionally, career-laddering certificates are offered in each of these areas.
Aptitudes: This field requires the ability to work well with others as well as the ability to work independently. The HVACR Technician will need to enjoy working with the public whether in a service or maintenance company or in a factory on the maintenance crew. The typical technician has a curious, analytical mind and enjoys problem solving. As technology continues to grow at an unprecedented rate, the trained technician will need to continue to learn once in the field.
Outlook: In today's accelerating information-based economy, there is a high demand for people who have these skills. Job prospects for highly skilled heating, air-conditioning, and refrigeration mechanics and installers are expected to be good, particularly for those with technical school or formal education training to install, remodel, and service new and existing systems. In addition to job openings created by employment growth, thousands of openings will result from the need to replace workers who transfer to other occupations or leave the labor force. The National Bureau of Labor Statistics suggests that the industry will grow somewhere between $10 \%$ and $20 \%$ by 2010 . They also suggest that wages for HVACR mechanics/technicians range from $\$ 9.71$ to $\$ 24.58$ per hour. Midrange salary for Illinois is $\$ 14.52$ per hour.

This is an occupational training program. Some of the courses may not transfer to four-year institutions.

For those interested in pursuing a certificate or degree, the following two career-laddering options are available:

- Associate in Applied Science - Heating, Ventilation, Air-Conditioning, \& Refrigeration (64 Credit Hours) (ICCB Code: AAS 058A)
- Basic Certificate - Commercial Heating, Ventilation, Air Conditioning (27 Credit Hours) (ICCB Code: C 058B)
- Basic Certificate - Residential Heating, Ventilation, Air Conditioning (27 Credit Hours) (ICCB Code: C 058C)
- Basic Certificate - Refrigeration (30 Credit Hours) (ICCB Code: C 058D)

| HVAC \& R COURSES | Credit Hours | AAS | Commercial Cert. | Residential Cert. | Refrigeration Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X |  |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |
| HVAC 100: Refrigeration Fundamentals | 3 | X | X | X | X |
| HVAC 102: Refrigeration Applications | 3 | X | X | X | X |
| HVAC 106: Tools \& Piping (formerly HVAC 200) | 3 | X | X | X | X |
| HVAC 130: Electricity Fundamentals | 3 | X | X | X | X |
| HVAC 132: Control Applications (formerly HVAC 104) | 3 | X | X | X | X |
| HVAC 140: Troubleshooting Air Conditioning Systems (formerly HVAC 105) | 3 | X | X | X | X |
| HVAC 202: Residential \& Self-Contained Refrigeration | 3 | X |  |  | X |
| HVAC 204: Commercial Refrigeration | 3 | X |  |  | X |
| HVAC 206: Troubleshooting Refrigeration Systems (formerly HVAC 215) | 3 | X |  |  | X |
| HVAC 230: Motors \& Controls | 3 | X | X | X | X |
| HVAC 240: Residential Air Conditioning (formerly HVAC 210) | 3 | X |  | X |  |
| HVAC 242: Residential Heating Systems (formerly HVAC 220) | 3 | X |  | X |  |
| HVAC 250: Commercial Air Conditioning | 3 | X | X |  |  |
| HVAC 252: Commercial Heating Systems (formerly HVAC 221) | 3 | X | X |  |  |
| HVAC 290: Work Experience \& Seminar (or HVAC 295) | 3 | X |  |  |  |
| MATH 104:Technical Mathematics | 4 | X |  |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Fine Arts/ Humanities, Math, Science, or Social Science | 6 | X |  |  |  |
| Total |  | 64 | 27 | 27 | 30 |

X = Required

* Students considering transfer options should take this course.

A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Heating, Ventilation, Air-Conditioning, Refrigeration AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 110 F,S,Su | ENGL 110 | F,S,Su | HVAC 202 | F | HVAC 204 | S |
| HVAC 100 F | HVAC 106 | S | HVAC 230 | F | HVAC 206 | S |
| HVAC 102 F | HVAC 132 | S | HVAC 240 | F | HVAC 250 | S |
| HVAC 130 F | HVAC 140 | S | HVAC 242 | F | HVAC 252 | S |
| MATH $104 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | Gen. Ed Elec (2) | F,S,Su | SPCH 120 | F,S,Su | HVAC 290 |  |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Horticulture

General Description: This program is designed to prepare students for a career in the horticulture industry that includes ornamental nurseries and greenhouses, landscape design and construction, lawn and tree care, golf course management, sod production, retail garden centers, florists and interiorscapes.
Aptitudes: Individuals in this field must enjoy planting, building, constructing, painting, lettering, designing, and working with their hands. Individuals should like to operate all types of power equipment and landscape tools and be able to make and carry out decisions. Individuals must be able to work with people and plants in an outdoor setting.
Outlook: The horticulture industry in Illinois is widespread, playing a critical role in the environment by providing a vast array of landscape products and services. The horticulture industry represents one of the fastest growing service-related occupations in Illinois. Future employment is open for qualified individuals.

These are occupational training programs. Some courses may not transfer to four-year institutions.
For those interested in pursuing a certificate or degree, the following career-laddering options are available:
-Associate in Applied Science - Horticulture (62 Credit Hours) (ICCB Code: AAS 0108)
-Basic Certificate - Floral Design (18 Credit Hours) (ICCB Code: C 108A)
-Basic Certificate - Greenhouse (18 Credit Hours) (ICCB Code: C 108B)
-Basic Certificate - Landscape \& Turf (21 Credit Hours) (ICCB Code: C 108C)

| Horticulture COURSES | Credit Hours | Floriculture AAS | Ornamental AAS | Floral Design | Greenhouse Cert. | Landscape Turf Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X | X |  |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X | X |  |  |  |
| HORT 100: Horticulture Science (formerly HORT 190) | 4 | X | X |  |  |  |
| HORT 110: Turf Management | 3 |  | X |  |  | X |
| HORT 111: Turf Production (formerly HORT 104) | 3 |  | X |  |  | X |
| HORT 120: Landscape Plant ID (formerly HORT 102) | 3 | X | X |  |  | X |
| HORT 121: Landscape Design Principles (formerly HORT 103) | 3 | X | X |  |  | X |
| HORT 145: Floral Design | 3 | X |  | X |  |  |
| HORT 146: Silk \& Dry Arrangements | 3 | X |  | X |  |  |
| HORT 150: Garden Center | 3 | X | X | X | X |  |
| HORT 200: Perennial Plant Material | 3 | X | X |  | X |  |
| HORT 201: Interior Plantscaping (formerly HORT 170) | 3 | X | X |  | X |  |
| HORT 211: Turf Equipment (formerly HORT 105) | 3 |  | X |  |  | X |
| HORT 221: Landscape Design \& Construction (formerly HORT 191) | 3 |  | X |  |  | X |
| HORT 230: Greenhouse Operations (formerly HORT 150 | 3 | X | X |  | X |  |
| HORT 231: Bedding \& Plant Prod. | 3 | X | X |  | X |  |
| HORT 245: Sympathy Design Techniques | 3 | X |  | X |  |  |
| HORT 246: Wedding Flowers | 3 | X |  | X |  |  |
| HORT 290: Work Experience Practicum \& Seminar (or HORT 295*) | 3 | X | X | X | X | X |


| Horticulture COURSES con. | Credit <br> Hours | Floriculture <br> AAS | Ornamental <br> AAS | Floral <br> Design | Greenhouse <br> Cert. | Landscape <br> Turf Cert. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| HORT 291: Advanced Work Exp. <br> Practicum \& Seminar <br> (or HORT 295*) |  |  |  |  |  |  |
| MATH 104: Technical Mathematics | 4 | X | X |  |  |  |
| SPCH 120: Business \& Professional <br> Speaking (or SPCH 101*) | 3 | X | X |  |  |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of <br> Communications, Math and/or Natural |  |  |  |  |  |  |
| Science, or Social Science and/or <br> Humanities/Fine Arts | 6 | X | X |  |  |  |
| Total |  | $\mathbf{6 2}$ | $\mathbf{6 2}$ | $\mathbf{1 8}$ | $\mathbf{1 8}$ | $\mathbf{2 1}$ |

*HORT 295 may be taken only once for program credit.
*Students considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Horticulture - Floriculture AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| este |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 110 | F,S,Su | HORT 121 | S | HORT 200 | F | HORT 201 | S |
| ENGL 110 | F,S,Su | HORT 146 | S | HORT 230 | F | HORT 231 | S |
| HORT 100 | F | HORT 150 | S | HORT 245 | F | HORT 246 | S |
| HORT 120 | F | MATH 104 | F,S,Su | SPCH 120 | F,S,Su | HORT 291 | AN |
| HORT 145 | F | Gen Ed Elec | F,S,Su | Gen Ed Elec | F,S,Su |  |  |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

Suggested full-time Horticulture - Ornamental AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  |  | 2nd Semester |  |  | 3rd Semester |  |  | 4th Semester |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| CIS 110 | F,S,Su | HORT 111 | S |  | HORT 200 | F |  | HORT 201 | S |  |
| ENGL 110 | F,S,Su | HORT 121 | S |  | HORT 221 | F | HORT 211 | S |  |  |
| HORT 100 | F | HORT 150 | S | HORT 230 | F | HORT 231 | S |  |  |  |
| HORT 110 | F | MATH 104 | F,S,Su | SPCH 120 | FSS,Su | HORT 291 | AN |  |  |  |
| HORT 120 | F | Gen Ed Elec | F,S,Su | Gen Ed Elec | F,S,Su |  |  |  |  |  |

HORT 290 \& 295 -Offered during the summer as needed
$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Hospitality Management

General Description: This degree program prepares students for career-track positions in the restaurant, catering, and institutional food service fields. Courses are offered in five areas: risk management, cost control and revenue management, human resources, marketing management, and operations management.
Aptitudes: A person should be energetic, enthusiastic, organized, hard working, and service-oriented and enjoy interacting with the public.
Outlook: There is a great need for managers in restaurants and other related businesses.
These are occupational training programs. Some courses may not transfer to four-year institutions.
For those interested in pursuing a certificate or degree, the following options are available:

- Associate in Applied Science - Hospitality Management/Food Service (62 Credit Hours) (ICCB Code: AAS 0121)
- Basic Certificate - Hospitality Management Fundamentals (18 Credit Hours) (ICCB Code: C 012A)
- Basic Certificate - Operations Management (17 Credit Hours) (ICCB Code: C 012B)
- Basic Certificate - Food Service Management (22 Credit Hours) (ICCB Code: C 012C)
(See course chart on p. 137.)

Suggested full-time Hospitality Management - Food Service AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  |  | 2nd Semester |  | 3rd Semester |  |  | 4th Semester |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| ACCT 100 | F,S | BUS 101 | F,S,Su | BUS 200 | F |  | BUS 220 | S |  |
| BUS 100 | F,S,Su | BUS 121 | S | BUS 231 | F,S |  | BUS 261 | S |  |
| BUS 110 | F,S,Su | HOSP 110 | F,S,Su | BUS 240 | F |  | BUS 262 | S |  |
| CIS 110 | F,S,Su | P REL 100 | F,S | BUS 260 | S | BUS 263 | S |  |  |
| ENGL 110 | F,S,Su | P REL 110 | S | ECON 231 | F,S,Su | BUS 290 | F,S,Su |  |  |
|  |  | SPCH 120 | F,S,Su |  |  |  |  |  |  |


| Hospitality Management COURSES | Credit Hours | Food Service AAS | HOSP Mgmt. <br> Fund. Cert. | HOSP Oper. Mgmt. Cert | Food Service Mgmt. Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACCT 100: Accounting Fundamentals (or ACCT 101*) | 3 | X | X |  |  |
| BUS 100: Business Fundamentals | 3 | X | X |  |  |
| BUS 101: Hospitality \& Tourism (formerly HOSP 100) | 3 |  | X |  |  |
| BUS 110: Business Mathematics (or MATH 104) | 3 | X | X |  |  |
| BUS 121: $\begin{aligned} & \text { Purchasing and Product Identification } \\ & \text { (formerly HOSP 104) }\end{aligned}$ | 3 | X |  | X |  |
| BUS 200: Customer Service Fundamentals | 3 | X |  |  | X |
| BUS 220: Cost Management (formerly HOSP 102) | 4 | X |  | X | X |
| BUS 231: Business Law Principles | 3 | X |  | X |  |
| BUS 240: Marketing Fundamentals (formerly BUS 124) | 3 | X |  | X |  |
| BUS 260: Hospitality Nutrition (formerly HOSP 202) | 3 | X |  |  | X |
| BUS 261: $\begin{aligned} & \text { Bar \& Beverage Management } \\ & \text { (formerly HOSP 203) }\end{aligned}$ | 3 | X |  |  | X |
| BUS 262: $\begin{aligned} & \text { Dining Room Management } \\ & \text { (formerly HOSP 204) }\end{aligned}$ | 3 | X |  |  | X |
| BUS 263: Catering \& Banquet Management | 3 | X |  |  | X |
| BUS 290: Work Experience Practicum (or BUS 295) | 3 | X |  |  | X |
| CIS 110: Business Applications | 3 | X | X |  |  |
| ECON 231: Macroeconomics | 3 | X |  |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |
| HOSP 110: Food Service Sanitation | 1 | X |  | X |  |
| P REL 100: Human Relations | 3 | X |  | X |  |
| P REL 110: Supervision | 3 | X | X |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |  |
| Total |  | 62 | 18 | 17 | 22 |
| X = Required |  |  |  |  |  |

## Information Technology

General Description: The Information Technology AAS program is designed to prepare students for employment in the growing Information Technology industry, either in an IT company or on an IT support team for a company in another industry. The IT AAS program consists of directed threetiered curricula, which provides all IT students with a common IT foundation of knowledge, followed by a specific concentration in one of three IT areas, and finally a capstone experience that puts into practice the IT knowledge gained throughout the program. The IT program includes three AAS degrees:

- Programmer/Analyst
- Network Technology
- Desktop Support Technician

In addition to the 3 degrees offered in the IT program, students may earn certificates that recognize significant academic achievement and progress through the program, as well as preparation for external occupational/professional certifications. IT certificates include

- COMPTIA A+ Preparation
- COMPTIA Net+ Preparation
- COMPTIA Security+ Preparation
- COMPTIA Project+ Preparation
- COMPTIA Linux+ Preparation - Cisco CCNA
- Computer Literacy
- Desktop Support Specialist
- Microsoft Certified Systems Administrator (MCSA)
- MOS (Microsoft Office Specialist)
- Network Specialist
- Object-Oriented Programming
- Programming Specialist
- Systems Programming
- Web Programming

Aptitudes: To be successful in this program and later as an IT professional, students will need to possess, or be able to develop, the ability to organize ideas and data; the ability to think logically, to analyze tasks and data, and design solutions; the ability to think conceptually but to work with details; the ability to be persistent, to face challenges and to overcome obstacles in the effort to find workable solutions; the ability to set priorities and meet deadlines; and the ability to work individually and on teams, in group work settings, and over the Internet. Extremely important abilities include above average mathematical, verbal/presentation, and writing skills, critical thinking skills, and interpersonal relation skills. Finally, to be successful in the Information Technology fields, one must be able to concentrate on detail and be tolerant of frustration and setbacks while striving for solutions.
Outlook: IT professionals remain high in demand in central Illinois as well as nationally. Areas of highest demand include multi-language applications programmers, applications software support specialists, hardware support technicians, and Internet \& Intranet technicians and administrators.

These are occupational training programs. Some courses may not transfer to four-year institutions.

## Desktop Support Technician

General Description: The AAS in IT Desktop Support Technician degree is designed to prepare students for application software and microcomputer workstation technical support of end users, where expert direct knowledge in the use of microcomputer workstations and their associated applications software and peripheral hardware is critical to the success of the organization. Typical job titles include microcomputer application support specialist, help desk specialist, technical support specialist, hardware support technician, troubleshooter, systems support technician, systems maintenance technician, and IT consultant.
Aptitudes: In addition to the aptitudes listed under the IT program, the ability to develop solutions by using and integrating applications software implemented in GUI environment and to troubleshoot problems in hardware and software is required.

For those interested in pursuing a certificate or degree, the following options are available:

- Associate in Applied Science - Desktop Support Technician (66 Credit Hours) (ICCB Code: AAS 0111)
- Certificate - Desktop Support Specialist (50 Credit Hours) (ICCB Code: C 011H)
- Certificate - Microsoft Office Specialist Prep (MOS) (15 Credit Hours) (ICCB Code: C 011F)
- Certificate - COMPTIA A+ Prep (10 Credit Hours) (ICCB Code: C 011A)
- Certificate - COMPTIA Project+ Prep (10 credit hours) ICCB Approval (ICCB Code: C 011P)
- Certificate - Computer Literacy (10 Credit Hours) 1 (ICCB Code: C 011M)
(See course chart on p. 140)
* Students considering transfer options should take this course.

A grade of "C" or better in ENGL 101 is required for the AAS degree.

Suggested full-time Information Technology - Desktop Support Technician AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 110 | F,S,Su | IT 116 | F | IT 205 | F | IT 207 | S |
| ENGL 110 | F,S,Su | IT 120 | S | IT 206 | F | IT 285 | S |
| IT 105 | F,S,Su | IT 130 | S | IT 210 | F | IT 290 | F,S,Su |
| IT 115 | F | IT 151 | S | IT 220 | F | P REL 100 | F, S |
| IT 173 | F | MATH104 | F,S,Su | IT 230 | F | SPCH 120 | F,S,Su |

Gen Ed Elec F,S,Su
F=fall $\quad S=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

| Desktop Support Technician COURSES | Credit Hours | $\begin{gathered} \text { Desktop } \\ \text { Support Tech } \\ \text { AAS } \end{gathered}$ | Desktop Support Specialist Cert. | Microsoft Office Specialist Prep Cert. | COMPTIA A+ Cert | COMPTIA Project+ Cert. | Computer Literacy Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 101: Computer Literacy | 1 |  |  |  |  |  | X |
| CIS 110: Business Applications | 3 | X | X |  |  |  |  |
| ENGL110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |  |  |
| IT 105: Information Technology Systems | 3 | X | X |  |  |  | X |
| IT 115: Windows Fundamentals | 3 | X | X |  |  |  | X |
| IT 116: Windows Client Operating Systems | 3 | X | X |  | X |  |  |
| IT 120: Spreadsheet Applications | 3 | X | X | X |  |  |  |
| IT 130: Word Processor Applications | 3 | X | X | X |  |  |  |
| IT 151: Internet Techniques (formerly CIS 287) | 3 | X | X |  |  |  | X |
| IT 173: A+ Computer Technologies (formerly IT 171 \& 172) | 4 | X | X |  | X |  |  |
| IT 205: Help Desk Techniques | 3 | X | X |  |  | X |  |
| IT 206: Operating Systems Support | 3 | X | X |  | X |  |  |
| IT 207: Software Applications Support | 3 | X | X |  |  |  |  |
| IT 210: Presentation Graphics Applications | 3 | X | X | X |  |  |  |
| IT 220: Data Management Applications (formerly CIS 221) | 3 | X | X | X |  |  |  |
| IT 230: Project Management | 3 | X | X | X |  | X |  |
| IT 285: Systems Analysis \& Design | 4 | X | X |  |  | X |  |
| IT 290: Work Experience Practicum \& Seminar (or IT 295) | 3 | X | X |  |  |  |  |
| MATH 104: Technical Math | 4 | X |  |  |  |  |  |
| P REL 100: Human Relations | 3 | X |  |  |  |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |  |  |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Sciences | 3 | X |  |  |  |  |  |
| Total |  | 66 | 50 | 15 | 10 | 10 | 10 |

X = Required

* Students considering transfer options should take this course.
A grade of "C" or better is required for the AAS degree.


## Network Technology

General Description: The AAS in IT Network Technology degree focuses on the use of computer technology and information management methods to solve business problems. Students will learn the hardware configuration and management of physical networks, the installation and configuration of the network system software, and how to manage and secure the system for optimum performance. Typical job titles include network technician, network engineer, network administrator, domain administrator, system analyst, network security specialist. The knowledge base of this degree program will prepare students for the Cisco CCNA, Microsoft's MCP and MCSA, CompTIA's A+, Security + and Network+ certifications.
Aptitudes: In addition to the aptitudes listed under the IT program, students pursuing this degree should have a nature aptitude for computers and technology. They should enjoy working with technologies, welcome new technologies and be able to see the big picture of how technologies interact and relate to each other. Problem solving skills are also desirable for this field.

For those interested in pursuing a certificate or degree, the following options are available:

- Associate in Applied Science - Network Technology (66 Credit Hours)
(ICCB Code: AAS 2076)
- Certificate - Network Specialist (50 Credit Hours) (ICCB Code: C 011K)
- Certificate - Cisco Network Administrator (CCNA) Prep (16 Credit Hours)
(ICCB Code: C 011B)
- Certificate - COMPTIA Net+ Prep (25 Credit Hours) (ICCB Code: C 011C)
- Certificate - COMPTIA Security+ Prep (18 Credit Hours) (ICCB Code: C 011N)
- Certificate - COMPTIA Linux+ Prep (13 Credit Hours) (ICCB Code: C 011Q)
- Certificate - Microsoft Certified Systems Administrator (MCSA) Prep (16 Credit Hours) (ICCB Code: C 011T)
(See course chart on p. 142)

A grade of "C" or better in ENGL 101 is required for the AAS degree.
Suggested full-time Information Technology - Network Technology AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 110 | F,S,Su | IT 141 | S | IT 241 | F | IT 243 | S |
| ENGL 110 | F,S,Su | IT 221 | S | IT 242 | F | IT 245 | S |
| IT 116 | F | IT 271 | S | IT 272 | F | IT 274 | S |
| IT 173 | F | MATH104 | $\mathrm{F}, \mathrm{S}, \mathrm{Su}$ | IT 273 | F | IT 285 | S |
| SPCH 120 | F,S,Su | P REL 100 | F,S | Gen Ed | F F,S,Su | IT 290 | F,S,Su |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

| Network Technology COURSES | Credit Hours | Network Technology AAS | Network Specialist Cert. | COMPTIA <br> Net +Prep Cert. | COMPTIA Security+ Prep Cert | Cisco (CCNA)Prep Cert. | MCSA Cert. | $\begin{gathered} \text { CoMPTIA } \\ \text { Linus + Prep } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X | X |  |  |  |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |  |  |  |
| IT 116: Windows Client Operating Systems | 3 | X | X |  |  |  | X |  |
| IT 141: Networking Fundamentals | 4 | X | X | X | X | X |  |  |
| IT 173: A+ Computer Technologies (formerly IT $171 \& 172$ ) | 4 | X | X | X |  |  | X | X |
| IT 221: Database Design | 3 | X | X |  |  |  |  |  |
| IT 241: Networking Routing Technologies (formerly IT 142) | 4 | X | X | X | X | X |  |  |
| IT 242: Wireless Networking | 3 | X | X | X | X |  |  | X |
| IT 243: $\begin{aligned} & \text { Networking Switching Technologies } \\ & \text { (formerly IT 143) }\end{aligned}$ | 4 | X | X | X | X | X |  |  |
| IT 244: Wide Area Networks (formerly IT 144) | 4 |  |  |  |  | X |  |  |
| IT 245: Network Security | 3 | X | X |  | X |  | X |  |
| IT 271: Windows Server Operating Systems | 3 | X | X | X |  |  | X |  |
| IT 272: Unix/Linux Fundamentals | 3 | X | X | X |  |  |  | X |
| IT 273: Managing Windows Networks | 3 | X | X |  |  |  | X | X |
| IT 274: Windows Active Directory | 3 | X | X |  |  |  |  |  |
| IT 285: Systems Analysis \& Design (replaces CIS 285) | 4 | X | X |  |  |  |  |  |
| IT 290: Work Experience Practicum \& Seminar (or IT 295) | 3 | X | X |  |  |  |  |  |
| MATH 104: Technical Math | 4 | X |  |  |  |  |  |  |
| P REL 100: Human Relations | 3 | X |  |  |  |  |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |  |  |  |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Math and/or Natural Science or Social Science and/or Humanities/Fine Arts. | 3 | X |  |  |  |  |  |  |
| Total |  | 66 | 50 | 25 | 18 | 16 | 16 | 13 |

X = Required
*Students considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.

## Programmer/Analyst

General Description: The AAS in IT Programmer/Analyst degree is designed to prepare students for designing, writing, testing, debugging, and implementing software, according to user/customer specifications, in process-oriented, data-oriented, and object-oriented coding environments. Typical job titles include programmer, programmer/analyst, data modeler, database designer, and systems analyst.
Aptitudes: In addition to the aptitudes listed under the IT program, the ability to develop solutions using designated computer languages and integrated development environments is required.

For those interested in pursuing a certificate or degree, the following options are available:

- Associate in Applied Science - Programmer/Analyst (66 Credit Hours)
(ICCB Code: AAS 0098)
- Certificate - Programming Specialist (50 Credit Hours) (ICCB Code: C 011G)
- Certificate - Object-Oriented Programming (26 Credit Hours) (ICCB Code: C 011R)
- Certificate - Systems Programming (26 Credit Hours) (ICCB Code: C 011U)
- Certificate - Web Programming (24 Credit Hours) (ICCB Code: C 011S)

| Programmer/Analyst COURSES | Credit Hours | Programmer /Analyst AAS |  | Obj.Oriented Prog. Cert | Systems Prog. Cert | Web Prog. Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 105: Foundations of Information Technology | 3 | X | X | X | X | X |
| CS 161: COBOL Programming | 4 | X | X |  | X |  |
| CS 230: Event-Driven Programming (formerly IT 132) | 3 | X | X | X | X |  |
| CS 251: Object-Oriented Programming | 4 | X | X | X |  |  |
| CS 281: Advanced Object-Oriented Programming | 4 | X | X | X |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |  |
| IT 116: Windows Client Operating Syst. | 3 | X | X | X | X | X |
| IT 131: Programming Logic | 3 | X | X | X | X | X |
| IT 153: Web Development | 3 | X | X |  |  | X |
| IT 221: Database Design | 3 | X | X | X | X | X |
| IT 222: Structured Query Language | 3 | X | X | X | X | X |
| IT 280: Advanced Systems Development | 4 | X | X |  | X |  |
| IT 282: Dynamic Web Development | 3 | X | X |  |  | X |
| IT 284: Web Programming | 3 | X | X |  |  | X |
| IT 285: Systems Analysis \& Design | 4 | X | X |  |  |  |
| IT 290: Work Experience Practicum \& Seminar (or IT 295) | 3 | X | X |  |  |  |
| MATH 104: Technical Math | 4 | X |  |  |  |  |
| P REL 100: Human Relations | 3 | X |  |  |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |  |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Math and/or Natural Science or Social Science and/or Humanities/Fine Arts. | 3 | X |  |  |  |  |
| Total |  | 66 | 50 | 26 | 26 | 24 |

X = Required
*Students who are considering transfer options should take this course.
A grade of "C" or better in ENGL 101 is required for the AAS degree.

Suggested full-time Information Technology - Programmer/Analyst AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  |  | 2nd Semester |  |  | 3rd Semester |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

## Machine Tool Processes (See Engineering Technology)

## Nursing <br> Nurse Assistant

General Description: This program meets the criteria established by the Illinois Department of Public Health for an approved Basic Nurse Assistant Training Program. The program consists of one course that provides instruction in theory, laboratory, and clinical experiences in basic nursing skills. The nurse assistant works under the direct supervision of a licensed nurse and functions as a member of the health care team in a long-term care facility, hospital, clinic, or home health care setting. The nurse assistant provides direct care to patients within the scope of practice for the nurse assistant. Students must attend all classes to meet the requirements established by the Illinois Department of Public Health, or they may be administratively dropped from the course. All students must submit for the health care worker criminal background check as required by the Illinois Health Care Worker Background Check Act - Public Act \# 89-197.
Aptitudes: The nurse assistant must be a caring individual who is honest and dependable, a good communicator, and a positive team member. The nurse assistant must be willing to care for a variety of patients and in a variety of job settings.
Outlook: The outlook for certified nurse assistants is above average. As the population ages and the number of health care facilities and home health agencies increase, the demand for certified nurse assistants will continue to rise.

## Admission Criteria:

- Complete Application for Admission to Richland Community College.
-Provide to the College official high school graduation transcript or G.E.D. certificate.
-Be 17 years of age.
-Successfully complete the Nurse Assistant pre-tests in the areas of math, reading, and health in the College Testing Center (W124) during the Center's scheduled hours of operation.

This is an occupational training program. Some courses may not transfer to four-year institutions.
Basic Certificate - Nurse Assistant (7 Credit Hours) (ICCB Code: BC 0053)

| Nurse Assistant <br> COURSE | Credit <br> Hours | Nurse Assistant <br> Basic Cert. |
| :--- | :---: | :---: |
| HLTH 141: Nurse Assistant Training* | 7 | X |
| Total |  | 7 |

X = Required

* Course is offered spring - summer - fall semesters

Certification: Upon successful completion of the approved course, the student is eligible to apply for the State Competency examination. When the student passes the State Competency examination and meets the Health Care Worker Background Check Act criteria, the student will be placed on the State of Illinois Nurse Aide Registry as a certified nurse assistant.

## Registered Nursing

The Nursing Program is a selective admissions program, and minimum criteria must be met in order to receive an application. Admission to the program is by application. Admission to RCC does not guarantee acceptance to the program. Out-of-district students will be considered for the program when space is available. Details on selective admission can be obtained during program information sessions.

Attendance at an informational session within one year of the date of application is required to receive a program worksheet to determine eligibility for application.

General Description: The purpose of the Associate Degree Nursing Program at Richland Community College flows from the Richland Community College mission and is designed to prepare competent, caring, and critically thinking graduates for entry-level nursing positions in a variety of health care settings and to encourage commitment to personal and professional growth. The program is a combination of nursing and selected general education courses. The nursing courses consist of classroom, simulated laboratory experiences, and clinical experiences providing care to clients in local health care agencies. Graduates will be able to provide direct care to clients in various stages of the life cycle and to manage care for an individual client and a group of clients. Upon satisfactory completion of the program, students will earn an Associate of Applied Science Degree. Graduates must submit to a criminal background check. On passing the background check, students are eligible to write the National Council Licensing Examination (NCLEX-RN). Graduates who successfully complete the NCLEX-RN and the State of Illinois requirements may apply to the State of Illinois for a license to practice as a professional registered nurse in Illinois.
The nursing program is approved by the Illinois Department of Financial and Professional Regulation (217-785-0800 or 312-814-4500) and accredited by the National League of Nursing Accrediting Commission (1-800-669-1656). The Nursing Program takes two full years to complete after a student has been accepted and begins the program. The program begins each fall and spring semesters, depending on sufficient enrollment and faculty availability.
Aptitudes: Nursing is a demanding, challenging, and satisfying profession. It requires clinical expertise, academic knowledge, critical thinking skills, physical stamina, and personal integrity. Individuals preparing to enter nursing must have good time management and study skills; in addition, they must be caring, self-disciplined, and committed to nursing as a goal.
Outlook: Nursing remains the largest single health profession in the United States. Nursing offers a life-long career with many learning and employment opportunities. The current and future need for nurses will be in acute care, long-term care, and community health agencies. The current salary for beginning registered nurses in the Richland District ranges from $\$ 17$ to $\$ 19$ per hour. Starting salaries average $\$ 35,360-\$ 39,520$ per year, depending on location.
Licensure/certification: Upon successful completion by the graduation date of all requirements for the Associate of Applied Science Degree outlined in the RCC Catalog and the Nursing Handbook, students will be required to submit to a background check and will then be eligible to write the National Council of State Boards of Nursing Examination for Registered Nurses (NCLEX-RN). After successfully passing this examination, the graduate may apply for state licensure to practice in Illinois as a Registered Nurse. Graduating from this program does not guarantee that the graduate will become a Registered Nurse. As required by the Illinois Nursing and Advanced Practice Nursing Act, the licensing process includes a criminal background check. If there are questions about the licensure exam or the background check, students should contact Illinois Department of Financial and Professional Regulation at 312-814-4500. http://www.idfpr.com/dpr/who/nurs.asp

## Admission Criteria:

Applicants must be one of the following: High School graduate, High School senior, or G.E.D. graduate.

High school or college course requirements are in the following academic areas: 4 years of high school English, 3 years of high school mathematics (including Algebra I and II and Geometry), two years of high school biology and one year of high school chemistry, or physics with a "B" or above or complete RCC BIOL 101 or the equivalent.

## 146 Instructional Programs

Submit the following: Application for Admission to Richland Community College, official high school transcript or G.E.D. certificate, and official college transcript from other college(s) for previous college work if it is to be considered for the program.

Submit ACT Scores or complete the College placement examinations as follows: Submit ACT scores with 19 or higher in English and Reading or place as follows on placement exams: English (placement in ENGL 101), Math (eligibility for MATH 098 or complete MATH 091 and MATH106), and achieve a score of 12th grade or higher in each section of the Nelson Denny Reading Examination.

Meet one of the following: an ACT composite score of 21 or above, with science reasoning score of 20 or above, and no section score below 15, or a cumulative college GPA of 2.50 or above in 15 semester hours of the general education courses that apply to the program (ENGL 101, BIOL101, 201, 202, 220, PSYCH110, 145, SOCIO110, Fine Arts elective, and a Special Topics elective). Official transcripts must show evidence that a grade of "C" or above has been earned in each course.

Have a high school or Nursing Program GPA of 2.50 or above. The Nursing Program GPA includes BIOL 101, 201, 202, 220, PSYCH 110, 145, SOCIO 110, ENGL101, Fine Arts elective and Special Topics elective, and all required nursing courses.

Biology GPA of 2.0 or better on a 4.0 scale. The last biology course taken (BIOL 101, 201, 202, 220) must have been completed within the past five years.

Applicants must be currently listed on the Illinois Department of Public Health Nurse Aide Registry in good standing and demonstrate employment within the last two years or document program completion within the last two years

Note: High school and college academic records from earlier admissions (five or more years ago) may be excluded from the evaluation by submitting a written request to the Program Director.

Attend an informational session to receive a program worksheet and advisement plan to determine eligibility for application and admission. Once the student meets all minimum criteria for admission, he or she must submit an application for Admission to the Nursing Program by the application deadlines: for Fall admission, April 1, by 5:00 p.m. and for Spring admission, October 1 by 5:00 p.m. Should either of those days fall on a weekend, 5:00 p.m. the first Monday following the date will automatically become the final application date.

## Conditional Admission:

Students are admitted to the program conditionally and must return the acceptance form to the Health Professions Division, submit a completed RCC Health Physical and provide proof of valid immunizations and/or immunity to certain diseases, submit a valid BLS Healthcare Provider (CPR) card, and complete NURS 111 to enter any clinical courses in the Nursing Program. Students who do not complete the above requirements by the established deadlines will forfeit their space in the program.

## Student selection is competitive and is determined by these components:

1. Program Grade point average (GPA) of 2.50 or above, on a 4.00 scale in all prerequisite and other courses that apply to the program.
2. Biology GPA of 2.00 or better
3. ACT of 21 Composite/ 20 Science Reasoning or a minimum of 15 credit hours of the general education credits required for the AAS Degree.
4. Number of Biology courses completed.
5. Nelson Denny Examination with a score of 12th grade or higher in each section.
6. The number of Biology course withdrawals and grades less than a "C".
7. Priority is given to the most qualified students.

Student Admission, Readmission, and Transfer from another RN Program: Admission to the program is granted on a space-available basis. Priorities for admission are determined as follows:

1. Current or continuing students who are in good standing academically and ethically are placed in the class before new admissions are considered.
2. In-district students admitted for the first time into NURS 111/112 and Bridge students entering Fall 2008 NURS 205/250 or Spring 2009 206/250, are evaluated according to the established admission criteria, and priority will be given to the most qualified students as space is available.
3. Finally, in-district students seeking readmission and transfer students are evaluated as one group according to the established admission criteria, and priority will be given to the most qualified students if space is available.
4. Because of the competition for positions in the nursing program, students seeking readmission may choose to apply for readmission to any semester that precedes the semester they are required to repeat. If a student chooses this option and is readmitted, he or she must complete ALL nursing courses required in the semester into which he or she is readmitted AND ALL subsequent nursing courses required in the program.
5. Applicants who meet or exceed the minimum admission requirements and are not admitted because of lack of space shall be placed on a list for alternate admission.
6. The alternate list is ranked for in-district and then for out-of-district students.
7. In the event of a cancellation of an admitted student, applicants on the alternate list will be contacted up to and including the day before classes start. Once the program begins, the alternate list will not roll over. Applicants must reapply for each semester and are evaluated with all other applicants during the next admission cycle.

The following courses must be taken to meet nursing program admission requirements. A grade of "C" or above in all program course work and a Program GPA of at least 2.50 are required for admission, progression, and graduation from the program.

| Registered Nursing <br> Prerequisite COURSES | Credit <br> Hours | Semesters <br> Offered | Transferable* | Proficiency Exam |
| :--- | :---: | :---: | :---: | :---: |
| BIOL 101: Concepts of Biology I | 4 | $\mathrm{~F} / \mathrm{S} / \mathrm{Su}$ | No | Yes |


| Registered Nursing COURSES-First Semester-Year 1 | Credit Hours | Semesters Offered | Transferable |
| :---: | :---: | :---: | :---: |
| NURS 111: Intro to Nursing | 1 | $\mathrm{Fa} / \mathrm{Sp}$ | No |
| NURS 112: Med Surg 1 | 9 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| PSYCH 110: Intro to Psych | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| ENGL 101: Composition 1 | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| BIOL 201: Human Anatomy \& Physiology 1 | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| Registered Nursing COURSES-Second Semester-Year 1 | Credit Hours | Semesters Offered | Transferable |
| NURS 152: Psychiatry Mental Health | 4 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| NURS 154: Pharmacology | 3 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| NURS 155: Medical-Surgical 2: Chronically Ill Client | 5 | Fa/Sp | Yes |
| PSYCH 145:Life Span Psychology | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| BIOL 202: Human Anatomy and Physiology II | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| Registered Nursing COURSES-Third Semester-Year 2 | Credit <br> Hours | Semesters Offered | Transferable |
| NURS 250: Med Surg III | 5 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| NURS 206: Family Health Nursing (Spring 2009) | 6 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| SOCIO 110:Intro to Sociology | 3 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| BIOL 220: Microbiology | 4 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| NURS 205: Care of the Chronically Ill Client (Fall 2008) | 5 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| Registered Nursing COURSES-Fourth Semester-Year 2 | Credit Hours | Semesters Offered | Transferable |
| NURS 252: Med-Surg IV Acute | 5 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| NURS 254: Leadership | 6 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| FA Elective | 3 | Fa/Sp | Yes |
| HLTH 197/297: Special Topics in Healthcare | 1 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |

## 148 Instructional Programs

## Other Graduation Requirements:

- Constitution test if not an Illinois high school graduate
- A grade of "C" or better in all prerequisite and program courses
- A 2.50 Program GPA on completion of all prerequisites and required program courses
- A score of 850 or greater on the required HESI Exit Exam
- Completion of all nursing psychomotor competencies with $76 \%$ of the designated skills performed in the clinical setting, at or above the expected level of competency
- Meets standards of the NLN Code of Ethics and the Integrity Policy.


## Advanced Placement Program for LPN's

- Graduate of a State-approved Licensed Practical Nursing Program who has a license or is eligible for licensure in the State of Illinois can be placed into the third semester of the ADN program by meeting admission requirements and passing the Bridge course (NURS 203) with a grade of "C" or better. Bridge students are admitted on a space available basis using the same student selection process as basic students. Availability of faculty clinical space will also impact the entry decision.


## Prerequisites for Admission to NURS 203 and the ADN Program:

- Complete placement testing: eligible for ENGL 101, and placement in MATH 098 or completion of MATH 091 and MATH 106.
- Nelson Denny Reading Examination: placement at 12th grade in all sections.
- Successful completion of two years of high school Biology and 1 year of high school Chemistry within the last three years with a "B" or better for each course or BIOL 101
- Successful completion of ENGL 101, BIOL 201, 202, BIOL 220, PSYCH 110, PSYCH 145, NURS 154, and SOCIO 110 with a "C" or better
- A 2.5 Program GPA in any of the following list of courses: BIOL 201, 202, 220, PSYCH 110, 145, NURS 154 ENGL 101, Fine Arts elective, and/or SOCIO 110 taken prior to admission to NURS 203.

Nursing is a selective admissions program. Students must meet the minimum criteria for admission to the program and complete an application for admission to the Associate Degree Nursing Program. A student can receive an application after attending a Nursing Information Session and verification by a counselor that selective admission criteria have been met.

- Graduate of a State-approved Licensed Practical Nursing Program.
- License or eligible for licensure in the State of Illinois.
- Two letters of reference from an employer, supervisor, director or faculty who is in a position to evaluate your performance.

Once all the requirements are met, the LPN is eligible to take NURS 203. Once NURS 203 is successfully completed with a "C" or better, a "Request for Proficiency Credit by Advanced Course" form must be completed by the student and submitted to the Registrar with appropriate fees. When approved, advanced placement credit is awarded for NURS 112, NURS 152, NURS 155.
(Pending ICCB Approval)
Students are responsible for LPN skills outlined in the Occupational Illinois Skills Competency Standards. Students are responsible for identifying areas of weakness or areas for improvement and for refining those skills in the open lab.

Course Prerequisite Requirements for admission to the NURS 203 Bridge Course

| Prerequisite Courses | Credit Hours | Semesters Offered | Transferable* | Proficiency Exam |
| :---: | :---: | :---: | :---: | :---: |
| BIOL 101: Concepts of Biology | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | No | Yes |
| BIOL 201: Human Anatomy \& Physiology I | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes | No |
| BIOL 202: A\&P II | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes | No |
| BIOL 220: Microbiology | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes | No |
| ENGL 101: Composition | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes | No |
| PSYCH 110:Intro to Psych | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes | Yes |
| PSYCH 145:Life Span Psych | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes | Yes |
| SOCIO 110: Intro to Sociology | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes | No |
| NURS 154: Pharmacology | 2 | Fa/Sp | Yes | Yes |
| Course sequence on admission to the Bridge course NURS 203 |  |  |  |  |
| COURSES-Third Semester-Year 2 |  | Credit <br> Hours | Semesters Offered | Transferable* |
| NURS 111: Intro to Nursing |  | 1 | $\mathrm{Fa} / \mathrm{Sp}$ | No |
| NURS 205: Med-Surg II (Fall 2008) |  | 5 | Fa | Yes* |
| NURS 206: Family Health Nursing (Spring 2006) |  | 6 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| NURS 250: Med-Surg III Surgical |  | 5 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes* |
| NURS 203: Bridge * |  | 7 | $\mathrm{Fa} / \mathrm{Sp}$ | No |
| COURSES-Fourth Semester-Year 2 |  |  |  |  |
| NURS 252: Med-Surg IV Acute |  | 5 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes* |
| NURS 254: Leadership |  | 6 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes* |
| FA Elective |  | 3 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes |
| HLTH 197/297: Special Topics In Healthcare |  | 1 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes* |

*NURS 155 and NURS 152 may be required based upon HESI Exam scores taken in NURS 203. **NURS 203 course starts prior to the beginning of the semester.
A grade of "C" or better in ENGL 101 is required for the AAS degree.

## Office Technology

General Description: The Office Technology Instructional Area offers an Administrative Assistant degree with concentrations in accounting, legal, or general office and a Medical Office Specialist Degree with concentrations in coding, medical transcription, or medical office. Students wishing to earn either of the AAS Degrees must complete the required Office Technology and Business courses and 15 credit hours of group requirements. Nine certificates ranging from 17 to 42 credit hours in Office Technology and Business courses that can be earned in one to three semesters are also available. Aptitudes: Successful employees in the office technology area should be detail oriented, be highly organized, and have the ability to work with a minimum of supervision. A high tolerance for ambiguity, patience, and the flexibility to deal with change are desirable.
Outlook: This is a large occupational area in Illinois that is expected to have many job openings each year. Prospects are best for those with training in several software applications.

These are occupational training programs. Some courses may not transfer to four-year institutions.
The Administrative Assistant Degree has three areas of concentration, including Accounting, General, and Legal. Students should choose one area of concentration to obtain their degree. Students may pursue more than one concentration, but only one degree will be given. However, the student will be given all certificate options earned.

## Administrative Assistant - Accounting Specialty

For those interested in pursuing this concentration, the following options are available:

> Associate in Applied Science - Administrative Assistant - Accounting (60 Credit Hours) (ICCB

Code: AAS 0044)

- Basic Certificate - Accounting Office Clerk (30 Credit Hours) (ICCB Code: C 044D)
- Basic Certificate - Advanced Accounting Office Specialist (42 Credit Hours) (ICCB Code: C 044E)
- Basic Certificate - Receptionist (16 Credit Hours) (ICCB Code: C 044G)

| Admin. Assist-Accounting Specialty COURSES | Credit Hours | $\begin{array}{\|c\|} \hline \text { Admin. Asst. } \\ \text { Acct. } \\ \text { AAS } \end{array}$ | Receptionist Cert. | Acct. Office Clerk Cert. | Adv. Acct. Office Spec. Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACCT 205:Small Business Accounting | 3 | X |  | X | X |
| BUS 110: Business Math | 3 | X | X | X | X |
| IT 120: Spreadsheet Applications | 3 | X |  |  | X |
| IT 130: Word Processor Applications | 3 | X |  |  | X |
| OT 113: Editing and Proofreading | 3 | X |  | X | X |
| OT 114: Word Processing \& Presentation | 3 | X | X | X | X |
| OT 116: Database Applications | 3 | X | X | X | X |
| OT 119: Business English | 3 | X | X | X | X |
| OT 120: Business Communications | 3 | X | X** |  | X |
| OT 150: Records Management | 3 | X |  | X | X |
| OT 160: Office Accounting(or ACCT101*) | 3 | X |  | X | X |
| OT 170: Professional Office Procedures (formerly OT 250) | 3 | X | X | X | X |
| OT 210: Statistical Keyboard Entry | 3 | X |  | X | X |
| OT 215: Document Production | 3 | X |  |  | X |
| OT 290: Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |  |
| P REL 100:Human Relations | 3 | X |  |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Science | 9 | X |  |  |  |
| Total |  | 60 | 16-18 | 30 | 42 |

$\mathrm{X}=$ Required
*Students transferring to a four-year university should take this course.
**or OTK 100 or 101

Suggested full-time Office Technology - Administrative Assistant - Accounting AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester |  | 3rd Semester | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BUS $110 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | IT 120 | S | P REL $100 \mathrm{~F}, \mathrm{~S}$ | ACCT 205 | F |
| OT $114 \mathrm{~F}, \mathrm{~S}$ | IT 130 | S | OT 215 F | OT 210 | S |
| OT 116 F,S | OT 113 | S | SPCH 120 F,S,Su | OT 290 | AN |
| OT 119 F, S | OT 120 | S | Gen Ed Elec F,S,Su | Gen Ed Elec | F,S,Su |
| OT 170 F,S | OT 150 | S |  |  |  |
|  | OT 160 | S |  |  |  |

[^5]
## Administrative Assistant - General Specialty

For those interested in pursuing this concentration, the following options are available:

- Associate in Applied Science - Administrative Assistant - General Office (63 Credit Hours) (ICCB Code: AAS 0044)
- Basic Certificate - Receptionist (16 Credit Hours) (ICCB Code: C 044G)
- Basic Certificate - Office Assistant (36 Credit Hours) (ICCB Code: C 044H)
- Basic Certificate - Business Office Specialist (45 Credit Hours) (ICCB Code: C 0044C)

| Admin. Assist-General Specialty COURSES | Credit <br> Hours | Admin. Asst. Gen. Office AAS | Receptionist Cert. | Office Asst. Cert. | Business Office Spec. Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110:Business Math | 3 | X | X | X | X |
| IT 120: Spreadsheet Applications | 3 | X |  | X | X |
| IT 130: Word Processor Applications | 3 | X |  | X | X |
| OT 113: Editing and Proofreading | 3 | X |  | X | X |
| OT 114: Word Processing \& Presentation | 3 | X | X | X | X |
| OT 116: Database Applications | 3 | X | X | X | X |
| OT 119: Business English | 3 | X | X | X | X |
| OT 120: Business Communications | 3 | X | $\mathrm{X}^{* *}$ | X | X |
| OT 150: Records Management | 3 | X |  | X | X |
| OT 160: Office Accounting (or ACCT 101*) | 3 | X |  | X | X |
| OT 170: Professional Office Procedures (formerly OT 250) | 3 | X | X | X | X |
| OT 200: Speedwriting (formerly OT 131) | 3 | X |  |  | X |
| OT 205: Voicing \& Transcription | 3 | X |  |  | X |
| OT 210: Statistical Keyboard Entry | 3 | X |  | X | X |
| OT 215: Document Production | 3 | X |  |  | X |
| OT 290: Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |  |
| P REL 100: Human Relations | 3 | X |  |  |  |
|  | 3 | X |  |  |  |
| AAS Group Requirements/ Electives To be selected from areas of Communications Math, Science, Humanities, Fine Arts, or Social Science | 9 | X |  |  |  |
| Total |  | 63 | 16-18 | 36 | 45 |

X = Required
*Students who are considering transfer options should take this course.
** or OTK 100 or OTK 101
Suggested full-time Office Technology - Administrative Assistant - General Office AAS sequence Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1 st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110 | F,S,Su | IT 120 | S | OT 200 | F | OT 210 | S |
| OT 114 | F, S | IT 130 | S | OT 205 | F | OT 290 | AN |
| OT 116 | F, S | OT 113 | S | OT 215 | F | P REL 100 | F,S |
| OT 119 | F,S | OT 120 | S | SPCH 120 | F,S,Su | Gen Ed (2) | F,S,Su |
| OT 170 | F,S | OT 150 | S | Gen Ed Elec | F,S,Su |  |  |
|  |  | OT 160 | S |  |  |  |  |

[^6]
## Administrative Assistant - Legal Office Concentration

For those interested in pursuing this concentration, the following options are available:

- Associate in Applied Science - Administrative Assistant - Legal Office (66 Credit Hours) (ICCB Code: AAS 0044)
- Basic Certificate - Legal Office Specialist (48 Credit Hours) (ICCB Code: C 044F)
- Basic Certificate - Receptionist (16 Credit Hours) (ICCB Code: C 044G)

| Admin. Assist-Legal Specialty COURSES | Credit Hours | Admin. Asst. Legal Office AAS | Receptionist Cert. | Legal Office Spec. Cert. |
| :---: | :---: | :---: | :---: | :---: |
| BUS 110: Business Math | 3 | X | X | X |
| BUS 231: Business Law 1 | 3 | X |  | X |
| IT 120: Spreadsheet Applications | 3 | X |  | X |
| IT 130: Word Processor Applications | 3 | X |  | X |
| OT 113: Editing and Proofreading | 3 | X |  | X |
| OT 114: Word Processing \& Presentation | 3 | X | X | X |
| OT 116: Database Applications | 3 | X | X | X |
| OT 119: Business English | 3 | X | X | X |
| OT 120: Business Communications | 3 | X | X** | X |
| OT 150: Records Management | 3 | X |  | X |
| OT 160: Office Accounting (or ACCT 101*) | 3 | X |  | X |
| OT 170: Professional Office Procedures (formerly OT 250) | 3 | X | X | X |
| OT 200: Speedwriting (formerly OT 131 | 3 | X |  | X |
| OT 205: Voicing \& Transcription | 3 | X |  | X |
| OT 230: Legal Terminology \& Writing | 3 | X |  | X |
| OT 232: Legal Procedures | 3 | X |  | X |
| OT 290: Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |
| P REL 100: Human Relations | 3 | X |  |  |
| SPCH 120: Business and Professional Speaking (or SPCH 101*) | 3 | X |  |  |
| AAS Group Requirements/ Electives To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Science | 9 | X |  |  |
| Total |  | 66 | 16 or 18 | 48 |

X = Required
*Students who are considering transfer options should take this course.
**or OTK100 or OTK 101

Suggested full-time Office Technology - Administrative Assistant - Legal Office AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1 1st Semester | 2nd Semester |  | 3rd Semester | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BUS $110 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | OT 160 | S | OT 200 | OT 230 | S |
| OT 114 F,S | OT 120 | S | OT 205 | OT 232 | S |
| OT 116 F,S | OT 150 | S | SPCH 120 F,S,Su | OT 290 | AN |
| OT 119 F,S | OT 113 | S | Gen Ed Elec F,S,Su | P REL 100 | F,S |
| OT 170 F,S | IT 120 | S | Bus 231 F | Gen Ed (2) | F,S,Su |
|  | IT 130 | S |  |  |  |
| $F=$ fall $\quad \mathrm{S}=$ spring | $\mathrm{Su}=\mathrm{su}$ |  | $\mathrm{AN}=$ as needed |  |  |

## Medical Office Specialist - General Specialty

For those interested in pursuing this concentration, the following options are available:

- Associate in Applied Science - Medical Office Specialist - General (63 Credit Hours) (ICCB Code: AAS 045D)
- Certificate - Medical Office Specialist (45 Credit Hours) (ICCB Code: C 045C)
- Certificate - Receptionist (16 Credit Hours) (ICCB Code: C 044G)

| Medical Office Specialist Gen.Spec. COURSES | Credit Hours | General AAS | Receptionist Cert. | Specialist Cert. |
| :---: | :---: | :---: | :---: | :---: |
| BUS 110: Business Math | 3 | X | X | X |
| HLTH 140:Medical Terminology (or OT 140) | 3 | X |  | X |
| IT 130: Word Processor Applications (or OT 116) | 3 | X |  | X |
| OT 113: Editing and Proofreading | 3 | X |  | X |
| OT 114: Word Processing \& Presentation | 3 | X | X | X |
| OT 116: Database Applications | 3 |  | X |  |
| OT 119: Business English | 3 | X | X | X |
| OT 120: Business Communications | 3 | X | X** | X |
| OT 141: Medical Office Anatomy (formerly OT 142) | 3 | X |  | X |
| OT 150: Records Management | 3 | X |  | X |
| OT 170: $\begin{aligned} & \text { Professional Office Procedures } \\ & \text { (formerly OT 250) }\end{aligned}$ | 3 | X | X | X |
| OT 205: Voicing \& Transcription | 3 | X |  | X |
| OT 215: Document Production | 3 | X |  | X |
| OT 240: Pharmacology Terminology | 3 | X |  | X |
| OT 244: Interpreting Healthcare Records | 3 | X |  | X |
| OT 245: Insurance/Patient Billing | 3 | X |  | X |
| OT 290: Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |
| P REL 100:Human Relations | 3 | X |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X |  |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Science | 9 | X |  |  |
| Total |  | 63 | 16 or 18 | 45 |

$X=$ Required
*Students who are considering transfer options should take this course.
** or OTK 100 or OTK 101
Suggested full-time Office Technology - Medical Office Specialist - General AAS sequence Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  |  | 2nd Semester |  |  | 3rd Semester |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

F=fall S=spring $\quad$ Su=summer $\quad A N=$ as needed

## 154 Instructional Programs

## Medical Office Specialist - Coding Specialty

For those interested in pursuing this concentration, the following options are available:

- Associate in Applied Science - Medical Office Specialist - Coding (63 Credit Hours) (ICCB Code: AAS 045D)
- Certificate - Medical Coding (21 Credit Hours) (ICCB Code: C 045B)
- Certificate - Receptionist (16 Credit Hours) (ICCB Code: C 044G)

| Medical Office Specialist Coding Specialty COURSES | Credit Hours | Med. Office <br> Specialist <br> Coding <br> AAS | Receptionist Cert. | Medical Coding Cert. |
| :---: | :---: | :---: | :---: | :---: |
| BUS 110: Business Math | 3 | X | X |  |
| HLTH 140: Medical Terminology (or OT 140) | 3 | X |  | X |
| IT 130: Word Processor Applications (or OT 116) | 3 | X |  |  |
| OT 113: Editing and Proofreading | 3 | X |  |  |
| OT 116: Database Applications | 3 |  | X |  |
| OT 114: Word Processing \& Presentation | 3 | X | X |  |
| OT 119: Business English | 3 | X | X |  |
| OT 120: Business Communications | 3 | X | X** |  |
| OT 141: Medical Office Anatomy (formerly OT 142) | 3 | X |  | X |
| OT 143: ICD-9 Coding (formerly OT 246) | 3 | X |  | X |
| OT 170: Professional Office Procedures (formerly OT 250) | 3 | X | X |  |
| OT 205: Voicing \& Transcription | 3 | X |  |  |
| OT 240: Pharmacology Terminology | 3 | X |  | X |
| OT 243: CPT Coding (formerly OT 245) | 3 | X |  | X |
| OT 244: Interpreting Healthcare Records | 3 | X |  | X |
| OT 245: Insurance/Patient Billing |  | 3 | X | X |
| OT 290: Work Experience Practicum \& Seminar | 3 | X |  |  |
| P REL 100: Human Relations | 3 | X |  |  |
| SPCH 120: Business and Professional Speaking |  | 3 | X |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Science | 9 | X |  |  |
| Total |  | 63 | 16-18 | 21 |

X = Required
Students who are considering transfer options should take this course.
** or OTK 100 or OTK 101
Suggested full-time Office Technology - Medical Office Specialist - Coding AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS $110 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | OT 113 | S | OT 205 | F | OT 245 | S |
| Hith 140 F,S | OT 120 | S | OT 240 | F | OT 290 | AN |
| OT 114 F,S | OT 141 | S | OT 243 | F | P REL 100 | F, S |
| OT 119 S | OT 143 | S | OT 244 | F | SPCH 120 | F,S,Su |
| OT 170 F | IT 130 | S | Gen Ed (2) | F,S,Su | Gen Ed Elec | F,S,Su |

$\mathrm{F}=$ fall $\mathrm{S}=$ spring $\mathrm{Su}=$ summer $\mathrm{AN}=$ as needed

## Medical Office Specialist - Transcription Specialty

The Richland Community College comprehensive medical transcription program is approved by the Approval Committee for Certificate Programs (ACCP), a joint committee established by AHIMA (American Health Information Management Association) and AHDI (Association for Healthcare Documentation Integrity) to approve medical transcription education certificate programs. AHIMA and AHDI acknowledge the ACCP approval committee as the process to identify quality medical transcription education programs that have been evaluated by a peer review process against a minimum set of standards for entry-level medical transcription professionals. This process allows academic institutions, healthcare organizations, and private companies to be acknowledged as offering an AHDI Approved Medical Transcription Certificate Program.

For those interested in pursuing this concentration, the following options are available:

- Associate in Applied Science - Medical Office Specialist - Transcription (63 Credit Hours) (ICCB Code: AAS 045D)
- Certificate - Medical Transcription (18 Credit Hours) (ICCB Code: C 045A)
- Certificate - Receptionist (16 Credit Hours) (ICCB Code: C 044G)

| Medical Office Specialist-Transcription Specialty COURSES | Credit Hours | Med. Office Specialist Transcript. AAS | Receptionist Cert. | $\begin{array}{\|c\|} \hline \text { Medical } \\ \text { Transcription } \\ \text { Cert. } \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: | :---: |
| BUS 110: Business Math | 3 | X | X |  |
| HLTH 140: Medical Terminology (or Ot 140) | 3 | X |  | X |
| IT 130: Word Processor Applications (or OT 116) | 3 | X |  |  |
| OT 113: Editing and Proofreading | 3 | X |  |  |
| OT 114: Word Processing \& Presentation | 3 | X | X |  |
| OT 116: Database Applications | 3 |  | X |  |
| OT 119: Business English | 3 | X | X |  |
| OT 120: Business Communications | 3 | X | X** |  |
| OT 141: Medical Office Anatomy (formerly OT 142) | 3 | X |  | X |
| OT 142: Medical Transcription (formerly OT 242) | 3 | X |  | X |
| OT 170: Professional Office Procedures (formerly OT 250) | 3 | X | X |  |
| OT 205: Voicing and Transcription | 3 | X |  |  |
| OT 240: Pharmacology Terminology | 3 | X |  | X |
| OT 242: Medical Transcription 2 (formerly OT 243) | 3 | X |  | X |
| OT 244: Interpreting Healthcare Records | 3 | X |  | X |
| OT 245: Insurance/Patient Billing | 3 | X |  |  |
| OT 290: Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |
| P REL 100: Human Relations | 3 | X |  |  |
| SPCH 120: Business and Professional Speaking (or SPCH 101*) | 3 | X |  |  |
| AAS Group Requirements/ Electives <br> To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Science | 9 | X |  |  |
| Total |  | 63 | 16-18 | 18 |

X = Required
*Students who are considering transfer options should take this course.
** or OTK 100 or OTK 101
Suggested full-time Office Technology - Medical Office Specialist - Transcription AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  |  | 3rd Semester |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

$F=$ fall $\quad S=$ spring $\quad S u=$ summer $\quad A N=$ as needed

## Pharmacy Technician

This is a selective admissions program. Admission to the program is by application. Admission to RCC does not guarantee acceptance to the program. Out-of-district students will be considered for the program when space is available.

General Description: Pharmacy technicians perform a variety of duties under the supervision of licensed pharmacists. They may prepare and distribute medications under the direct supervision of a pharmacist. They may replenish drugs and pharmaceutical supplies in the pharmacy and patient care areas, mix and add medications to intravenous solutions (with some limitations), price and order drugs, and maintain records required in the operation of the pharmacy. Pharmacy technicians must be aware of the necessity for aseptic technique, cleanliness, orderliness, and accuracy in the work areas.

Pharmacy technicians must be registered by the Illinois Department of Professional Regulation. National certification, by examination, is available from the Pharmacy Technician Certification Board.
Aptitudes: Students who desire to become a pharmacy technician must like to work with details and in a scientific or laboratory-type setting. They must be able to perform pharmaceutical mathematic procedures involving weights, measurements, and conversions. They must also be computer literate and possess keyboarding skills.
Outlook: Job opportunities are available in community-based retail pharmacies, hospitals, home health agencies, mail order companies, compounding pharmacies, nuclear pharmacies, and natural pharmacies and with pharmaceutical companies. Opportunities continue to be good in spite of unitdose packaging and automated dispensing.

## Admission Criteria:

Applicants must be one of the following: High school graduate, high school senior, or G.E.D. graduate.

Submit the following: Application for Admission to Richland Community College, official high school transcript or G.E.D. certificate, and official college transcript from other college(s) for previous college work if it is to be considered for the program.

Complete the College placement examinations as follows: English (eligible for ENGL 101) or submit ACT scores with 19 or higher in English and Reading; Math (level equivalent to MATH 091).

Submit an Application for Admission to Pharmacy Technician Program.
Applications to the program are available in the Health Professions Office (S162). The application period is from October 1 to March 1. Students who apply by March 1 will be informed by letter of the action taken on their application by March 20. Late applications will be accepted and reviewed until class enrollment is filled. The program sequence begins in the fall semester and is conducted over two semesters.

For admission to the program, progression within the program and graduation from the program, students must earn a grade of "C" or better in the general education courses required by the program and in all core pharmacy technology courses.

This is an occupational training program. Some courses may not transfer to four-year institutions.
Basic Certificate - Pharmacy Technician (18 Credit Hours) (ICCB Code: BC 2074)

| Pharmacy Technician <br> COURSES | Credit <br> Hours | Pharmacy Technician <br> Basic Certificate |
| :--- | :---: | :---: |
| HLTH 150: Pharmacology | 4 | X |
| HLTH 152: Pharmacy Calculations | 2 | X |
| HLTH 155: Pharmacy Technician | 6 | X |
| HLTH 156: Work Experience | 2 | X |
| HLTH 157: Pharmacy Technician Certification Review | 1 | X |
| CIS 110: Business Applications on Microcomputers | 3 | X |
| Total |  | $\mathbf{1 8}$ |

X $=$ Required

## Suggested full-time Pharmacy Technician Basic Certificate sequence

1st Semester - Fall<br>2nd Semester - Spring<br>HLTH 150<br>HLTH 152<br>HLTH 155<br>CIS 110<br>HLTH 156<br>HLTH 157

## Certification:

After successful completion of all didactic and clinical competency requirements, students are eligible to seek certification from the Pharmacy Technician Certification Board (PTCB) by making application for the examination.

## Practical Nursing

Practical Nursing is a selective admissions program. Admission to the program is by application. The minimum criteria must be met in order to complete an application. Admission to RCC does not guarantee acceptance to the program. Out-of-district students will be considered for the program when space is available. Attendance at an informational session is required to receive a program worksheet and advisement plan to determine eligibility for application.

General Description: The Practical Nursing program at RCC is approved by the Illinois of Department of Financial and Professional Regulation and prepares entry-level students to provide nursing care to clients with normal and common health problems through the use of basic skills under the direction of a registered nurse or licensed physician. The program consists of classroom instruction, laboratory, and clinical experiences in hospitals, nursing homes, and community health settings. Upon successful completion of the program and on passing the required criminal background check, the graduate will then be eligible to write the National Council of State Boards of Nursing Examination for Practical Nurses (NCLEX-PN). After successfully passing this examination, the graduate can apply for licensure as a practical nurse. As required by the Illinois Nursing \& Advanced Practice Nursing Act, the licensing process includes a criminal background check. In addition, the curriculum is structured so that the practical nurse graduate may choose courses that will allow for continued study in Richland Community College's Associate Degree Nursing program.
Aptitudes: Nursing is a demanding, challenging, and satisfying profession. It requires clinical expertise, academic knowledge, critical thinking skills, physical stamina, and personal integrity. Individuals preparing to enter nursing must have good time management and study skills; in addition, they must be caring, self-disciplined, and committed to nursing as a goal.
Outlook: Nursing remains the largest single health profession in the United States. Nursing offers a life-long career with many learning and employment opportunities. The current and future need for nurses will be in acute care, long-term care, and community health agencies. The current salary for beginning practical nurses in the Richland District ranges from $\$ 12$ to $\$ 14$ per hour. Starting salaries average $\$ 24,960-\$ 29,120$ per year, depending on location.

## Admission Criteria:

Applicants must be one of the following: High school graduate, high school senior, or G.E.D. graduate. Complete an application for admission to the program by March 1 (5:00 p.m.) for admission to the LPN Program. If March 1 falls on a weekend, 5:00 p.m. the first Monday following the date will automatically become the final application date.

Submit the following: Application for Admission to Richland Community College, official high school transcript or G.E.D. certificate, and official college transcript from other college(s) for previous college work if it is to be considered for the program.

## 158 Instructional Programs

Cumulative Program GPA of 2.50 or above, on a scale of 4.0, in the prerequisites and general education courses that apply to the program (BIOL 101, BIOL 201, BIOL 202, ENGL 101, PSYCH 110, PSYCH 145, HLTH 197/297, HLTH 220), and a Biology GPA of 2.0 or better. Transcripts must show evidence that a grade of " C " or above has been earned in each course. The last biology course must have been completed within the past five years.

Complete the College placement examinations as follows: English (placement in ENGL 101), eligibility for Math 098 or completion of MATH 091 and MATH 106, and a Nelson Denny Reading Score of 12th grade or better.

CNA in good standing on the Illinois Department of Public Health Nurse Aide Registry.
Complete an application for Admission to the Program by the March 1, for summer admission.

Note: High school and college academic records from earlier admissions (five or more years ago) may be excluded from the evaluation by submitting a written request to the Program Director.

## Student selection is competitive and is determined by

1. Program Grade point average (GPA) of 2.50 or above, on a 4.00 scale in the general education courses that apply to the program.
2. Biology GPA of 2.00 or better.
3. Number of Biology courses completed.
4. Nelson Denny Reading Level.
5. The number of Biology courses completed.
6. The number of program course withdrawals and grades less than a "C".
7. Priority is given to the most qualified students.

## Admission is conditional:

Students are admitted to the program conditionally and must return the acceptance form to the Nursing Department, submit a completed RCC Health Physical and provide proof of valid immunizations and/ or immunity to certain diseases, submit a valid BLS Healthcare Provider (CPR) card by the established deadlines, and attend PN 101 to be fully admitted in the program. Students who do not complete the above requirements by the established deadlines will forfeit their space in the program.

The following courses must be taken to meet practical nursing program admission requirements for summer admission. A grade of "C" or above in all program course work and a Program GPA of at least 2.50 are required for admission, progression, and graduation from the program.

Practical Nursing Certificate 47 Credit Hours (ICCB Code: C050A)

| Practical Nursing <br> Prerequisites for Program Courses | Credit <br> Hours | Semesters <br> Offered | Transferable* | Proficiency Exam |
| :--- | :---: | :---: | :---: | :---: |
| 4 semesters of high school Biology and 2 <br> semesters of Chemistry or Physics with a "B" or <br> better or BIOL 101-Concepts of Biology I |  |  |  |  |
| PSYCH 110: Intro to Psych | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | No | Yes |


| Practical Nursing COURSES-First Semester-Year 1 | Credit <br> Hours | Semesters Offered | Transferable* |
| :---: | :---: | :---: | :---: |
| PSYCH 145: Life Span Psych | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| HLTH 220: Nutrition | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| BIOL 201: Human Anatomy \& Physiology I | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| COURSES-Second Semester-Year 1 |  |  |  |
| PN 101A: Transition I | 1 | Fa | Yes* |
| PN 102A: Wellness I (1st 8 weeks) | 6 | Fa | Yes* |
| PN 103A: Wellness II (2nd 8 weeks) | 4 | Fa | Yes* |
| NURS 154: Pharmacology | 3 | $\mathrm{Fa} / \mathrm{Sp}$ | Yes* |
| BIOL 202: A\&P II | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| COURSES-Third Semester-Year 1 |  |  |  |
| PN 104A: Transitions II | 1 | Spring | Yes* |
| PN 105: Alterations I (1st 8 wks ) | 7 | Sp | Yes* |
| PN 106: Alterations II (2nd 8 wks ) | 6 | Sp | Yes* |
| ENGL 101: Composition | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| HLTH 197 or HLTH 297: Special Topics in Healthcare elec. | 1 | Fa/Sp | Yes* |
| PN 113: Licensure Prep | 1 | Spring | Yes* |

*Verify transferability of this course with a specific school. Courses in major may or may not be transferable.

Student Admission, Readmission, and Transfer from another PN Program: Admission to the program is granted on a space-available basis. Priorities for admission are determined as follows:

1. Current or continuing students who are in good standing academically and ethically are given seats in the class before new/readmissions are considered.
2. In-district students admitted for the first time into PN 101A/102A are evaluated according to the established admission criteria, and priority will be given to the most qualified students as space is available.
3. Finally, in-district students seeking readmission and transfer students are evaluated as one group according to the established admission criteria and priority will be given to the most qualified students if space is available.
4. Because of the competition for positions in the nursing program, students seeking readmission may choose to apply for readmission to any semester that precedes the semester they are required to repeat. If a student chooses this option and is readmitted, he or she must complete ALL nursing courses required in the semester into which he or she is readmitted, AND ALL subsequent nursing courses required in the program.
5. Applicants who meet or exceed the minimum admission requirements and are not admitted because of lack of space shall be placed on a list for alternate admission.
6. The alternate list is ranked for in-district and then for out-of-district students.
7. In the event of a cancellation of an admitted student, applicants on the alternate list will be contacted up to and including the day before classes start. Once the program begins, the alternate list will not roll over. Applicants must reapply for each semester and are evaluated with all other applicants during the next admission cycle.
8. To receive transfer credit for PN 102A, the course syllabus must be submitted to the Dean of Health Professions for review.
9. Only PN 102A may be accepted for transfer to maintain the integrity of the RCC Practical Nursing curriculum. Students must validate skill proficiency for credit to be awarded for PN 102A.
10. Each student will be evaluated on an individual basis to determine placement within the program. Availability of clinical space may also impact the entry decision.

## Graduation Requirements:

- Constitution Test if not an Illinois high school graduate
- A grade of "C" or better in all prerequisite and program courses
- A 2.50 Program GPA on completion of all required program courses
- Completion of all nursing psychomotor competencies with $76 \%$ of the designated skills must be performed in the clinical setting at or above the expected level of competency
- Meets standards of the NLN Code of Ethics and the Professional Integrity Policy


## 160 Instructional Programs


#### Abstract

Licensure/Certification: Upon successful completion by the graduation date of all requirements for the Practical Nursing Certificate outlined in the RCC Catalog and the Nursing Handbook, students will be required to submit a background check and will then be eligible to write the National Council of State Boards of Nursing Examination for Registered Nurses (NCLEX-PN). After successfully passing this examination, the graduate can apply for a state license to practice in Illinois as a Practical Nurse. Graduating from this program does not guarantee that the graduate will become a Practical Nurse. As required by the Illinois Nursing and Advanced Practice Nursing Act, the licensing process includes a criminal background check. If there are questions about the licensure exam or the background check, students should contact the Illinois Department of Financial and Professional Regulation at 312-814-4500. http://www.idfpr.com/dpr/WHO/nurs.asp


## Radiography

Radiography is a selective admissions program. Admission to the program is by application. Admission to RCC does not guarantee acceptance to the program. Out-of-district students will be considered for the program when space is available. Details on selective admission are found at Selective Admission to Health Professions on page 19.
General Description: The mission of the Richland Community College Radiography Program is to provide students with classroom, lab, and clinical experiences that enable them to achieve entry-level knowledge, skills, and professional values needed to produce quality radiographs. The program prepares students to safely use ionizing radiation to produce images of the tissue, organs, bones, and vessels of the human body. Radiographers must have a thorough understanding of anatomy, radiographic procedures, image production, patient care, and radiation protection. Additional duties may include processing film, evaluating radiologic equipment, managing a radiographic quality assurance program, and providing relevant patient education.
Aptitudes: Radiography is a challenging and rewarding profession. It requires a warm and compassionate manner, pleasant personality, ability to work with others, accurate work habits, patience, and an interest in science and computer-assisted medical technology. Radiographers must be able to think critically and problem solve so they can assess situations and make good decisions to provide appropriate patient care. Physical strength to lift equipment and patients, manual dexterity to load cassettes, ability to hear patients, vision to access radiographic images, and verbal skills to communicate with patients are absolutely necessary.
Outlook: A radiographer may be employed by hospitals, clinics, physician's offices, and government agencies. X-ray equipment manufacturers and educational facilities may also offer employment. In Illinois and nationally, employment is expected to grow faster than average through 2014. Contributing to this growth is the increased demand for services by the aging population, the aging of radiographers, and the expansion of other imaging modalities. Nationally, the mean full-time compensation in 2007 for radiographers was $\$ 52,673$, and in Illinois the mean was $\$ 55,479$. The mean for radiographers with $0-2$ years experience was $\$ 44,346$.

## Admission Criteria:

Attendance at an informational session is required to receive a program advisement plan to determine eligibility for application.
Applicants must be one of the following: High school graduate, high school senior, or G.E.D. graduate.

Submit the following: Application for Admission to Richland Community College, official high school transcript or G.E.D. certificate, and official transcript(s) from other college(s) if transfer courses are to be considered for the program. Applicant must show evidence of one year of high school geometry or RCC MATH 095 (Geometry or its equivalent) with a grade of "C" or above.

Meet one of the following: an ACT composite score of 21 or above with a science reasoning score of 20 or above and no section below 15, or cumulative college GPA of 2.5 or above on a scale of 4.0 and transcripts showing a grade of "C" or above in each of the general education courses that apply to the program (BIOL 101, BIOL 201, BIOL 202, ENGL 101, and PSYCH 110), or IEMA Division of Nuclear Safety Limited License.

Complete the College placement examinations as follows: English (eligible for ENGL 101) or submit ACT scores with 19 or higher in English and Reading; Math (level equivalent to MATH 098 or complete MATH 091), and a Nelson Denny Reading comprehension score of $12^{\text {th }}$ grade (120) or above.

Note: High school and college academic records from admissions five or more years ago may be excluded from the evaluation by submitting a written request to the Program Director.

The following courses must be taken to meet radiography program admission requirements. A grade of "C" or above in all program course work and a GPA of at least 2.5 are required for admission, progression, and graduation from the program.

| Radiography <br> Prerequisites for Program Courses | Credit <br> Hours | Semesters <br> Offered | Transferable* | Proficiency Exam |
| :--- | :---: | :---: | :---: | :---: |
| HLTH 140 - Medical Terminology | 3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Sy}$ | Yes | Yes |
| RADT 101 - Introduction to Radiography** | 3 | Fa | $*$ | No |

*Verify transferability of this course with a specific school.
*Prerequisites: eligibility for ENGL 101 \& math placement score at 098. Students may be concurrently enrolled in MATH 095.

| Radiography COURSES-First Semester - Summer - Year 1 | Credit Hours | Semesters Offered | Transferable* |
| :---: | :---: | :---: | :---: |
| RADT 102: Patient Care | 3-1-3 | Su | * |
| RADT 108: Radiographic Procedures I | 2-3-3 | Su | * |
| COURSES-Second Semester - Fall- Year 1 |  |  |  |
| RADT 110: Principles I | 3-0-3 | Fa | * |
| RADT 115: Radiography Clinical I | 0-18-3 | Fa | * |
| RADT 116: Radiation Physics | 3-0-3 | Fa | * |
| RADT 118: Radiographic Procedures II | 2-3-3 | Fa | * |
| BIOL 101: Concepts of Biology 1 | 3-2-4 | Fa/Sp/Su | Yes |
| COURSES-Third Semester - Spring - Year 1 |  |  |  |
| RADT 120: Principles II | 3-0-3 | Sp | * |
| RADT 125: Radiography Clinical II | 0-18-3 | Sp | * |
| RADT 126: Imaging Equipment | 3-0-3 | Sp | * |
| RADT 128: Radiographic Procedures III | 2-3-3 | Sp | * |
| BIOL 201: Human Anatomy \& Physiology I | 3-2-4 | Fa/Sp/Su | Yes |
| COURSES-Fourth Semester - Summer - Year 2 RADT 155: Radiography Clinical III | 0-21-3.5 | Su | * |
| COURSES-Fifth Semester - Fall - Year 2 |  |  |  |
| RADT 215: Radiography Clinical IV | 0-24-4 | Fa | * |
| RADT 218: Radiographic Procedures IV | 2-3-3 | Fa | * |
| RADT 219: Radiation Protection \& Radiobiology | 2-0-2 | Fa | * |
| BIOL 202: Human Anatomy \& Physiology II | 3-2-4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| COURSES-Sixth Semester - Spring - Year 2 |  |  |  |
| RADT 225: Radiography Clinical V | 0-24-4 | Sp | * |
| RADT 228: Radiographic Image Analysis | 1.5-0-1.5 | Sp | * |
| RADT 230: Radiography Seminar | 2-3-3 | Sp | * |
| PSYCH 110: Introduction to Psychology | 3-0-3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| ENGL 101: Composition I | 3-0-3 | Fa/Sp/Su | Yes |

[^7]
## 162 Instructional Programs

## Licensure/certification:

After successful completion of all didactic and clinical competency requirements, students are eligible to seek certification from the American Registry of Radiologic Technologists (ARRT). In addition to the educational standards, students must meet and agree to comply with the organization's ethical and character standards before sitting for the certification exam.

Students wishing to practice within Illinois must also seek accreditation from the IEMA Division of Nuclear Safety.

## Student Transfer from another RT Program

Any student wishing to transfer into the program must apply for College admission and program admission. Transfer credits will be evaluated and transfer of credit will occur through College policy. Such transfer shall be subject to the availability of an appropriate clinical placement, student admission procedures, and Program Director approval.

## Degree Completion Program for R.T. (R) (ARRT)

Registered radiographers may be eligible for an associate's degree completion program if they meet the following:

1. Have five years experience in radiography.
2. Hold a current ARRT registration AND IEMA Division of Nuclear Safety license.
3. Be graduated from an accredited hospital-based or certificate radiography program,
4. Apply for admission to Richland Community College.
5. Submit transcripts from radiography program and any colleges attended to Richland Community College Admissions and Records.
If all of the above are satisfied, students may apply for transfer credit without examination by completing the following:
6. Applying for degree completion to the Radiography Program Director
7. Completing a minimum of eighteen credit hours of general education with a grade of " C or better of which at least fifteen credit hours must be completed at Richland. English Composition I and Introduction to Psychology must be included.
8. Satisfying Constitution requirement
9. Submitting an Application for Graduation.

Transfer credit for all core radiography courses is awarded when all of the above are satisfied. Transfer credit is not included in computing the student's GPA at Richland.

## Other Graduation Requirements:

Radiography program students must also complete all of the following in order to graduate:

- Pass the Constitution Test if not a graduate of an Illinois high school;
- Complete all lab competencies with minimum score of $84 \%$;
- Complete all clinical proficiency exams required by the program;
- Meet standards of the ARRT/ASRT Code of Professional Ethics;
- Complete all clinical proficiency exams required by ARRT;
- Return film ID markers and film badge holder or make reimbursement.


## Surgical Technology

Surgical Technology is a selective admissions program. Admission to the program is by application. Admission to Richland Community College does not guarantee acceptance to the program. The applicant must meet or exceed the minimum requirements to be considered for admission to the Surgical Technology Program. The Surgical Technology Certificate/AAS Degree program at RCC is a regional program with Heartland, Lakeland, and Lincoln Land Community Colleges. Students who are admitted to this program may take non-core courses at their local college. The core Surgical Technology courses will be offered at RCC. While enrolled at RCC, the students will become in-district students. They will pay the current tuition rate and follow the same procedures regarding student services as in-district. Details on selective admission are found on page 18.

General Description: The Surgical Technology Certificate/AAS Degree Program is accredited by the Commission of Accreditation of Allied Health Education Programs (CAAHEP, 1361 Park Street, Clearwater, FL 33756 Phone: 727-210-2350 Web: www.CAAHEP.org). The mission of the RCC Surgical Technology program is to prepare students for entry level into the profession, by providing instructors in the three learning domains-afferent, critical thinking, and psycho motor. The program prepares students to assist with patient care and related services in delivery room, surgery center, and other settings that call for knowledge of asepsis by performing tasks that help ensure safe surgical procedures. Some of those tasks include preparing all supplies, instruments, and equipment for operative procedures; passing instruments to the surgeon and understanding aseptic technique. The program provides classroom instruction, laboratory, and clinical experiences.
Aptitudes: Surgical Technology is a demanding, challenging, and satisfying profession. It requires clinical expertise, academic knowledge, thinking skills, physical stamina, the ability to work with others in a team, and personal integrity. Students must be physically and mentally capable of lifting supplies and instrument trays, moving heavy equipment, and lifting/moving patients. Physical stamina is required to be able to stand for long periods of time, and the student must be able to work in a confined/stressful environment. The student must possess adequate visual, hearing, and verbal communication skills. Due to the physical constraints of the profession, students who are admitted to the program are required to submit a health record certifying these abilities. Additionally, students must have the ability to pay close attention to detail, be conscientious, orderly, emotionally stable, and be willing to continue their education throughout their career to keep abreast of new developments in the field.
Outlook: The Surgical Technology profession is expected to grow faster than the average to the year 2010. The current salary for new graduates ranges from $\$ 11-\$ 13$ per hour. With successful completion of the certification examination, the salary may increase. In addition, several health care providers may offer sign-on bonuses and/or educational incentives.

This is an occupational training program. Some of the courses may not transfer to four-year institutions.

## Admission Criteria:

Attendance at an information session is required to receive a program worksheet to determine eligibility for application.
Applicants must be one of the following: High school graduate, high school senior, or G.E.D. graduate.
Submit the following: Application for Admission to Richland Community College, official high school transcript or G.E.D. certificate, and official college transcript from other college(s) for previous college work if it is to be considered for the program.
Program GPA of 2.5 or above, on a scale of 4.0, in the General Education courses that apply to the program (BIOL 101, BIOL 201, BIOL 202, BIOL 220, ENGL 101, HLTH 140, and PSYCH 110). Transcripts must show evidence that a grade of "C" or above has been earned in each course. Complete the College placement examinations as follows: English (eligible for ENGL 101)

## 164 Instructional Programs

Be eligible for BIOL 220 (Microbiology) during the program's first semester. High School students who graduate in the current year may take BIOL 101 in the junior or senior year of high school, as permitted by the College policy

Pass the Revised PSB-Health Occupations Test with a combined score of $50 \%$ or above.
Applications to Richland's Regional Surgical Technology Program are due by March 1. Late applications will be accepted until the class is filled. Students will be informed by letter of the action taken on their applications by April 15, June 5, and August 15. A new Surgical Technology Class will begin fall semester of each year.

Note: High school and college academic records from earlier admissions (five or more years ago) may be excluded from the evaluation by submitting a written request to the Program Director.

The following courses must be taken to meet Surgical Technology program admission requirements. A grade of "C" or above in all program course work \& a GPA of at least 2.5 are required for admission, progression, and graduation program.

| Surgical Technology <br> Prerequisites for Program Courses | Credit <br> Hours | Semesters <br> Offered | Transferable* | Proficiency Exam |
| :--- | :---: | :---: | :---: | :---: |
| BIOL 101: Concepts of Biology 1* <br> Program GPA 2.50 <br> PSB Scores 50\% | 4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | No | Yes |


| Surgical Technology COURSES-First Semester - Fall - Year 1 | Credit Hours | Semesters Offered | Transferable* |
| :---: | :---: | :---: | :---: |
| SURGT 100: Surgical Technology Orientation* | 2-0-2 | Fa | * |
| BIOL 220: Microbiology* | 3-2-4 | Fa/Sp/Su | Yes* |
| ENGL 101: Composition 1 | 3-0-3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| HLTH 140: Medical Terminology* | 3-0-3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| COURSES-Second Semester - Spring - Year 1 |  |  |  |
| SURGT 101: Surgical Technology I* | 4-6-6 | Sp | * |
| BIOL 201: Human Anatomy \& Physiology 1* | 3-2-4 | Fa/Sp/Su | Yes* |
| COURSES-Third Semester - Summer - Year 1 |  |  |  |
| SURGT 102: Surgical Technology II* | 4-9-7 | Su | * |
| COURSES-Fourth Semester - Fall - Year 2 |  |  |  |
| SURGT 201: Surgical Technology III* | 8-15-13 | Fa | * |
| BIOL 202: Human Anatomy \& Physiology II* | 3-2-4 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes |
| COURSES-Fifth Semester - Spring - Year 2 |  |  |  |
| SURGT 202: Work Experience Practicum* | 2-21-9 | Sp | * |
| PSYCH 110: Introduction to Psychology | 3-0-3 | $\mathrm{Fa} / \mathrm{Sp} / \mathrm{Su}$ | Yes* |

*Verify transferability of this course with a specific school.

A grade of "C" or better in ENGL 101 is required for the AAS degree.

- Certificate - Surgical Technology (48 Credit Hours) (* courses required for this certificate)
- Associate in Applied Science Degree - Surgical Technology (61-62 Credit Hours)


## Licensure/Certification:

After successful completion of all didactic, laboratory, and clinical competency requirements, the graduate will receive a Certificate/AAS Degree of Completion and become a Certified Surgical Technologist (CST) upon passing the National Certification Examination given by the NBSTSA. Students wishing to practice within Illinois may also seek registration from the Department of Regulation in Springfield, Illinois.

## Student Transfer from another Surgical Technology Program

Any student wishing to transfer into the program must apply for College admission and program admission. Transfer credits will be evaluated and transfer of credit will occur through College policy. Such transfer shall be subject to the availability of an appropriate clinical placement, student admission procedures, and Program Director approval.

## Degree Completion Program for Certified Surgical Technologist

Certified Surgical Technologists (CST) may be eligible for AAS Degree completion if they meet the following:

1. Presently employed as a CST.
2. Demonstrate current Certification through the National Board for Surgical Technology and Surgical Assistant (NBSTSA).
3. Apply for admission to Richland Community College.
4. Submit transcripts from surgical technology program and any colleges attended to Richland Community College Admissions and Records.
5. With approval of the Program Director, enroll in SURGT 290 Internship Course. If all of the above criteria are satisfied, students may apply for transfer credit withoutexamination by submitting a degree completion letter for admission to the Surgical Technology Program Director.

## Other Graduation Requirements:

Surgical Technology program students must also complete all of the following in order to graduate:

1. Pass the Constitution Test if not a graduate of an Illinois high school.
2. A "C" or better in all program courses including all prerequisites and courses required for the Certificate/AAS.
3. A Program GPA of 2.5. Program GPA in all prerequisites and program courses required for the Certificate/AAS Degree.
4. Completion of all surgical technology skills in the lab/clinical and $100 \%$ of the designated skills must be performed in both lab/clinical settings.
5. All skill performances must be at $100 \%$ competency level.
6. No violation of Professional Integrity Policy.

## Teacher Assistant (See Paraprofessional Education, Page 111)

## Transportation

General Description: The CDL Truck Driver (Tractor/Trailer) Training Program is designed for individuals with little or no commercial driving experience. The program consists of a course that includes the Commercial Driver's License learner's permit and endorsement preparation, regulations, log books, map reading, trip planning, and complete vehicle training to prepare the individual for an entry-level position in the trucking industry. The program can be completed in four weeks by attending full time during the day, Monday through Friday. The part-time program can be completed in a maximum of eight weeks and is offered during the evening, Monday through Friday. Thirty (30) hours of home study are required during the program. Full-time programs start every month. Students may register at any time.
Aptitudes: Truckers should enjoy working outdoors, need average manual dexterity and good eyehand coordination, possess mechanical abilities, the ability to meet deadlines, and good work ethic. Good eyesight and physical condition are also needed.
Outlook: The trucking industry has a significant number of job openings in Central Illinois. There is a serious to moderate shortage of qualified truck drivers nationwide.

## 166 Instructional Programs

This is an occupational training program. Some courses may not transfer to four-year institutions. - Basic Certificate - Transportation (7 Credit Hours) (ICCB Code: BC 0123)

| Transportation <br> Required Courses | Credit <br> Hours |
| :--- | :---: |
| CDL1000: Tractor/Trailer Driver Training | 7 |

## Welding Technology

General Description: Welding is the most common way of permanently joining metal. Because of its strength, welding is used to build and repair a myriad of products, from pipelines and power plants to ships and spacecraft. Job opportunities are on the rise as the demand for highly trained welders increases with industries throughout the world. Welders plan the sequence of operations and select the equipment to be used according to the kinds of metals involved and the type of weld to be made. The Welding program is designed to provide skill development in currently used welding processes including brazing, soldering, arc welding, gas welding, resistance welding, and solid state welding. Additionally, skill development may be obtained in oxy-fuel cutting, arc cutting, thermal cutting, thermal spraying, and adhesive bonding. This program prepares students to take the certification exams reflecting the structural codes and standards set by the American Society of Mechanical Engineers (ASME 9), American Welding Society (AWS), and the National Center for Construction Education \& Research (NCCER). Students seeking this degree will need to choose between a construction and pipe welding concentration or an industrial and equipment specialty. Welders work indoors and outdoors, often welding in awkward positions.
Construction and Pipe Specialty - Students pursing this specialty will receive instruction through Richland Community College and National Pipe Trades at 932 E. Wood, Decatur, Illinois 62521. Upon graduation students will be prepared for the NCCER certification. Many courses in this specialization have a higher tuition cost - check with the Student Services Center for details.
Aptitudes: According the Illinois Career Information System, welders are people who tend to

- Consider support from their employer important. They like to be treated fairly and have supervisors who will back them up. They prefer jobs where they are trained well.
- Consider good working conditions important. They like jobs offering steady employment and good pay. They want employment that fits their individual work style. They may prefer doing a variety of tasks, working alone, or being busy all the time.
- Have realistic interests. They like work activities that include practical, hands-on problems and solutions. They like to work with plants, animals, and physical materials such as wood, tools, and machinery. They often prefer to work outside.
- Have conventional interests. They like work activities that follow set procedures, routines, and standards. They like to work with data and detail. They prefer working where there is a clear line of authority to follow.
Outlook: Nationally \& statewide, these positions are expected to grow about as fast as average over the next decade. However locally, the manufacturing and construction industries are experience a severe shortage of qualified welders. Opportunities for skilled certified welders should be plentiful.

This is an occupational training program. Some of the courses may not transfer to four-year institutions.

For those interested in pursuing a certificate or degree, the following options are available:

- Associate in Applied Science - Welding Technology with two specialty options (64/68 credit hours) (ICCB Code: AAS 0032)
- Certificate - Welding (31 credit hours) (ICCB Code: C 0030)
- Certificate - Welding Technician (45 credit hours) (ICCB Code: C 032A)
- Certificate - Pipefitting \& Pipe Welding (52 credit hours) (ICCB Code: C 032B)

| Welding Technology COURSES | Credit <br> Hours | Const <br> \& Pipe AAS |  <br> Equipment AAS | Welding Cert. | Welding Tech Cert. | Pipefitting \& Pipe Cert. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X | X |  |  |  |
| ENGT 100: Industrial Processes (formerly MFG 120) | 3 |  | X |  | X |  |
| ENGT 102: Blueprint Reading (formerly MFG 100) (or DRAFT 101) | 2 | X | X | X | X | X |
| ENGT 105: Occupational Safety (formerly IND S 100) | 3 |  | X |  | X |  |
| ENGT 160: Metrology | 2 |  | X |  | X |  |
| ENGT 200: Industrial Materials (formerly MFG 110) | 3 |  | X |  | X |  |
| ENGT 231: Piping Fundamentals (formerly MEC S 240) | 2 |  | X |  | X |  |
| ENGT 232: Rigging \& Cranes | 2 |  | X |  | X |  |
| ENGT 260: Quality Fundamentals (formerly PROD C 130) | 3 |  | X |  | X |  |
| ENGT 290: Work Experience Practicum \& Seminar (or ENGT 295) | 3 |  | X |  |  |  |
| MATH 104: Technical Mathematics | 4 | X | X | X |  |  |
| P REL 100: Human Relations | 3 | X | X |  |  |  |
| SPCH 120: Business \& Professional Speaking (or SPCH 101*) | 3 | X | X |  |  |  |
| WELD 100: Oxy-Acetylene \& Plasma Arc Cutting | 1 | X | X | X | X | X |
| WELD 101: Shielded Metal Arc Welding | 4 | X | X | X | X | X |
| WELD 102: Adv. Shielded Metal Arc Welding | 4 | X | X | X | X | X |
| WELD 103: Welding Tools \& Safety | 3 | X | X | X | X | X |
| WELD 190: Maintenance Welding | 2 |  | X | X | X |  |
| WELD 201: Gas Metal Arc \& Flux Core Arc Welding | 2 | X | X | X | X | X |
| WELD 202: Welder Certification** | 2 | X | X | X | X | X |
| WELD 204: Pipe Welding | 4 | X | X | X | X | X |
| WELD 205: Gas Tungsten Arc Welding | 3 | X | X | X | X | X |
| WELD 230: Pipefitting Fundamentals | 3 | X |  |  |  | X |
| WELD 231: Pipefitting Applications | 4 | X |  |  |  | X |
| WELD 232: Pipefitting Techniques | 4 | X |  |  |  | X |
| WELD 233: Pipe Fabrication | 3 | X |  |  |  | X |
| WELD 234: Field Maintenance \& Safety | 4 | X |  |  |  | X |
| WELD 240: Non-Ferrous Welding |  | X |  |  |  | X |
| WELD 241: GMAW/FCAW Pipe | 3 | X |  |  |  | X |
| WELD 242: Aluminum Plate \& Pipe | 3 | X |  |  |  | X |
| General Education Elective (Phys 100 rec.) | 3 | X | X |  |  |  |
| Total |  | 68 | 64 | 31 | 45 | 52 |

X = Required

* Students who are considering transfer options should take this course.

A grade of "C" or better in ENGL 101 is required for the AAS degree.
**WELD 202 is designed to prepare students for workplace testing and is based on the ASME code. Completion of this course does not certify student in AWS, NCCER, or ASME. Additional testing with these organizations will be required to receive these certifications.

## 168 Instructional Programs

Suggested full-time Welding Technology - Construction \& Pipe Specialty AAS sequence
Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester |  | 2nd Semester |  | 3 rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL 110 | F,S,Su | P REL 100 | F,S | WELD 230 | F,S | WELD 231 | F,S |
| ENGT 102 | F,S | WELD 103 | F,S | WELD 240 | F,S | WELD 232 | F,S |
| MATH 104 | F,S,Su | WELD 201 | F,S,Su | WELD 241 | F,S | WELD 233 | F,S |
| WELD 100 | F,S,Su | WELD 202 | F,S,Su | WELD 242 | F,S | WELD 234 | F,S |
| WELD 101 | F,S,Su | WELD 204 | F,S,Su | SPCH 101 | F,S,Su | Gen Ed Elec | F,S,Su |
| WELD 102 | F,S,Su | WELD 205 | F,S,Su |  |  |  |  |
| $\mathrm{F}=$ fall | S=spring | Su=summer | AN=as |  |  |  |  |

Suggested full-time Welding Technology - Industrial \& Equipment Specialty AAS sequence Note: Students who start in January may not finish in a two-year time frame. Recommended sequence begins in the fall.

| 1st Semester | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL $110 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | ENGT 105 | S | ENGT 100 | F | ENGT 231 | S |
| ENGT $102 \mathrm{~F}, \mathrm{~S}$ | ENGT 160 | S | ENGT 200 | F | ENGT 232 | S |
| MATH $104 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | WELD190 | F,S,Su | ENGT 260 | F | ENGT 290 | AN |
| WELD $100 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | WELD 103 | F, S | SPCH 101 | F,S,Su | P REL 100 | F, S |
| WELD 101 F,S,Su | WELD 201 | F,S,Su | WELD 204 | F,S,Su | WELD 202 | F,S,Su |
| WELD $102 \mathrm{~F}, \mathrm{~S}, \mathrm{Su}$ | WELD 202 | F,S,Su | WELD 205 | F,S,Su |  |  |
|  | Gen Ed Elec | F,S,Su |  |  |  |  |
| $\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring | $\mathrm{Su}=$ summer | AN=as |  |  |  |  |

## Guarantee for Technical Competency

Any student earning an Associate in Applied Science degree or certificate who is judged by an employer to be lacking in the technical job skills necessary for entry into the job for which the degree or certificate was designed shall be provided up to nine tuition-free credit hours of additional skill training. The graduate, under the agreement to enact this guarantee, will still be responsible for all costs other than the tuition specified.

Qualifying Conditions for the Guarantee:

1. The graduate must have earned the Associate in Applied Science degree or certificate no earlier than one year prior to the beginning date of the employment under consideration.
2. The graduate must have completed the degree within a five-year time period beginning at the point of first employment.
3. The graduate must be employed full time in a position directly related to the program of study as certified by the Vice President of Student and Academic Services.
4. The employer must certify in writing that the graduate is lacking entry-level skills within 90 days of the graduate's initial date of employment.
5. The employer, graduate, division Dean, and appropriate faculty member, on the occasion of confirmed need for more training, would develop a written educational plan for retraining.
6. This guarantee does not imply that the graduate is guaranteed to pass any licensing or qualifying examination for a particular career.

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## General Programs

## Basic Certificate Programs

The full range of courses offered by the College is applicable to the first seven basic certificate programs. Students may develop programs that will meet their specific interests or needs.

The Basic Certificate in Personal Development is meant to serve those students who want to enroll in occupational, baccalaureate-oriented, or liberal studies programs but who need additional preparation to meet their goals. Therefore, this program is more structured than the other seven basic certificate general studies programs.

## Basic Certificate in Community and Civic Development

The program is meant to serve those who have an interest in improving their understanding of community and civic affairs. Persons with such an interest in community and civic activities may enroll in this program even if they do not intend to receive a Certificate. We recommend that interested individuals plan their programs with a counselor.

Graduation requirements for this Certificate are completion of

1. Sixteen semester hours of course work that complements the individual's other life experiences so as to broaden his/her perspective in community and civic activities. (Students transferring credit to Richland should see regulations under Admissions, page 20.)
2. Constitution requirement. (See page 64.)
3. Cumulative Grade Point Average - 2.00
("C") or better for courses numbered 080 or above and a grade of "CR" for courses numbered 079 or below that are pursued at the College and are applicable to this certifi cate. (See page 61.)

## Basic Certificate in Developmental, Preparatory, or Basic Skills

The program is meant to serve those who want to develop or strengthen their abilities in the basic study skills areas, such as reading, writing, or arithmetic, which are important to daily living and/or further study. This program allows them to develop or strengthen these general skills in a less formalized program structure than is provided for the Basic Certificate in Personal Development. Persons with an interest in this area may enroll in the program even if they do not intend to receive a certificate. Interested individuals should plan their program with a counselor.

Graduation requirements for this certificate are completion of

1. Sixteen semester hours of course work that complements the individual's other life experiences so as to develop or strengthen general study skills. (Students transferring credit to Richland should see regulations under Admissions, page 20.)
2. Constitution Requirement. (See page 64.)
3. Cumulative Grade Point Average - 2.00 "C" or better for courses numbered 080 or above and a grade of "CR" for courses numbered 079 or below that are pursued at the College and are applicable to this certificate. (See page 61.)

## Basic Certificate in Health, Safety, and Environment

The program is meant to serve those who have an interest in improving their understanding of matters relating to health, safety, and environment (ecology). Persons with an interest in those fields may enroll in this program even if they do not intend to receive a certificate. Interested individuals should plan their program with a counselor.

Graduation requirements for this Certificate are completion of

1. Sixteen semester hours of course work that complements the individual's other life experiences so as to broaden his/her per spective concerning health, safety, and environment. (Students transferring credit to Richland should see regulations under Admissions, page 20.)
2. Constitution requirement. (See page 64.)
3. Cumulative Grade Point Average - 2.00 ("C") or better for courses numbered 080 or above and a grade of "CR" for courses numbered 079 or below that are pursued at the College and are applicable to this certificate. (See page 61.)

## Basic Certificate in Homemaking

The program is meant to serve those who have an interest in developing or improving their homemaking capabilities. Persons with an interest in this area may enroll in the program even if they do not intend to receive a certificate. Interested individuals should plan their program with a counselor.

Graduation requirements for this Certificate are completion of

1. Sixteen semester hours of course work that complements the individual's other life experiences so as to develop or strengthen general study skills. (Students transferring credit to Richland should see regulations under Admissions, page 20.)
2. Constitution requirement. (See page 64.)
3. Cumulative Grade Point Average - 2.00 ("C") or better for courses numbered 080 or above and a grade of "CR" for courses numbered 079 or below that are pursued at the College and are applicable to this certificate. (See page 61.)

## Basic Certificate in Improving Family Circumstances

The program is meant to serve those who have an interest in improving family life. Such an interest could range from the development of skills useful in the home to the development of psychological and/or sociological understanding. Persons with an interest in this area may enroll in the program even if they do not intend to receive a certificate. Interested individuals should plan their program with a counselor.

Graduation requirements for this Certificate are completion of

1. Sixteen semester hours of course work that complements the individual's other life experiences so as to broaden his/her per spective to improve family life. (Students transferring credit to Richland should see regulations under Admissions, page 20.)
2. Constitution requirement. (See page 64.)
3. Cumulative Grade Point Average - 2.00 ("C") or better for courses numbered 080 or above and a grade of "CR" for courses numbered 079 or below that are pursued at the College and are applicable to this certificate. (See page 61.)

## Basic Certificate in Intellectual and Cultural Studies

The program is meant to serve those who have an interest in pursuing studies for their own intellectual and/or cultural development. Richland recognizes that many persons enroll for the purpose of studying in areas not previously pursued even though they may have earned one or more college degrees. Other persons may have developed their occupational skills primarily through employment experiences and now desire to take advantage of the opportunity for intellectual and/or cultural development. Such study is for personal enrichment rather than for the purpose of development of occupational competence or the pursuit of a baccalaureate-oriented curriculum. Those interested in pursuing work for such a purpose may enroll in this program even if they do not intend to receive a certificate. Interested individuals should plan their program with a counselor.

Graduation requirements for this certificate are completion of

1. Sixteen semester hours of course work that complements the individual's other life experiences and broadens his/her intellectual and/or cultural understandings. (Students transferring credit to Richland should see regulations under Admissions, Page 20.)
2. Constitution requirement. (See Page 64.)
3. Cumulative Grade Point Average - 2.00 ("C") or better for courses numbered 080 or above and a grade of "CR" for courses numbered 079 or below that are pursued at the College and are applicable to this certificate. (See Page 61.)

## Basic Certificate in Personal Development

The program is meant to serve those who want to complete courses in preparation for advanced study but who need additional preparation to meet that goal. If, after consulting with a counselor, it is decided that the student needs additional preparatory courses, the student and counselor will design a course of study under this program. This is called a contract. Persons with an interest in this area may enroll in the program even if they do not intend to receive a certificate. Those interested in this program should make an appointment early with a counselor.

Graduation requirements for this certificate are completion of

1. Group Requirements:
a. Communications Skills - 4 to 6
semester hours; and
b. One course in at least two of three areas: Humanities/Fine Arts, Social Science or Natural/Life/Physical Science, and Mathematics - 4 to 6 semester hours. (See page 93.)
2. Total credits required - 16 semester hours including requirements in Item 1 above plus general electives. (Students transferring credits to Richland should see regulations under Admissions, (See page 20.)
3. Constitution requirement. (See page 64.)
4. Cumulative Grade Point Average - 2.00 ("C") or better for work applicable to the certificate that was taken at the College. (In the event that a course numbered 079 or below is recommended by the counselor as part of the program, a grade of "CR" would be required for such a course and a 2.00 GPA for all other work. (See page 61.)
Suggested Courses:
Communications Skills
ENGL090 - Reading and Study Skills II
ENGL097 - Developmental Writing II
ENGL 101 - Composition 1
SPCH101 - Principles of Speech Education
ED100 - Introduction to Public
Social Science
POL S100 - People and Politics
PSYCH100 - Practical Psychology
SOCIO100 - Man, Society, and Culture
SOCIO200 - Marriage and the Family
Natural/Life/Physical Science
BIOL101 - Concepts of Biology
CHEM100 - Concepts of Chemistry
Mathematics
MATH090 - Arithmetic
MATH091 - Basic Algebra
MATH110 - Mathematical Concepts
MATH113 - Intro to Applied Statistics
Humanities/Fine Arts
AF AM101 - The African-American
Experience 1
AF AM102 - The African-American
Experience 2
ART100 - Art Appreciation
DRAMA150 - Introduction to Theatre
MUSIC100 - Music Appreciation
MUSIC190 - Introduction to American
Other
P DEV100 - Human Potential Seminar

In addition to the suggested courses listed for the group requirements areas, a student may utilize one or more other courses if his or her background is appropriate to a particular area of study. Electives may include other introductory courses not listed.


Communication...

## Cooperation!



## Course Responsibilities

The administrative responsibilities for credit courses are assigned to various divisions within the College. Inquiries concerning courses should be directed to the division indicated above the course prefix:

## Communications, Education, Humanities, and Fine Arts Division

Dean - Room C162
(African American Studies, Arabic, Art, Early Childhood Education, Chinese, Dance, Drama, Education, English, French, German, Graphic Arts, Humanities, Journalism, Music, Philosophy, Spanish, Speech)

## Health Professions Division

Dean - Room S162
(Allied Health, Pharmacy Technology, Practical Nursing, Radiography, Registered Nursing, Surgical Technology)

## Mathematics and Sciences Division

Dean - Room S119
(Anthropology, Astronomy, Biology, Chemistry, Criminal Justice, Earth Science, Economics, Fire Science, History, Mathematics, Physical Education, Physics, Physical Science, Political Science, Psychology, Social Science, Sociology)

## Business and Technology Division

Dean - Room C242
(Automotive, Business, Accounting, Culinary Arts, Drafting \& Design Engineering, Electronics, Engineering, Engineering Technology, HVACR, Hospitality Management, Information Technology, Office Technology, Welding)

## Continuing and Professional Education

Dean - Room SC06
(Transportation - CDL)

## Correctional Education

Dean - Room W206
(Business Management, Commercial Custodial Services, Computer Technology, Construction Occupations, Food Service Technology, Horticulture)

## Academic Support Programs

Dean - Room S145A
(Career Development, Personal Development)

## Applicability of Course to Program

Courses are offered appropriate to a wide variety of programs; consequently, not all courses are applicable to every program.

Any course numbered 100 or above is applicable to one or more but not all Associate Degree curricula and one or more but not all certificate programs depending upon the nature of the curriculum or program. Courses numbered 099 or under may be applicable to selected Basic Certificate programs.

Also, several programs require some study of courses that satisfy certain Group Requirements, subdivided into Communications, Humanities/Fine Arts, Social Science, and Mathematics and Natural/Life/Physical Science. Occupational-oriented Associate Degree curricula require some study through Group Requirement areas, which are subdivided into Communications, Humanities and/ or Business, Social Science, and Mathematics and/or Natural Science.

Following each course description is information showing the certificate or degree, the Group Requirement, and the Program Area of Concentration to which the course is applicable toward RCC graduation. The degrees are abbreviated: AAS-Associate in Applied Science; AES-Associate in Engineering Science; ALS-Associate in Liberal Studies; AA-Associate in Arts; AS-Associate in Science; AATAssociate in Arts in Teaching; and AFA-Associate in Fine Arts.

## Course Titles, Hours, and Credit

Course titles include (1) the general area of instruction for the course, which is called the course "Prefix" (for example: ACCT, MATH, HIST); (2) the course number; (3) the descriptive course title (for example: Financial Accounting, College Algebra, United States to 1877); and (4) the number of hours a class normally meets a week and the number of semester credit hours granted (for example: 1-$4-3$ would indicate 1 hour of lecture/discussion per week and 4 hours of laboratory per week for 3 semester hours of credit.)

## Key to Course Descriptions

Below is an example of a Course Description that will serve as a Key to those descriptions that follow on pages 176-334.

Course No. Course Title

|  |
| :---: |
|  |  |
|  |  |

## Accounting

## ACCT 100 - Accounting Fundamentals

3-0-3
is designed to promote success in ACCT 101 with an emphasis on the financial statements, accounting cycle, special journals and ledgers, adjustments, accounts receivable and accounts payable, bank reconciliation, inventories, and depreciation. This course is recommended for nonbusiness majors and small business managers. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
ACCT 101 - Financial Accounting (IAI: BUS 903) 4-0-4
presents accounting as an information system that produces summary financial statements primarily for users external to a business. Emphasis is on applying basic accounting principles, recording, reporting, and interpretation of all four basic financial statements. This course includes coverage of proprietorship, partnership, and corporate forms of organization. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Accounting
ACCT 102 - Managerial Accounting Fundamentals (IAI: BUS 904)
4-0-4
(Prerequisite: ACCT 101) presents accounting as an information system useful to internal managers of a business. Emphasis is on product costing, planning and control, and analysis to support business decision making. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS Only)
Area of Concentration - Accounting
ACCT 201 - Intermediate Accounting 1
4-0-4
(Prerequisite: ACCT 101) examines accounting concepts, principles, and theory with an emphasis on the special problems that arise in applying these concepts for external reporting purposesspecifically covering the income statement, balance sheet, and all asset topics. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AA, AS, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
ACCT 202 - Intermediate Accounting 2
4-0-4
(Prerequisite: ACCT 201) examines accounting concepts, principles, and theory with an emphasis on the special problems that arise in applying these concepts for external reporting purposesspecifically covering liabilities, corporation, taxation, and financial statement analysis topics. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AA, AS, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
ACCT 205 - Small Business Accounting
(Prerequisite: ACCT 101 or OT 160) is an introduction to using a microcomputer accounting application such as QuickBooks as a tool for performing accounting tasks and financial reporting for a small business. Also provides in-depth coverage of payroll accounting procedures, law, and reporting requirements including a microcomputer payroll application such as QuickBooks. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not ApplicableACCT 210 - Tax Accounting (formerly ACCT 130)3-0-3serves as an introduction to the basic concepts and procedures of federal and state income tax asthey pertain to the individual taxpayer and the small business enterprise under the latestamendments to the Internal Revenue Code. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
ACCT 211 - Managerial Cost Accounting (IAI: Bus 904) 4-0-4
(Prerequisite: ACCT 101) emphasizes the managerial uses of cost accounting information for business decision-making. Topics include analysis of three elements of cost: material, labor, and overhead. Job order, standard, and process cost will be covered. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Accounting

## African-American Studies

AF AM101 - The African-American Experience 1 (IAI: HF 906D) 4-0-4
surveys African-American heritage from its African roots through the beginning of the civil rights movement (1954) and critically examines literature and other products of African-American culture. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities, Fine Arts
Area of Concentration - African-American Studies
AF AM102 - The African-American Experience 2 4-0-4
surveys African-American history from 1954 to the present; examines the prose, poetry, and drama of African-American authors of the period; and traces African-American music from ragtime through rock and soul to the present. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - African-American Studies
AF AM103 - African-American Experience Through the Arts (IAI: HF 906D) 3-0-3
presents a critical, aesthetic, and historical introduction to African-American music, drama, and visual arts as ethnic tradition and as part of the American cultural experience. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities, Fine Arts
Area of Concentration - African-American Studies
AF AM104 - African-American Experience Through Literature (IAI: H3 910D) 3-0-3
presents a critical and cultural introduction to African-American poetry and prose as ethnic tradition and as part of the American literary experience. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - African-American Studies
AF AM105 - History of African American Gospel Music 3-0-3
is designed to provide the student with a practical viewpoint of the role of gospel music in the African American culture. This course emphasizes the historical legacy behind the music and some of its musicians. Students will have the opportunity to take a look into the lives and souls of a group of people whose only hope was found in the spiritual words of the songs they sang, as well as the connection to the continent of Africa, blues, jazz, and jubilee styles of music. Offered in Fall.

Applicable toward graduation where structure permits:
Certificate or Degree - All Certificates and Degrees
Group Requirement - Humanities and Fine Arts (AAS, ALS only)
Area of Concentration - African-American Studies

## Agriculture

AGRIC106 - Animal Science (IAI: AG 902) ..... 3-2-4is an application of the sciences of genetics, physiology and nutrition to the improvement of theanimal industries and an introduction to management and production practices. Includes animalbreeds, breeding and selection; anatomy, physiology, and nutrition and growth; environment,health and sanitation; products and marketing; production technology and economics; animalbehavior; and current issues in animal science. Offered in Spring
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - Agriculture
AGRIC130 - Crop Science (IAI: AG 903) 3-2-4
examines basic principles of plant growth, including human and environmental influences and the theoretical and practical application of agronomic principles to crop production. Includes the historical and economic importance of crop plants for food, feed, and fiber; origin, classification, and geographic distribution of field crops; environmental factors and agronomic problems; crop plant breeding, growth, development, and physiology; cropping systems and practices; seedbed preparation, tillage, and crop establishment; pests and controls; and harvesting, storing, and marketing practices. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS, ALS only)
Area of Concentration - Agriculture

## AGRIC195 - Contemporary Issues in Agribusiness <br> 3-0-3

provides an introduction to issues and career opportunities in agriculture focusing on, but not limited to, agribusiness. Topics may include communications, finance, economics, accounting, commodity marketing, and the study of the political landscape of agriculture. An in-depth dialogue and possible field visits will help develop an understanding of the skill sets needed to succeed in each of the different areas discussed. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
AGRIC200 - Weed and Pest Control
3-2-4
covers the safety and handling of approved agricultural pesticides with emphasis on pesticides used in corn and soybean production. Students will develop the ability to select pesticides, formulate mixes, and understand how to apply materials in a safe and approved manner. Also included are discussion and understanding of integrated pest management principles and practices as related to weed and pest control. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
AGRIC210 - Soil Science (IAI: AG 904)
3-2-4
(Prerequisite: CHEM 100 or 110 or consent of Agriculture Coordinator) is an introduction to the chemical, physical, and biological properties of soils; the origin, classification, and distribution of soils and their influence on people and food production; the management and conservation of soils; and the environmental impact of soil use. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Agriculture

## AGRIC232 - Agricultural Economics (formerly AGRIC120) (IAI: AG 901) <br> 3-0-3

applies the principles of economics to agricultural problems and the role of agriculture in the United States and world economies. Includes production principles; production costs, supply, and revenue; profit maximization; consumption and demand; price elasticity; market price determination; and competitive versus noncompetitive market models. Examination of the world food situation, including population growth, world food production trends, trade in agricultural products, and agriculture's role in economic growth; agriculture characteristics and inputs (natural, human and capita); the marketing of agricultural products (functional and institutional commodity approaches to marketing, marketing costs, and the operation of the futures market); and agricultural problems and policies (program goals, price and income, and resource use). Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Agriculture

## AGRIC240 - GPS Applications

2-2-3
(Prerequisite: CIS 110 or equivalent skills) introduces students to global positioning equipment hardware and use. Class time will be spent in outdoor laboratory settings dealing with practical applications in agriculture using the monitor and receiver of a GPS unit. Students will utilize personal and laptop computers to transfer the gathered information to a geographic information system for data processing, analysis, and decision making in agriculture business settings. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## AGRIC241 - Intro to GIS Using ArcView

2-2-3
(Prerequisite: CIS 110 or permission of the instructor) explains the fundamental process of Geographic Information Systems (GIS) using ArcView software. File formats, database management, spatial analysis, and manipulation of data are discussed. Students will also be exposed to geo-referenced data from mapping and yield monitor data. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## AGRIC251 - Agricultural Commodities (formerly Agric 121)

3-0-3
is designed to help farmers develop marketing skills by determining production costs and understanding the cash and futures markets, to conduct a technical analysis of the markets, and to use these principles to develop a marketing plan for their own operation. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## AGRIC290 - Work Experience Practicum \& Seminar

1-10-3
(Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an Agribusiness Degree or approval of the Dean) provides the student with an opportunity to apply knowledge and skills gained in the academic setting to real work situations. The suitability of the work setting for this practicum is determined through consultation with the Agribusiness and/or Horticulture faculty, the prospective employer, and the student. The work experience should be directly related to the student's desired career objectives and should serve as a supplemental source of learning. Topics to be addressed during the practicum include, but are not limited to, job performance, relationship to supervisors, time management, record keeping, customer relations, decision making, sales, and maintenance. The practicum will include the student's participation in mandatory seminars to be scheduled with the instructor at the beginning of the semester and a minimum of 120 hours of work-based experience. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

AGRIC295 - Workplace Simulation \& Projects<br>1-10-3<br>(Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an Agribusiness Degree or approval of the Dean) provides the student the opportunity to work on a specific project-real or simulated-under the guidance of an Agriculture faculty mentor. Students are required to present a written proposal to the Agriculture faculty for consideration. The student(s) must meet to discuss specific objectives, timelines, credit to be allowed, success criteria, and other topics. This is a capstone course and should be taken in the student's final semester. Offered as needed.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates, AAS, ALS<br>Group Requirement - Not Applicable<br>Area of Concentration - Not Applicable

## Anthropology

## ANTHR 110 - Introduction to Cultural Anthropology (IAI: S1 901N)

3-0-3
(Prerequisite: eligibility for ENGL 101) is an introduction to cultural anthropology, which strives for a holistic and comparative view of human culture. Examples from societies around the world will be used to provide the students with a broader perspective of their own culture. This involves examining religion, kinship, technology, political and economic systems, and the process of cultural change. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Anthropology
ANTHR 120 - Introduction to Physical Anthropology (IAI: S1 902)
3-0-3
(Prerequisite: eligibility for ENGL 101) is an introduction to physical anthropology, with a primary focus on human evolution. It includes elements of evolutionary biology, genetics, paleoanthropology, archaeology, and the study of non-human primates. We will discuss the methodology of physical anthropology, the fossil record and archaeological evidence for hominid biology and behavior, and the variation found in modern human populations. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Anthropology
ANTHR 130 - Introduction to Archaeology (IAI: S1 903)
3-0-3
(Prerequisite: eligibility for ENGL 101) is designed to introduce students to anthropological archaeology, including archaeological data, concepts, methods, and goals. Time is also spent discussing the major events in human prehistory, such as the domestication of plants and animals, and the development of cities and complex societies, as well as the history of archaeology and archaeological thought. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Anthropology

## Arabic

ARAB 115 - Conversational Arabic 1 3-0-3
is the development of conversational Arabic skills with intensive oral practice in listening and speaking. The communicative approach in instruction will emphasize functional conversational patterns, idiomatic vocabulary, basic grammar and syntax, cultural information, readings/writing of the script for travel, career development, cultural outreach, or personal enrichment. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language

## Art

examines the various styles of painting, sculpture, and other visual media with an historical overview. Offered in Fall, Spring and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Not Applicable
ART 101 - Introduction to Drawing 1 (IAI: ART 904) 1-5-3
acquaints the student with the basic concepts and practice of drawing including the study of line, form, space, value, and composition. Subject matter will include still life arrangements and other projects. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 102 - Introduction to Drawing 2 (IAI: ART 905)
1-5-3
(Prerequisite: ART 101) continues exercises from still life arrangements and other projects. Black and white as well as color media is used. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 111 - Design 1 (IAI: ART 907)
1-5-3
offers the student orientation in the principles and practice of two-dimensional designing using various media and dealing with the elements of line, color, balance, value, and form. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 112 - Design 2 (IAI: ART 908) 1-5-3
(Prerequisite: ART 111) involves the study and practice of three-dimensional design and exploration of various tools, materials, and techniques. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 113 - Figure Drawing 1 (IAI: ART 906) 1-5-3
(Prerequisite: ART 101, 102, 111, or 112 or concurrent enrollment in any one of these courses) introduces the student to the drawing of the human figure with activities involving techniques, anatomy, and design in varied media. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 114 - Figure Drawing 2
1-5-3
(Prerequisite: ART 113) continues activities involving techniques, anatomy, and design in various media of drawing the human figure. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 115 - Printmaking 1 (IAI: ART 914)
introduces the student to creative explorations in the media of monoprint, linoleum block cut prints, and wood block prints. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 116 - Printmaking 21-5-3
(Prerequisite: ART 115) introduces the student to an exploration of the silkscreen print technique.
Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art1-5-3
ART 117 - Painting 1 (IAI: ART 911)
introduces the student to the approaches, media, and techniques of painting as a medium ofexpression. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirements - Not Applicable
Area of Concentration - Art

## ART 118 - Painting 2

1-5-3
(Prerequisite: ART 117) continues exploration of the approaches, media, and techniques of painting as a medium of expression. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirements - Not Applicable
Area of Concentration - Art
ART 119 - Sculpture 1 (IAI: ART 913) 1-5-3
introduces the student to three-dimensional spatial concerns in various sculptural materials. Various fundamental techniques are explored. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 120 - Sculpture 2
1-5-3
(Prerequisite: ART 119) offers further work in various three-dimensional materials. Attention is given to personal and individual problem-solving. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 121 - Ceramics 1 (IAI: ART 912)
1-5-3
is an introduction to various hand-building techniques, decorative methods, and firing processes. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 122 - Ceramics 2 1-5-3
(Prerequisite: ART 121) is a continuation of various hand-building techniques, decorative methods, and firing processes. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art

## ART 123 - Watercolor 1

1-5-3
introduces the student to approaches, techniques, and media of transparent and opaque watersoluble paints. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 124 - Watercolor 2 ..... 1-5-3
(Prerequisite: ART 123) continues the approaches, techniques, and media of transparent andopaque water-soluble paints. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 125 - Photography 1: Black and White (IAI: ART 917)1-5-3
introduces the student to photography, covering fundamentals of camera, studio, and darkroomtechniques. (Students must supply their own fully manual 35 mm cameras. Refer to equipmentlist for the class.) A fifty-minute laboratory period per week is required in addition to scheduledclass hours. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 126 - Photography 2: Black and White1-5-3(Prerequisite: ART 125 or evaluation of portfolio) is a continuation of ART 125. It offers furtherstudy and experimentation with camera, studio, and darkroom techniques. A fifty-minutelaboratory period per week is required in addition to scheduled class hours. Offered in Fall andSpring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 127 - Digital Photography ..... 1-5-3
provides an introduction to the mechanics of making a color image and the use of basic photomanipulation tools to enhance that image for final output. Techniques using both computer andhand skills will be explored as they pertain to the Prepress/Publication fields. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 128 - Fiber I1-5-3
will employ technical information for manipulating cloth and traditional fiber materials, as wellas in-depth readings pertaining to the contemporary world of fiber and material studies. Sewing,knitting, wrapping, coiling, beading, casting, dyeing, and discharge work are techniques that maybe covered in the course curriculum. Students will be investigating materials and their meaningin order to explore and express personal content and ideas. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 129 - Digital Photography II1-5-3
(Prerequisite: ART 127) is a course for persons experienced in photography or those interestedin improving their current skills. It covers more advanced aspects of photography and photomanipulation in Adobe Photoshop. Use of CD/DVD slide shows will also be covered. The courseinstructor delivers critiques of photo skills to improve the skills of the photographer. Offeredas needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art

## ART 131 - Advanced Ceramics 1

(Prerequisite: ART 122) is a continuation of ceramics with the emphasis on use of the potter's wheel and the building techniques, decorative methods, and firing processes of wheel-thrown work. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art

## 184 Course Descriptions

## ART 140 - Principles of Graphic Design <br> 1-5-3

(Prerequisite: completion of or concurrent enrollment in ART101 and 111) is an introductory course into the art of visual communication and advertising. Studies will include portfolio presentation, production methods, compositional practices and creative development with attention given to the manipulation of text and illustration. Studio assignments are both computer and non-computer aided. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 145 - Typography
1-5-3
is part of the graphic design sequence. This course is the study and application of text and type as it applies to graphic design. Studies will include but are not limited to the following: an overview of typographic history, terminology, the application of the elements and principles, type classification, portfolio presentation, production methods, compositional practices and creative development. Studio assignments are both computer and non-computer aided. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 151 - Computer Graphics 1 (IAI: ART 919)
1-5-3
(Prerequisite: ART 140) introduces the student to the fundamentals of using the computer as a fine arts and graphic design tool. Effective design concepts and individual expression will be emphasized, as well as acquiring skills necessary to master various drawing, painting, and layout software. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 152 - Computer Graphics 2 1-5-3
(Prerequisite: ART 151) is an intensive study of computer painting, drawing, photo manipulation, and layout software to produce design pieces for a variety of uses. Fundamentals of layout, symbol, packaging, and advertising design are investigated. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
Art 160 - 3-D Computer Design \& Multimedia
1-5-3
(Prerequisite: successful completion of ART 111 and ART 140) covers a broad spectrum of computer graphics applications as they pertain to $3-\mathrm{D}$ modeling and animation applications as well as multimedia authoring. Students will study the basics of three-dimensional design on the computer, sound editing, and video and animation editing, as well as scripting for a final presentation. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
Art 162 - Computer Animation 1
1-5-3
(Prerequisite: ART 111, ART 151, or instructor approval) introduces the student to the fundamentals of 3D modeling, lighting and texture using the latest industry standard software Maya/Foundation. This course also provides the fundamentals of using the software in preparation for more advanced techniques in Computer Animation 2. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 199 - Topics in Fine \& Applied Art (Variable Credit \& Repeatable) 1-0-1 to 3-0-3provides the student an opportunity to engage in a comprehensive study of topics dealing withstudio and/or non-studio issues in the fine or applied arts. The course requires no prior depth ofknowledge, but it is expected that the student has demonstrated a special interest in the topic.Repeatable two times. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 210 - Art History 1: Ancient and Medieval (IAI: F2 901, ART 901)
3-0-3
(Prerequisite: successful completion of ENGL 101with a "C" or better) is an introductory course in art history from prehistoric times through the Egyptian, Greek, Roman, Early Christian, Medieval, Romanesque, and Gothic periods. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Art
ART 220 - Art History 2: Renaissance-Rococo (IAI: F2 902, ART 902) 3-0-3
(Prerequisite: successful completion of ENGL 101 with a "C" or better) is an introductory course in art history from early Renaissance art and architecture through Baroque, Rococo, Neoclassicism, Impressionism, and Modern art. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Art
ART 230 - Art History 3: Modern Art (IAI: F2 902, ART 903)
3-0-3
(Prerequisite: successful completion of ENGL 101 with a "C" or better) is an introductory course in the art history of the 20th century. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Art
ART 240 - History of Design
3-0-3
(Prerequisite: successful completion of ENGL 101 with a " $C$ " or better) is an introductory course in art history as it pertains to the field of design from its origins to the present. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Art
ART 251 - Computer Graphics 3
1-5-3
(Prerequisite: ART 152) provides advanced visual communication using computer graphics to produce advertising and layout designs for complex publications, including web publishing. Students will also study the history of advertising, media types, and advertising strategies. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art
ART 252 - Graphics Arts 4: Self Promotion/Portfolio Preparation
(Prerequisite: ART 152, ART 160, or ART 251) guides the student in preparing a professional computer graphics portfolio. This is a capstone course that covers portfolio content, selfpromotion, job market analysis, comparison of full-time and freelance work and strategies in approaching studios, agencies, or corporations. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - ArtART 261 - Illustration1-5-3(Prerequisite: successful completion of ART 102, ART 111 and ART 140, or consent of instructor)is an introductory course into the fundamentals of commercial illustration. Various methods ofconveying ideas through imagery and media are explored. Studies will include portfoliopresentation, production methods, compositional practices and creative development. Studioassignments are both computer and non-computer aided. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art

## ART 290 - Work Experience/Internship (Variable Credit) <br> 1-5-1 to 5

(Prerequisite: sophomore standing) allows the student pursuing a degree in Graphic Arts the opportunity to apply the principles learned in course work to the work situation through employment. All internships must be arranged by the instructor and the student and must be approved by the Dean prior to enrollment in the course. Credit for this internship is determined at enrollment based on the ratio of five hours per week in the job setting for each semester hour for credit over a 16 -week semester. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Art

## ART 295 - Workplace Simulation \& Projects <br> 1-10-3

(Prerequisite: completion of 45 credit hours toward an AAS degree in Graphic Arts or approval of the Dean) provides the student the opportunity to work on a real or simulated project under the guidance of a graphic arts faculty member. The faculty member will provide supervision as needed for the project, and students will devote approximately 10 hours per week to the project. Projects for this course can be developed by an employer, an entity in the community, an employee of the College, a faculty member, or the student. Participating students are to present a written proposal outlining the scope of work to the graphic arts faculty member within the first two weeks of the semester. The student(s) must meet with the instructor to determine specific objectives for the project, timelines, credit to be awarded for the project, criteria for successful completion of the project, and other guidelines for the course. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Art

## Astronomy

ASTRO 105 - Introduction to Astronomy (IAI: P1 906) 4-0-4
(Prerequisite: eligibility for ENGL 101 and successful completion of MATH 091 ["C" or better grade] or equivalent competencies) is an introduction to Astronomy from antiquity to modern times, the solar system, planets, stars, galaxies, evolution of stars, neutron stars, black holes, and cosmology. Includes some evening telescope observations. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and Degrees
Group Requirement - Natural/Physical Science
Area of Concentration - Not Applicable

## Automotive Technology

AUTO 101 - Basic Theory2-2-3provides an overview of basic automotive skills and terminology. Students will learn definitionsof common automotive terms, proper care and use of tools, and safety precautions and proceduresin the shop. In addition, the course provides a general introduction to automotive componentsand principles, including the engine, its parts and their functions; fuel systems; batteries andcranking systems; ignition systems; suspension, steering, and brakes; manual and automatictransmissions and heating and air conditioning; and electrical systems and principles. Offered inFall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## AUTO 102 - Electrical Systems <br> 1-6-4

is for students with basic automotive and/or electrical knowledge. It covers operations and principles of the electrical and electronic components in the automobile. Students will also learn practical applications in the basic diagnosis and repair of automotive electrical systems. Topics include batteries, electrical and electronic devices, AC and DC charging systems, ignition systems, instruments and accessories, and troubleshooting. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
AUTO 201 - Suspension \& Steering Alignment
1-6-4
introduces the more advanced automotive student to the components and functions of suspension equipment, steering equipment, and braking systems. Classroom work and practical applications provide knowledge and hands-on experience with equipment and operations such as front and rear suspension; shock absorbers; manual and power steering; wheels and tires; wheel alignment and balance; various brake types; antilock braking systems; and brake diagnosis, service, and inspection. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## AUTO 202 - Heating and Air Conditioning

1-4-3
covers functions and components of automotive heating and air conditioning systems. Students will learn the fundamental operations of cooling systems, heating and ventilating systems, and refrigeration systems. Safety precautions, diagnostic procedures, and cleaning and inspection are also covered. Offered in Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
AUTO 203 - Fuel and Emission Systems 1-7-4
(Prerequisite: AUTO102) introduces the advanced student to the functions and components of advanced fuel injection and turbo and super charging. Through classroom work and hands-on applications, students will become familiar with the following equipment and operations: turbochargers and superchargers; gasoline, diesel, and propane fuels; fuel supply systems; carburetors; fuel injection systems and injectors; gasoline and diesel fuel injection components; exhaust systems; and emission controls and modifications. Students will also be introduced to diagnostic and performance testing procedures. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
covers the diagnostic processes and actual procedures of engine repair. Students learn troubleshooting techniques, service tips, safety rules, and repair methods in the classroom and in hands-on experiences. Topics include basic engine components; engine systems, classifications, and measurements; force and pressure; energy, work and power; externally mounted parts; lubrication systems and principles; cooling systems and principles; and overall engine diagnosis and service procedures. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## AUTO 205 - Manual Drive Train and Axles

1-6-4
covers the terms and components related to manual drive trains and axles. Students will study principles and operations of manual transmissions, learning equipment, terms, and safety procedures. Course also includes information on diagnosis and service, cleaning, and inspection. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
AUTO 206 - Automatic Transmissions/Transaxles 1-6-4
introduces the student to the terms and components involved in maintenance and service of automatic transmissions. Students will study the basic parts and operation of automatic transmissions, including safety tips, service, and diagnostic procedures. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
AUTO 207 - Advanced Automotive Electronics 1-6-4
(Prerequisite: AUTO 102 or permission of instructor) teaches the advanced diagnostic and analytical skills that are needed to service today's high tech, electronically-controlled vehicles properly. Students will study electrical and electronic fundamentals, measurement devices, electron and current flow, schematic diagram reading, semiconductors, various transistors and their uses, electronic control modules, and dashboard instruments. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
AUTO 208 - Automotive Brakes
1-6-4
teaches the advanced diagnostic and analytical skills that are needed to service today's high tech, electronically-controlled anti-lock brake systems properly. Topics include brake types (design and application), braking principles, hydraulic brake systems, power brakes, disc brakes, drum brakes, electric brakes, anti-lock braking systems, and testing and diagnosis of brake systems. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
AUTO 209 - Advanced Drivability Problem Diagnosis
(Prerequisite: AUTO 102, 203, and 207) teaches advanced diagnostic and analytical skills that are needed to service today's high tech, computer-controlled engine management systems properly. Students will learn intake and fuel system design and application, exhaust and emission systems, carburetors, fuel injection, ignition systems and problem diagnosis, computerized engine controls and circuits, and engine performance diagnosis and troubleshooting. Lab work includes examination, analysis, and diagnosis of various vehicles. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

AUTO 290 - Automotive Internship<br>0-15-3<br>(Prerequisite: AUTO 101, 102, and at least two additional Automotive Technology courses) provides a student in the Automotive Technology program the opportunity to apply the knowledge and skills learned in other courses to the workplace. The suitability of the work setting will be determined by consultation with the Automotive Coordinator and the prospective employer. Student must work a minimum of 150 hours during the semester to receive credit for this course. Payment of an hourly wage to the intern will be at the option of the employer. Interns will be required to keep a daily $\log$ of their activities and to write a report detailing their work study experiences at the end of the semester. Offered as needed.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates, AAS, ALS<br>Group Requirement - Not Applicable<br>Area of Concentration - Not Applicable

## Biology

BIOL 101 - Concepts of Biology 1 (IAI: L1 900L, BIO 912, CLS 902) 3-2-4
(Prerequisite: eligibility for ENGL 101) is an introduction to basic principles of biology with emphasis on the biochemistry, structure, function, and organization of cells. Topics include scientific method, cellular respiration, photosynthesis, cellular reproduction, molecular and classical genetics, and an introduction to evolution and ecology. This course includes lecture and laboratory classes. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural/Life Science
Area of Concentration - Biology, General Science
BIOL 102 - Concepts of Biology 2 (IAI: BIO 911, CLS 901) 3-2-4
(Prerequisite: successful completion ["C" or better grade] of BIOL 101) is a continuation of Biology 101 with an emphasis on organismal biology or biodiversity. Structure and function of major groups of microorganisms, fungi, animals, and plants are introduced. Evolutionary trends and ecological relationships are observed in the increasing complexity of life from microorganisms to vertebrates and angiosperms. Laboratories include microscope work, field work, and the dissection of representative invertebrates and vertebrates. This course includes lecture and laboratory classes. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS, ALS only)
Area of Concentration - Biology, General Science
BIOL 106 - Issues in Human Biology (IAI: L1904)
3-0-3
(Prerequisite: eligibility for ENGL 101) is designed as a non-lab/non-majors course. The course examines practical aspects of selected concepts in biology and their application to life and technology. Concepts include heredity, growth, development, health, diseases of the human body, edological issues, and a brief introduction to anatomy and physiology. This course DOES NOT fulfill the prerequisite for BIOL 201 or BIOL 220. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Life Science
Area of Concentration - Biology, General Science
BIOL 120 - Plants and Society (IAI: L1 901)
4-0-4
(Prerequisite: eligibility for ENGL 101) is an introduction to plant biology with an emphasis on plant structure, plant physiology, plant growth and reproduction, and the economic importance of plants. Also, it includes an interrelationship between plants and humans. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate - All Certificates and All Degrees
Group Requirement - Natural/Life Science
Area of Concentration - Biology, General Sciences
(Prerequisite: eligibility for ENGL 101 and MATH 098) provides an introduction to basic genetic principles and to contemporary issues in biotechnology. This course addresses the ethical, political and social implications of biological advances in the area of genetics including medical and agricultural biotechnology. The purpose of this course is to introduce students to the many aspects of plant and animal genetics and to show how research in genetics affects our lives. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural/Life Science (AAS, ALS only)
Area of Concentration - Biology, General Science
BIOL 201 - Human Anatomy \& Physiology 1 (IAI: CLS 903, NUR 903) 3-2-4
(Prerequisite: successful completion ["C" or better grade] of BIOL 101 or successful completion [" $B$ " or better grade for each course] of two years of high school biology and 1 year of high school chemistry within the last three years) is a study of tissues and the integumentary, skeletal, nervous, and muscular systems of the human body, emphasizing the relationship between structure and function. This course includes lecture and laboratory classes. Offered in Fall, Spring, Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - Biology, General Science
BIOL 202 - Human Anatomy \& Physiology 2 (IAI: CLS 904, NUR 904)
3-2-4
(Prerequisite: successful completion ["C" or better grade] of BIOL 201 or successful completion of BIOL 201 proficiency exam) is a continuation of BIOL 201, covering the circulatory, lymphatic, respiratory, digestive, urinary, reproductive, and endocrine systems. This course includes lecture and laboratory classes. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - Biology, General Science
BIOL 210 - Environmental Biology (IAI: L1 905L) 3-2-4
(Prerequisite: eligibility for ENGL 101) teaches a foundation of basic ecological principles that leads to an examination of current issues of environmental concern. Lectures will include such topics as air/water/soil pollution, overpopulation, extinction, deforestation, global warming, and ozone depletion. Laboratory exercises will include indoor experiments, outdoor field studies, and visits to local facilities of environmental concern. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural/Life Science
Area of Concentration - Biology, General Science
BIOL 220 - Microbiology (IAI: CLS 905, NUR 905)
(Prerequisite: successful completion ["C" or better grade] of BIOL 101 or successful completion [" $B$ " or better grade for each course] of two years of high school biology and 1 year of high school chemistry within the last three years) is an introductory course in the principles of microbiology and their application to medicine, agriculture, sanitation, and industry. Training in laboratory technique pertinent to the field is included. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - Biology, General Science

## Building Construction

B CON 210 - Mechanical and Electrical Building Service Systems
2-2-3
introduces the study of the materials and equipment used in the mechanical and electrical service systems of buildings. The student is provided with information on how a modern building operates. This information enables the student to make reasonable preliminary selection of necessary mechanical and electrical equipment. Topics covered include illumination, heat gain and loss, heating systems, sewage disposal, electrical sources, and materials. Students will visit buildings to observe the service systems and equipment so that they may be better able to realize the relationship of these elements to the building as a whole. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Business

BUS 100 - Business Fundamentals (IAI: BUS 911) 3-0-3
is an introductory course in business aimed at the student with minimal background in business study. The course introduces the student to many facets of business including ownership and management, forms of organizations, personnel and labor-management relations, marketing, accounting, finance, ethics, and social responsibility. This course is designed to help the student develop many skills including communication, decision making, teamwork, critical and creative thinking, responsibility, and maturity. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Business
BUS 101 - Hospitality \& Tourism (formerly HOSP 100) 3-0-3
(Prerequisite: eligibility for $E N G L$ 101) includes a study of the application of all aspects of the hotel, food service, restaurant, and travel and tourism businesses, including operations, marketing, and sales. The course will reflect current developments in this rapidly changing industry, stressing problem-solving tools and industry-wide trends. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
BUS 102 Teller Fundamentals (Pending ICCB Approval) 2-0-2
provides an in-depth focus of the skills needed in today's banking industry to become a successful bank teller. It provides a comprehensive overview of the workings of the banking industry, the U.S. Payments System, the duties of the Federal Reserve System, and an overview of pertinent banking laws and regulations. In addition, the course explains the variety of daily transaction procedures that the position involves as well as the teller's responsibilities and delivery of quality customer service. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 110 - Business Mathematics 3-0-3
covers basic applications of mathematics in the business world. Students develop understandings of these processes as they relate to general business applications. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 121 - Purchasing \& Product Identification (formerly HOSP 104) ..... 3-0-3(Prerequisite: eligibility for ENGL 101) includes a study and application of purchasing methodsfor the Hospitality Industry including the distribution system, supplier channels, price andpayment, ordering procedures, storage and security, and specifications for food and non-fooditems. The course will focus on up-to-date information on the latest trends and today's technology.Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
BUS 200 - Customer Service Fundamentals 3-0-3
(Prerequisite: completion of or concurrent enrollment in OT 119 or ENGL 101) covers the importance of excellence in customer service in creating a competitive edge in business. Topics covered include customer service skills, resolving customer complaints, the importance of verbal and nonverbal communication, listening skills and the use of technology. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS $\mathbf{2 2 0}$ — Cost Management (formerly HOSP 102) 4-0-4
(Prerequisite: eligibility for ENGL 101 and completion of CIS 110 and BUS 110) includes a study and application of food cost control, beverage operation and sales, and labor cost control as related to hospitality management. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
BUS 221 - Security \& Loss Prevention (formerly HOSP 213)
3-0-3
(Prerequisite: eligibility for ENGL 101) will examine how to handle vital risk management, claims, and insurance issues in the hospitality workplace. This includes the study of safety and security case studies developed with industry professionals and will utilize links to Internet-based, hospitality-specific resources for safety and security. The formation of in-house safety committees, crisis communications, development of an OSHA-approved safety program, and the importance of safety equipment will be discussed in detail. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
BUS 225 - Small Business Development (formerly BUS 125)
3-0-3
introduces the fundamentals for the start-up and management of a small business particularly in an entrepreneurial environment. Topics include forms of businesses, business policy and operations, staffing a small business, the legal environment, and government relations. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 231 - Business Law Principles
3-0-3
provides an introduction to the legal system as it affects business activity. Areas of concentration include formation and nature of contracts, the agency relationships, and the Uniform Commercial Code Law of Sales and Commercial Paper. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 232 - Business Law \& Ethics
3-0-3
(Prerequisite: BUS 231 or equivalent competencies) includes a study of the legal and social environment of business, with emphasis on business ethics and corporate social responsibilities. Areas of concentration include governmental regulation of business, securities law, consumer protection law, labor law, and employment law. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 233 - Business Law for Entrepreneurs
3-0-3
is targeted to those individuals starting or operating a business. It covers those aspects of the law most relevant to business ownership, including contracts, the Uniform Commercial Code, and government regulation of business. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 240 - Marketing Fundamentals (formerly BUS 124) 3-0-3
(Prerequisite: completion of or concurrent enrollment in OT 119 or eligibility for ENGL 101) is a fundamental course describing the business activities involved in product planning, pricing, promoting, and distributing want-satisfying goods and services. Other topics include market segmentation, consumer motivation and behavior, and legal influences. Marketing cases are used to illustrate current principles and techniques and to enhance development of managerial skills. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 245 - Integrated Marketing Communications
3-0-3
includes coverage of the economic and social role of advertising, customer research, selection of advertising appeals, media decisions, and the creative process. Specific media to be studied are newspaper, magazine, radio, TV, direct mail, and outdoor advertising. Students will work on an advertising campaign during the semester. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 250 - Selling \& Sales Management (formerly BUS 146)
3-0-3
is a practical course that centers on the seven steps in the personal selling process, consumer motivation, ethics, and careers in sales. Role playing, demonstrations, and critiques of demonstration allow students the opportunity to apply selling skills. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 255 - Principles of Banking (Pending ICCB Approval)
is designed for anyone seeking to gain a better understanding of the diversified services offered by the banking industry and is essential for most new banking personnel. Further, this course will provide information to entry to mid-level bankers with the information they need to provide effective service to their customers and thereby improve bank profitability. Topics include the history of banking, the effects banks have on the U.S. economy, the purpose and business of banking, check processing, collection functions, bank bookkeeping, loans and investments, trust services and the security functions of the bank. Lastly, students will gain an understanding of the inter-relationships among bank departments, the role of Ethics and the Code of Conduct that govern employees' actions, and the application of banking laws and regulations. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group requirement - Business (AAS only)
Area of Concentration - Not Applicable
(Prerequisite: eligibility for ENGL 101) includes a study and application of nutrients, carbohydrates, lipids, introduction to protein, vitamins, water, minerals, nutritional menu planning for the life cycle and for weight management, menu planning for vegetarians and for better health, nutritious menu planning and recipe development, and marketing nutrition in the food service management industry. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
BUS 261 - Bar \& Beverage Management (formerly HOSP 203)
3-0-3
(Prerequisite: eligibility for ENGL 101) includes a study, application, and closer look at beverages to include beer, wine, spirits and non-alcoholic beverages, equipping the beverage operation, the clean and sanitary beverage operation, staffing the beverage operation, managing promotions, costs, and profits, the effects of alcohol on the body, liability laws that affect business, policies and procedures, and techniques in managing responsible alcohol service in the food service management industry. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
BUS 262 - Dining Room Management (formerly HOSP 204)
3-0-3
(Prerequisite: eligibility for ENGL 101) takes students from the necessary historical overview of service up to the contemporary professional server. Table service and customer service are balanced for a comprehensive look at service in various industry segments and the manager's key role. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
BUS 263 - Catering \& Banquet Management
3-0-3
offers professionals and aspiring caterers detailed advice on all of the crucial business aspects of the subject for on- and off-premise catering. Updated to address the needs of this fast-growing industry, the course covers many current topics such as the latest trends in cuisine and meal concepts, marketing techniques for the home replacement food business, and new special events service concepts. Fresh information on menu design and pricing comes complete with all-new menu examples illustrating a full range of menu possibilities and styles. The course also offers concrete tips on using the latest computer software to maximize functions' sales and profits. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
BUS 280 - Strategic Decision Making
3-0-3
(Prerequisite: BUS 100) covers strategic planning and decision making with an emphasis on entrepreneurship. Topics include long and short-term planning, charting and other decision enhancement tools, total quality management, and the continuous improvement process. Students will use software to create a business plan. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 281 - Strategic Performance for Productivity
3-0-3
focuses on implementation and management of a business plan for a small business from the perspective of the owner/general manager. Basic performance measurement and control concepts and systems are covered. Application of concepts to case studies and/or student's business situations is emphasized. Students may find completion of Bus 280, Strategic Decision Making, prior to this course beneficial, but it is not a prerequisite. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, A.L.S
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 282 - Strategic Tax Management ..... 3-0-3emphasizes the effect taxation has on decision-making for businesses and individuals. Incometax concepts and the basic income tax model are studied. Choice of business entity, tax compliancerequirements, and common tax issues will be discussed. Students will learn to apply tax planningconcepts to case situations. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 283 - Finance \& Insurance ..... 3-0-3is an introductory study of personal and small business financial management. Studies includewealth management techniques with an emphasis on money management, risk reduction,investment strategies and retirement/estate planning. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 290 - Work Experience Practicum \& Seminar
1-10-3
(Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an Accounting, Business, or Hospitality Management degree, or approval from the appropriate fulltime faculty) provides students the opportunity to apply principles learned in other courses to the work situation by employment in or observation of activities necessary for the student to succeed in the workplace. Student will need to work a minimum of 150 hours during the semester to receive credit for this course. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable
BUS 295 - Workplace Simulation \& Project
1-10-3
(Prerequisite: student seeking AAS degree or certificate in Business/Accounting/Hospitality Management who has completed at least 40 credit hours of college work or who has approval of appropriate instructional team) is an individual or group project course that allows the student the opportunity to work on an advanced level in his/her major area of study. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable

## Career Development

C DEV112 - Career Planning and Development
3-0-3
provides the student with a presentation of career development and career decision-making as a lifelong process and an introduction and discussion of the relationship of individuals to the world of work. Students will practice their approach to decision-making in personal, academic, and career planning. Students will explore values, skills, interests, and abilities as they relate to the world of work. Job search techniques, résumé, development, cover letters, and interviewing skills will be developed as a part of the course. (Students may not receive credit for C DEV112 and P DEV109, 110, and/or 111.) Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Chemistry

CHEM 100 - Concepts of Chemistry (IAI: P1 902L)
(Prerequisite: eligibility for MATH 098) examines fundamental concepts of chemistry, both
theoretical and practical. Course content includes the following: measurement, atomic structure,
chemical bonding, stocichometry, the three states of matter, solutions, and acids and bases. The
topic of chemical equilibrium is also introduced. The course is designed as an introduction to
chemistry. It may be used as a prerequisite for CHEM131 or to satisfy the requirement for a one-
semester laboratory science course. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural/Physical Science
Area of Concentration - Not Applicable
CHEM 110 - Survey of Organic Chemistry
(Prerequisite: CHEM 100 with "C" or better grade) is a survey course in organic chemistry. Topics include the structure and identification of simple organic molecules, functional group classifications, preparative synthetic reactions, and biochemical applications. This course is recommended for nursing and allied health professionals. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - General Science
CHEM 131 - General Chemistry I
(IAI: P1 902L, BIO 906, CHM 911, CLS 906, EGR 961, NUR 906)
3-3-4
(Prerequisite: MATH 116 and either (1) one year of high school chemistry with "B" or better grade or (2) CHEM 100 with "B" or better grade) is the first part of a two-semester college-level general chemistry course. Topics include measurement, stoichiometry, thermochemistry, atomic structure, chemical bonding, molecular structure, the three states of matter (gas, solid, liquid), and solutions. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural/Physical Science
Area of Concentration - Chemistry, General Science

## CHEM 132 - General Chemistry II

(IAI: BIO 907, CHM 912, CLS 907, EGR 962, NUR 907)
3-4-5
(Prerequisite: MATH 116 with MATH 121 strongly recommended and CHEM 131 with " $B$ " or better grade) is the second part of a two-semester college-level general chemistry course. Topics include chemical kinetics, chemical equilibrium, reactions in solutions, chemical thermodynamics, electrochemistry, nuclear chemistry, and the descriptive chemistry of metals and non-metals. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - Chemistry, General Science
CHEM 201 - Organic Chemistry I (IAI: BIO 908, CLS 908, EGR 963) 3-6-5
(Prerequisite: CHEM 132 or equivalent competencies) is the first of a two-semester chemistry series. Topics include a review of atomic and molecular theory, the nomenclature, synthesis, and reactions of alkanes, cycloalkanes, alkenes, alkynes, alkyl halides, alcohols, ethers, and unsaturated systems. Also, stereoisomerism, an introduction to reaction mechanisms, and synthetic techniques are included. Two 3 -hour lab periods per week are conducted with an emphasis on synthesis of organic compounds. This course is recommended for chemistry and biology majors and students entering programs in medicine, chiropractic, dentistry, pharmacy, or related areas. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - Chemistry, General Science
(Prerequisite: CHEM 201 or equivalent competencies) is a continuation of CHEM 201. Topics studied include nomenclature, synthesis and reactions of aromatic hydrocarbons, phenols, organometallics, amines, carbonyl compounds, carboxylic acids and derivatives, and biomolecules, with an introduction to the physical methods of structure identification. The study of reaction mechanisms and synthetic methods is continued from the first course. Two 3-hour lab periods per week are conducted with an emphasis on qualitative analysis and instrumental methods of analysis, including nuclear magnetic resonance spectroscopy, infrared spectroscopy, and gas chromatography. CHEM 202 is recommended for chemistry and biology majors and students entering programs in medicine, chiropractic, dentistry, pharmacy, or related areas. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - Chemistry, General Science

# Child Care and Education (See Early Childhood Education) 

## Chinese

## CHIN 101 - Beginning Chinese 1 <br> 4-0-4

is the beginning Chinese language instruction in Mandarin Chinese/putung hua including writing, listening, speaking, and reading using the communicative approach with cultural materials. Basic vocabulary, grammar and syntax, pronunciation and tones, speech patterns, and character writing will be learned. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
CHIN 102 - Beginning Chinese 2
4-0-4
(Prerequisite: CHIN 101) is a continuation of CHIN 101. Beginning Chinese language instruction in Mandarin Chinese/putung hua includes writing, listening, speaking, and reading using the communicative approach with cultural materials. Basic vocabulary, grammar and syntax, pronunciation and tones, speech patterns, and character writing will be learned. Two assigned 25minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
CHIN 201 - Intermediate Chinese 1 4-0-4
(Prerequisite: CHIN 102) is a continuation of CHIN 102. Intermediate Chinese language instruction in Mandarin Chinese/Putung hua including writing (beginning compositions), listening, speaking, and reading using the communicative approach with cultural materials. The development of vocabulary, grammar and syntax, pronunciation and tones, speech patterns, and character writing will be learned. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language

CHIN 202 - Intermediate Chinese 2<br>4-0-4<br>(Prerequisite: CHIN 201) is a continuation of CHIN 201. Intermediate Chinese language instruction in Mandarin Chinese/putung hua including writing (beginning composition), listening, speaking, and reading using the communicative approach with cultural materials. The development of vocabulary, grammar and syntax, pronunciation and tones, speech patterns, and character writing will be learned. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates and All Degrees<br>Group Requirement - Humanities (AAS, ALS only)<br>Area of Concentration - Foreign Language

## Computer Information Systems

## CIS 101 - Computer Literacy <br> 1-0-1

provides the student with brief overview of basic computer concepts and hands-on learning for students who are new to the use of a computer and the Internet. Topics will include basics of the following: PC navigation, PC hardware and software, logging on to a network, accessing e-mail, use of the Internet, use of a course management tool, downloading and uploading files, and how to use an online library database. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - Computer Literacy Certificate, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CIS 110 - Business Applications for Microcomputers (IAI: Bus 902)
2-2-3
introduces students to the concepts and applications of operating systems, word processing, spreadsheets, databases, the Internet and presentation software. Students will receive hands-on lab experience using IBM-compatible equipment. Topics will include exposure to software for each of the areas of study and how to evaluate software and hardware. Offered Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Business (AAS only)
Area of Concentration - Not Applicable

## Computer Science

CS 105 - Foundations of Information Technology (IAI: CS910) 2-2-3
provides the student with an overview of the computing field and its typical applications. The student learns key terminology and components of computer hardware, software, operating systems, systems development methods, management information systems, and using application software and the Internet. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Computer Science
CS 161 - COBOL Programming
3-2-4
(Prerequisite: IT 131 or consent of full-time Information Technology instructor) emphasizes essentials of structured COBOL programming. Students will use structured programming design to develop, implement, test, and documentation program in COBOL. Topics covered include processing of array, records, and files, string manipulation, direct access file techniques, data validation, calculations, decision and repetition structures, arithmetic operations, control break logic, master file updating, sorting and searching techniques, interactive programming, program linkage and parameter processing. Offered in Spring.

Applicable for graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Computer Science
(Prerequisite: CS 251) is a course in event-driven programming building on prior programming experience. Topics include algorithm development, structured design, object-oriented, eventdriven programming and file processing. The course covers topics in control arrays, exception handling, and the use of properties, controls, and multiple forms. Introduces database manipulation and database controls, including use of dynamic link libraries (DLLs); dynamic data exchanges (DDEs); object linking and embedding (OLEs); and programming applications to display, edit, and update databases by use of the data access object (ADO). This course uses the high-level block-structured and object-oriented programming language Visual Basic.NET. Offered in Fall.

Applicable for graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Computer Science
CS 251 - Object-Oriented Programming (formerly CS 151)
(Prerequisite: IT 131 or consent of full-time Information Technology instructor and MATH 098) introduces students to top-down structured problem-solving, algorithm development, procedural and data abstraction. Topics include selection, repetition, sequence control structures; program design, development, test, and documentation; coding style, readability and maintainability; and array, record, and file manipulation. Students will examine elements of a programming language, including fundamental data types, variable declaration, expressions, operators, control statements, arrays, strings, I/O, functions, parameters, structures, and libraries. This course uses the high-level block-structured programming language C++NET and Java. Offered in Spring.

Applicable for graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Computer Science
CS 281 - Advanced Object-Oriented Programming (formerly CS 152)
(Prerequisite: CS 251) is designed to prepare students for large-scale program and system design and implementation. Topics include abstract data types; data structures such as files, sets, pointers, lists, stacks, queues, trees, and graphs; program verification and complexity analysis; recursion; dynamic concepts such as memory, scope and block structures; string processing; and searching and sorting algorithms. The course focuses on object-oriented programming concepts and design, algorithms, problem formulation, structured programming, variables, primitive and abstract data types, data structures, file I/O and string manipulation, sorting and searching, control structures and standard algorithms, arrays, and recursion. This course uses the high-level block-structured and object-oriented programming languages $\mathrm{C}++\mathrm{NET}$ and Java. Offered in Fall.

Applicable for graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Computer Science

## Criminal Justice

CRJ 110 - Criminal Justice Fundamentals (IAI: CRJ 901) 3-0-3
(Prerequisite: eligibility for ENGL 101) introduces the student to the philosophy and history of law enforcement and criminal justice. An overview of crime and police problems, organization and jurisdiction of local, state, and federal enforcement agencies, review of court systems, and procedures from incident to final disposition are included. Consideration also is given to professional career opportunities and necessary qualifications. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## CRJ 112 - Investigative Report Writing

3-0-3
(Prerequisite: ENGL 101 or equivalent competencies) prepares students to use appropriate grammar, punctuation, and spelling in written communications and identify the purposes and characteristics of an effective Criminal Justice report. The course prepares students to record effective field notes as the basis for a Criminal Justice report. How to use accurate and concise language, organize a narrative in chronological order, and construct a Criminal Justice report by separating categories of information are also covered. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 113 - Criminal Investigation
3-0-3
(Prerequisite: eligibility for ENGL 101) includes the fundamentals of investigation, crime scene search and recording, collection and presentation of physical evidence, basic photography, scientific aids, sources of information, interviewing, follow-up, and case preparation. The course also emphasizes report writing. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 114 - Criminal Law (IAI: CRJ 913)
3-0-3
(Prerequisite: eligibility for ENGL 101) introduces law as it applies to crimes against persons, property, and the state. It includes the elements of crimes, criminal law procedures in Illinois, and federal agency jurisdiction. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## CRJ 116 - Probation/Parole

3-0-3
(Prerequisite: eligibility for ENGL 101) analyzes modern probation and parole practices and services and examines current probation and parole procedures and the legal decisions. Specifically, the course will encompass the criminal justice system, probation and parole, types of offenses, sentencing process, pre-sentence investigation, revocation procedures, alternatives to incarceration, parole board functions, Parole Officer responsibilities, and guidelines for releasing inmates. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## CRJ 125 - Patrol Procedures

3-0-3
(Prerequisite: eligibility for ENGL 101) includes patrol functions, types of calls and methods of response, protection of scene, response to hazardous materials spills, crime prevention, and patrol techniques. This course helps prepare learners to demonstrate effective patrol techniques; interact professionally with complainants, victims, witnesses, suspects, members of the community-atlarge and employees of criminal justice system agencies; apply effective officer safety considerations in patrol situations; respond successfully to a variety of patrol situations to include community caretaker and crime prevention functions, traffic matters, calls for service and criminal investigations; document patrol operations; and demonstrate case processing behaviors. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 126 - Emergency Telecommunications3-0-3(Prerequisite: eligibility for ENGL 101) introduces learners to police telecommunications center operations. The course examines what a telecommunicator is, the responsibilities of a telecommunicator, and the importance of the telecommunicator within the organizational structure. Radio basics, proper broadcast procedures, telephone techniques, records systems, dispatching and handling crisis calls for assistance are covered. Role-playing will occur within a variety of scenario contexts. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 128 - Corrections Fundamentals
3-0-3
(Prerequisite: eligibility for $E N G L$ 101) provides the student with the necessary fundamental knowledge of the operations of corrections. It introduces the student to standard operating procedures in correctional institutions from intake of prisoners to the time of release. The course includes theory; simulated experience emphasis is placed on professionalism, integrity, and quality work performance. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 130 - Juvenile Delinquency
3-0-3
(Prerequisite: eligibility for ENGL 101) studies the social and psychological factors of delinquent behavior and is designed to give meaning and direction to the law enforcement employee that must deal with the problem daily. Discusses the practical applications of different juvenile behavior theories. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 132 - Institutional Behavior in Corrections
3-0-3
(Prerequisite: eligibility for ENGL 101) studies the different aspects of prison life and the correctional officer. Explores careers and issues of daily prison interactions, sexual exploitation, and relationships between correctional officers and inmates. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 134 - Correctional Counseling \& Treatment
3-0-3
(Prerequisite: CRJ 110, CRJ 128, CRJ 132, and eligibility for ENGL 101) presents an introduction to treatment techniques currently being used in American correctional facilities. This course provides an understanding of the responsibilities and goals of correctional treatment agents, as well as an examination of the environments in which they work. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 140 - Defensive Tactics for Criminal Justice 3-0-3
(Prerequisite: eligibility for ENGL 101 and completion of CRJ 110 and approval of Criminal Justice Coordinator) covers aspects of self-defense as related to the field of criminal justice. Emphasis will be placed on defense against common types of attacks that officers may encounter during the course of their work and also will include defense against knife and handgun attacks. This course will also cover when such force is legally acceptable and discusses the court requirements for any such force by an officer. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - Not Applicable
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 200 - Youth, the Law, \& Police Intervention ..... 3-0-3(Prerequisite: eligibility for ENGL 101 and completion of SOCIO 110, PSYCH 110, and CRJ 110)covers all aspects of police contact with today's juvenile. Emphasis is on the social/psychologicalcourses of delinquency, incorrigible behavior, and child abuse/neglect, as well as police, court,and social agency intervention in these matters. A study of the pertinent laws and contemporaryyouth problems in the community is involved. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 210 - Law Enforcement \& Community Relations
3-0-3
(Prerequisite: eligibility for ENGL 101) studies the whole function of the law enforcement officer and the ways in which the officer portrays an image to the entire community. The course considers the role and responsibility of the law enforcement agency in crime prevention, everyday relationships with the public, assistance to persons needing help, and public information. Ethics, courtesy, and impartiality as tools necessary in gaining public support and confidence are emphasized. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CRJ 290 - Work Experience Practicum \& Seminar
1-10-3
(Prerequisite: eligibility for ENGL 101 and approval of the Criminal Justice Coordinator) affords the student in the Criminal Justice program the opportunity to apply the principles learned in other courses to the work situation through employment in or observation of activities necessary for the operation of a law enforcement agency. Employment or observation activities are coordinated with the student's course work. Students must work a minimum of 150 hours during the semester to receive credit for this course. Students will be required to meet with their supervisor weekly for an hour to discuss progress and/or concerns, and they are required to submit a weekly log of their practicum activities to the Dean/Coordinator of the Criminal Justice Program and write a research paper. A background check is required. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

CRJ 295 - Special Projects
1-10-3
(Prerequisite: eligibility for ENGL 101 and completion of CRJ 110, PSYCH 110, and SOCIO 110; sophomore standing; minimum completion of 45 hours toward the AAS in Criminal Justice; and approval of the Criminal Justice Coordinator) provides an opportunity for criminal justice students to work on specific projects either real or simulated under the supervision of a law enforcement officer. The student is required to write a proposal of the intended work simulation/ project and present it to the coordinator of the criminal justice program for approval. Offered as needed.

Applicable toward graduation where structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Culinary Arts

## (PENDING ICCB APPROVAL)

## CA 105 - Culinary Fundamentals

2-4-4
is a study of the fundamental elements of the food service industry, including terminology, equipment identification and usage, information regarding types of foods and trends in the industry, and basic preparation techniques. Students will breakdown and operate kitchen equipment and learn and use the following: cookery methods, product identity, soups, stocks and sauce, and the function of production kitchen. Students will also be taught culinary math and its application to yields and recipe costs. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## CA 115 - Culinary Fundamentals

2-4-4
(Prerequisite: CA 105) will focus on development of 1) strong basic culinary skill, 2) sanitation, 3) speed and efficiency, and 4) proper nutrition. Students will continue to expand their culinary knowledge and skills. Students study and practice how to operate efficiently and effectively in a variety of restaurant kitchen stations such as broiler, sauté, roundsman, etc. Special emphasis is placed on presentations and plating of quality food served to the public. Students will develop an understanding of key cooking terms and procedures such as roasting, braising, sautéing, grilling and broiling. Students will also learn proper cooking techniques for vegetables and starches. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, A.A.S, A.L.S
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CA 120 - Baking Fundamentals
2-4-4
(Prerequisite: CA 105) introduces students to the fundamental elements of baking science, ingredients, weights, measures, formula conversion and storage. Topics include formulation of yeast-based products, the functions and properties of various flours, fats, sugars, leaveners, and other baking ingredients. Students will spend lab time applying their knowledge in the production of various products. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CA 200 - Meat, Poultry, and Fish
2-3-3
(Prerequisite: CA 115) focuses on the identification of wholesale and fabricated cuts of beef, pork, veal and lamb and the recognition of various types of poultry and fish. It includes the study of the fundamental principles regarding meat, poultry and fish preparation. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CA 210 - Garde Manger
2-3-3
(Prerequisite: CA 115) is a basic overview of the history of Garde Manger. Students will develop and apply knowledge related to cold food preparation, hors d'oeuvres, display platters, and buffet center pieces. The students will develop Garde Manger skills and learn various functions as they prepare products. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CA 220 - Pastry Fundamentals
2-3-3
(Prerequisite: CA 120) familiarizes the student with the proper methods of pastry assembly, color coordination and the importance of appropriate taste combinations and pastry finishing techniques. The student acquires and practices skills involving pastries, specialty breads, icings, and fillings. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

CA 230 - International Cuisine
2-4-4
(Prerequisite: CA 115) reinforces knowledge of tools, equipment, vocabulary and theories learned in other courses along with providing the student with the exposure to cooking methods, procedures and ingredients used in international cuisines. The student will explore the cooking of Europe and the Mediterranean along with Asian cuisine and cuisines of the Americas. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Dance


#### Abstract

DANCE 110 - Beginning Ballet 0-2-1 is designed to help students to understand Ballet technique used in barre exercises, center floor work, and dance combinations and is concerned with correct body alignment of students and their basic understanding of Ballet terminology. Course may be repeated one time for a total of 2 accrued credits. Offered as needed.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates and All Degrees Group Requirement - Not Applicable Area of Concentration - Not Applicable

\section*{DANCE 120 - Beginning Tap}

0-2-1


is designed to help students to understand tap technique used in warm-up exercises in the center and at the barre, in center floor work (including combinations and dance routines). Tap students will focus on using good posture, coordinating the feet, familiarizing themselves with various tap rhythms, and gaining a basic understanding of tap terminology. Course may be repeated one time for a total of 2 accrued credits. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DANCE 130 - Beginning Jazz Dance
0-2-1
is designed to help students to understand Jazz technique used in warm-up exercises at the barre and in center, center floor work, combination, and dance routines and to help their basic understanding of Jazz terminology. Course may be repeated one time for a total of 2 accrued credits. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DANCE 140 - Beginning Swing
0-2-1
is designed to help students to understand swing dancing technique and combinations that can be used to create dance routines for enjoyment and performances. Course may be repeated one time for a total of 2 accrued credits. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Drafting \& Design Engineering

DRAFT 101 - Drafting Fundamentals
is an introductory course involving drafting techniques, sketching, lettering, orthographic projection, sectioning, primary auxiliary projections, and dimensioning as well as some geometric construction. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT 102 - Industrial Drafting (IAI: MTM 911) ..... 2-4-4
(Prerequisite: DRAFT 101 or equivalent competencies) includes secondary auxiliaries, dimensioning, detail and assembly drawings, threads and fasteners, revolutions, and diametric projections. Attention will also be given to symbols and shop processes. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining

## DRAFT 110 - Technical Design

2-2-3
introduces the student to the principles of design. The student will develop individual creative/ analytical problem-solving skills and apply them to a team problem-solving approach. These concepts will be developed through the construction of a project. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT 120 - Technical Graphics
1-3-2
(Prerequisite: DRAFT 101 or equivalent competencies) introduces the student to pictorial drawings and drafting room practices. Pipe drafting principles and practices are covered. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT 130 - Tool Design Drafting
2-4-4
(Prerequisite: DRAFT 101) introduces the principles of jig, fixture, and die designing. The course also includes drawing machine layouts for conventional and N.C. machines. Emphasis is placed on proper location and clamping of parts for all types of machining. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT 210 - Microstation
2-3-3
(Prerequisite: DRAFT 101 or equivalent competencies) provides the basic knowledge of computer-aided drafting (CAD). The student learns to use the computer aided drafting system to draw 2-D mechanical drawings. This system uses graphics, terminals, digitizers, microcomputer, and plotter as drafting tools. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DRAFT 215 - AutoCad

2-3-3
(Prerequisite: DRAFT 101 or equivalent competencies or consent of full-time Drafting instructor) introduces the student to the principles of computer-aided drafting using Autocad CAD software. After completing this course, the student should be able to demonstrate knowledge of the following: A) the components of computer aided drafting, B) application of geometric principles in creating a 2-D drawing, C) the creation of completed 2-D drawings with dimensions, D) storage and retrieval of drawings from a common database, and E) plotting drawings to scale from the screen and the database. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT220 - Intermediate CAD
2-3-3
(Prerequisite: DRAFT 210 or DRAFT 215) provides the knowledge to create advanced 2-D and basic 3-D drawings on the computer-aided drafting system. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT 230 - Advanced CAD (IAI: MTM 931) ..... 2-3-3
(Prerequisite: DRAFT 220) provides the knowledge to create advanced 3-D drawings. These
drawings include wire frame models as well as models with surfaces and shading. Offered in Fall,Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining
DRAFT 235 - Solid Modeling (3-D)2-3-3
(Prerequisite: DRAFT 230 or equivalent competencies) provides the student with the knowledgeto create advanced 3-D solid model designs using parameter IC modeling procedures. Theseprocedures include the use of the following: sketching and constraining profiles, creating complexshapes, creating work planes, adding features by editing, creating multiple views from a model,
creating assemblies, and constructing a bill of materials. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DRAFT 236 - Pro-Engineer

(Prerequisite: DRAFT 230 or equivalent competencies) provides the student with the knowledge and procedures to create parametric 3-D solid model designs and assemblies using the ProEngineer software. The procedures to be used will include the following: sketching and constraining profiles, creating complex shapes and assemblies, creating feature and sketch planes, editing the parametric model, and creating multi-views from the parametric model. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DRAFT 242 - Commercial Architecture

2-3-3
(Prerequisite: DRAFT 210 or 215 and DRAFT 244 or equivalent industrial experience) will enable the student to design and develop commercial buildings according to state and local codes on the CAD system. A concentration of facility design and flow, structural design, exterior and interior façade, construction detailing, landscape design, electrical design, and 3D model rendering development are implemented. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DRAFT 243 - Structural Steel Detailing

(Prerequisite: DRAFT 220) introduces the student to structural steel detailing using a CAD system. Steel frame terminology, typical details, framing plans, and working drawings are covered so that the student will have the understanding and experience of creating structural steel drawings using the CAD system. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DRAFT 244 - Concrete Detailing

(Prerequisite: DRAFT 220) provides the student the experience in preparing working drawings for reinforced concrete structures using a CAD system. Principles of reinforced concrete are introduced to provide the student with a background in the standards and the conventions of logical detailing. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT 245 - Residential Architecture ..... 2-3-3(Prerequisite: DRAFT 220) includes the development and execution of a complete set ofarchitectural working drawings using the CAD system. These drawings will include floor plans,elevations, foundation, plot plan, and wall sections. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT 290 - Work Experience Practicum
0-15-3
(Prerequisite: DRAFT 220, 230, 235, 243 or 236, 244, and 245 or 242) provides the student with the opportunity to use the skills acquired from the Drafting \& Design Engineering Program in a workplace setting. The internship will also allow the student to acquire additional knowledge from the workplace. The internship work will be in the student's desired career area and must provide a source of learning. Student is required to work 15 hours per week for a 15 -week semester. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DRAFT 295 - Workplace Simulation \& Project
1-10-3
(Prerequisite: DRAFT 220, 230, 235 or 236, 243, and 245 or equivalent competencies) gives the student enrolled in the Drafting and Design Engineering Program an opportunity to work on real or simulated projects under the guidance of the professor of CAD/Design. These projects will simulate the drafting/design workplace. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Drama

DRAMA150 - Theatre Appreciation (IAI: F1 907)
3-0-3
is an introduction to the appreciation of theatre as an art form. At least eight plays are read and analyzed. Production values and the physical theatre are studied. The course includes background reading, lectures, reading of literature, and the discussion of the history of theatre. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Speech and Drama
DRAMA 160 - Theatre Production (IAI: TA 918) (Variable Credit \& Repeatable) 1-4-1 to 3 has as its primary activity the production of a complete play, including the analysis of script, interpretation, casting, rehearsal, and performance. Students may participate in four areas: 1) acting, assistant directing, and stage management; 2) set construction and lighting; 3) costuming, property construction, and make-up; and 4) publicity and program construction. The student is expected to stress one of the four areas and assist in one other. The course may be repeated. A student may enroll in and receive credit for this course a maximum of four times to have an opportunity to emphasize a different area during each enrollment. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Speech and Drama
DRAMA 170 - Introduction to Acting (IAI: TA 914)
3-0-3
is a study of the interpretative function and technique of the actor. Students are introduced to the principles of acting theory and are provided the opportunity to practice acting as a part of this course. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Speech and DramaDRAMA 171 - Acting II2-2-3(Prerequisite: DRAMA 170 or instructor's approval) is a continuation of the study of theinterpretative function and technique of the actor. Students will be instructed using backgroundsin various acting techniques to further their own acting development through advanced scenework, exercises, and script analysis. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Speech and Drama

## DRAMA 180 - Stage Craft I

is a lecture/lab course designed to teach the fundamentals of properties, tool use and maintenance, scenery construction, painting, theatre safety, design aesthetics, and basic sound and lighting techniques. Field trips and guest speakers may supplement text and lecture materials. Attendance at two college productions and an accompanying written critique are required. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Speech and Drama

## DRAMA 181 - Stage Craft II

## 2-2-3

(Prerequisite: DRAMA 180) is a lecture/lab course designed to teach the fundamentals of properties, lighting and electricity, design concepts, and scenic and lighting design. Field trips and guest speakers may supplement text and lecture materials. Attendance at two college productions and an accompanying written critique are required. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Speech and Drama

# Early Childhood Education <br> (formerly Child Care and Education) 

ECE 101 - Introduction to Child Care \& Education (IAI: ECE 911) 3-0-3
(Prerequisite: eligibility for ENGL 090 and ENGL 097) offers an introduction to the early childhood education and education field with emphasis on the history of early childhood education, the variety of operations, services, facilities, career opportunities, and basic child development principles. The laboratory includes field studies in a variety of early childhood centers. Reading of periodical articles is required to introduce the student to early childhood education and the authors and publications of the profession. Students are required to complete fifteen hours of classroom observation in an educational setting. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AS, AA
Group Requirement - Not Applicable
Area of Concentration - Early Childhood Education

## ECE 102 - School-Age Child Care

 2-0-2(Prerequisite: eligibility for ENGL 090 and ENGL 097) introduces the individual caring for children five years to twelve years of age in a before- and after-school setting. Basic concepts of physical, intellectual, emotional, and social development of this age group are introduced. The provision of child care services is discussed. Appropriate curriculum, environment, and activities are explored by the student through semester projects and class activities. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 103 - Child Guidance
2-0-2
(Prerequisite: eligibility for ENGL 090 and ENGL 097) addresses typical characteristics and needs of children ages $0-5$ and provides a broad range of practical, effective, and flexible guidance strategies based on tested theories. Workable steps are devised for creating cooperative, respectful relationships with young children. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 110 - Health, Nutrition, and Safety for Young Children
3-0-3
(Prerequisite: eligibility for ENGL 101) provides an overview of current concepts in the fields of health, nutrition, and safety with emphasis on meeting children's needs in group settings and in accordance with licensing standards. Topics include community health issues, appropriate curriculum for nutrition needs, first aid and emergency practice, reporting policies, and choices for a healthy lifestyle. This course requires five hours of classroom observation experience to be arranged with the instructor. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Natural Science (ECE only)
Area of Concentration - Not Applicable
ECE 111 - Children's Literature
3-0-3
(Prerequisite: eligibility for ENGL 101) explores basic concepts of reading and telling stories and suggests methods of encouraging the child's creativity in the language arts. An important part of this course concerns the selection and use of materials appropriate for the level of comprehension associated with the different stages of mental, physical, and emotional development of the individual child. Particular emphasis is placed on language development. This course requires five hours of classroom observation experience to be arranged with the instructor. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 112 - Math and Science for Young Children
2-2-3
(Prerequisite: eligibility for ENGL 090 and ENGL 097) explores basic concepts of mathematics and science and suggests methods for encouraging the child's creativity in these areas. An important part of the course concerns the identification of those concepts appropriate to the different levels of mental, physical, and emotional development of the individual child. Handson experience supports this basic concept. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 113 - Art, Music, and Drama for Young Children
(Prerequisite: eligibility for ENGL 090 and ENGL 097) explores basic concepts of art, music, and drama and suggests methods for encouraging the child's participation and creativity in those areas. Included during the course are discussions of the various activities associated with different stages in the mental, physical, and emotional development of the individual child and the use of these art forms to increase the child's social abilities. Emphasis is on small motor activities. Through book reports the student is introduced to various authors and child development theories. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not ApplicableECE 114 - Play Activities for Young Children2-2-3(Prerequisite: eligibility for ENGL 090 and ENGL 097) explores basic concepts of structured andunstructured play and suggests methods for encouraging the child's creativity in those areas. Animportant part of the course concerns appropriate play activities associated with the different levelsof mental, physical, and emotional development of the individual child. Also included within thecourse are selection, construction, and maintenance of the equipment related to these activities.Emphasis is on large motor activities. The laboratory includes observation and designing ofoutdoor and indoor play areas. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 115 - Infant and Toddler Development
2-2-3
(Prerequisite: eligibility for ENGL 090 and ENGL 097) explores activities suitable for children under two years of age. An important part of the course concerns the identification of those concepts appropriate to the development of the individual child. Lab includes observation of infants and toddlers. This course requires five hours of classroom observation experience to be arranged with the instructor. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 203 - Child, Family, and Community (IAI: ECE 915)
3-0-3
(Prerequisite: eligibility for ENGL 101) investigates the historical and current attitudes toward children and families, the history of childcare and economic, and cultural and political factors that influence child care practices. Comparisons are made between childcare in the United States and those of other selected cultures. This course requires five hours of classroom observation experience to be arranged with the instructor. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 210 - Curriculum Design for Early Childhood
3-0-3
(Prerequisite: eligibility for ENGL 101 and completion of ECE 101 or permission from the Early Childhood Education Professor) offers an overview of the methods and procedures used in childhood education programs. Topics covered include curriculum, program planning, role of the teacher, use of materials and equipment, techniques of classroom management, and meeting the needs of individual children. The student needs either several of the ECE activity courses or equivalent knowledge to succeed in curriculum and program planning. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 220 - Child Care Administration and Organization
3-0-3
(Prerequisite: successful completion of ENGL 101, completion of a sufficient portion of the Early Childhood program to justify a learning experience in administration and organization, and permission of the Early Childhood Education Professor and/or Dean) provides knowledge and skills needed to run a family day care home: setting up a day care home, business management and administrative skills, and child development principles as applicable to home day care, the community, and the parents. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 230 - Early Childhood Program Management ..... 4-0-4(Prerequisite: successful completion of ENGL 101, completion of a sufficient portion of the EarlyChildhood program to justify a learning experience in program management, and permission ofthe Early Childhood Education Professor and/or Dean) is designed to develop the knowledgeand skills in administration and supervision for persons presently engaged in the administrationof child care programs as well as for those who aspire to do so. Principles and practices, organizationand supervision of staffs, budgets, record keeping, filing, office equipment usage, and legalresponsibilities are studied. Equipment and plant operation are topics also included. Offered inSpring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 235 - Early Childhood Business Management
3-0-3
(Prerequisite: successful completion of ENGL 101, completion of a sufficient portion of the Early Childhood program to justify a learning experience in program management, and permission of the Early Childhood Education Professor and/or Dean) is designed to develop the student's knowledge and skills in administration, supervision, and business operations for persons presently engaged in the administration of child care/early childhood programs as well as for those who aspire to do so. This course addresses each phase of the management process and provides specific examples of how that process applies to programs for young children and their families. Appropriate Illinois State Board of Education benchmarks are incorporated into this curriculum. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ECE 290 - Work Experience Practicum \& Seminar (Variable Credit)
1-10-1 to 3
(Prerequisite: eligibility for ENGL 101, completion of a sufficient portion of the Early Childhood program to justify a learning experience in the employment setting, and permission of the Early Childhood Education Professor and/or Dean) affords the student in the Early Childhood Education program the opportunity to apply the principles learned in other courses to the work situation through employment in or observation of activities necessary for the operation of a child care agency. Employment or observation activities are coordinated with the student's course work. One of the requirements of this course will be a one-hour seminar to be arranged for maximum convenience of the student. Credit is determined at enrollment based on the ratio of five or more hours per week in the employment setting for a regular-length semester for one semester hour of credit. Students planning to enroll in this course must request an application from the Early Childhood Education Professor 30 days or more prior to the first day of registration for the semester during which the student desires to participate in this course. Practicum assignments are allowed in the Richland Learning Child Care Center and any center working on NAEYC accreditation. Each student serving a practicum in a licensed child care center must furnish current proof of a physical examination including a statement of his/her physical and emotional ability to work with children. Credit is determined at enrollment based upon hours per semester in the school setting: $1-15$ clock hours $=1.0$ credit hour; $16-20$ clock hours $=2.0$ credit hours; $21+$ clock hours $=3.0$ credit hours. Due to education-related course observation requirements, this course may be repeated as necessary. Offered Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

# Earth Science 

EASCI 210 - Physical Geography (IAI: P1 909L) 3-2-4<br>(Prerequisite: eligibility for ENGL 101) offers an introductory study of physical geography and is designed to develop a basic understanding of the Earth, its landscapes and its climates. It concentrates on the earth as a system, and on the variety of physical environments with which humans must deal. Lab activities include working with various types of geographical data, such as topographic maps, climate classification and weather. Offered in Fall and Spring.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates and All Degrees<br>Group Requirement - Natural/Physical Science<br>Area of Concentration - Earth Science<br>EASCI 220 - Introduction to Physical Geology (IAI: P1 907L)<br>3-2-4<br>(Prerequisite: eligibility for ENGL 101) is an introduction to the study of physical geology and will give students a basic understanding of the processes that shape the earth. Topics include plate tectonics, volcanism, rocks and minerals, landforms and the various processes that shape landforms. Lab activities include the hands-on study of rocks and minerals, as well as the use of topographic maps and computer simulations. Offered in Fall and Spring.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates and All Degrees<br>Group Requirement - Natural/Physical Science<br>Area of Concentration - Earth Science<br>EASCI 230 - Introduction to Meteorology (IAI: P1 905L)<br>3-2-4<br>(Prerequisite: eligibility for ENGL 101 and MATH 091) is an introduction to the study of weather. Students will acquire a basic understanding of meteorology, weather terminology and atmospheric science, including global weather patterns and climatic change. Lab activities include working with a variety of atmospheric data and weather maps. Offered in Fall and Spring.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates and All Degrees<br>Group Requirement - Natural/Physical Science<br>Area of Concentration - Earth Science

## Economics

ECON 225 - Comparative Economic Systems
3-0-3
(Prerequisite: eligibility for ENGL 101) compares the similarities between various economies through an examination of systems of various countries/regions, including the former Soviet Union, China, Japan, Europe, Pacific Rim, and other economies. The course also includes the trade-off between efficiency and equity, economic freedom and economic order, and marketoriented systems versus planned economic systems. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS, ALS only)
Area of Concentration - Economics, International Business
ECON 231 - Macroeconomics (IAI: S3 901)
3-0-3
(Prerequisite: eligibility for $E N G L$ 101) is an introduction to the study of general economic principles. Such topics as economic systems, demand and supply, business organizations, gross national product, unemployment, inflation, fiscal policy, monetary policy, interest rates, and business cycles are discussed. Macroeconomics and current economic topics are emphasized. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Business, Economics, International Business, Social Science
(Prerequisite: ECON 231) is a continuation of the study of general economic principles. Such topics as elasticity, production costs, consumer demand, perfect and imperfect competition, agriculture, labor unions, social problems, and alternative economic systems are discussed. Microeconomics and current economic topics are emphasized. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Business, Economics, International Business, Social Science

## Education

ED 100 - Introduction to Public Education (IAI: EED 901, SED 901, SPE 911) 3-0-3 is designed for students considering a career in teaching and for individuals who wish to become better informed about the foundations of American education. The course reviews changing concepts in public education in America and examines the duties and responsibilities of the classroom teacher. Discussion of current issues and problems in education is included. Students are required to complete fifteen hours of observation in a classroom setting. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS, ALS only)
Area of Concentration - Teacher Education: Elementary-Secondary
-Special-Early Childhood
ED 101 - The Community of Higher Education
3-0-3
is designed to introduce and foster a mature understanding of learning, its importance, its methodologies, and its applications. Specifically, the course will entail reading, viewing, and discussing selected readings. The course will focus on the application of academic success strategies introduced through the text and class activities. The course has been organized around the concept of community: 1) the RCC community, 2 ) the broader academic community, and 3 ) the community beyond college. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS, ALS, and Certificates only)
Area of Concentration - Not Applicable
ED 102 - Field Experience in Education (IAI: EED 904,SED 905) (Variable Credit and Repeatable)

1-10-1 to 3
(Prerequisite: ED 100 or current enrollment in ED 100) is designed to provide the student with practical, hands-on experience in the public or private schools or in educational agencies for the purpose of exploring the potential of teaching as a career. This experience and seminar class emphasizes visiting and working in various classroom settings of interest to the student. Class seminars are also conducted in which experiences are shared with students and the instructor. Observation experiences are coordinated with the student's course work. Experiences are arranged by the student and instructor cooperatively and a one-hour per week seminar is a requirement of the course. Credit is determined at enrollment based upon hours per semester in the school setting: 1-14 clock hours $=1.0$ credit hours; $15-20$ clock hours $=2.0$ credit hours; $21+$ clock hours $=3.0$ credit hours. Due to education-related course observation requirements, this course may be repeated as necessary. Students may be required to provide a criminal background check to school districts before participating in field experiences. Offered in Fall and Spring.

Applicable toward graduation where structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS, ALS only)
Area of Concentration - Teacher Education: Elementary-Secondary

- Special-Early Childhood

[^8]ED 200 - Educational Psychology (IAI: SED 902)
3-0-3
(Prerequisite: PSYCH110) examines the application of psychological principles to education. Special emphasis is placed on understanding growth and development, the learning process, motivation, intelligence, evaluation, measurement, creativity, and the impact of culture on learning styles. The course requires formal classroom field experience to be arranged with the instructor. A student may not receive credit for both ED 200 and PSYCH 200. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS, ALS only)
Area of Concentration - Teacher Education: Elementary-Secondary
-Special-Early Childhood
ED 210 - Introduction to Bilingual Education 3-0-3
(Prerequisite: eligibility for ENGL 101) is a study of problems facing teachers, students, and educational institutions in multicultural communities. Includes discussion of the role of bilingual education, linguistically and culturally effective teaching strategies, and resources for multicultural teaching. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS, ALS)
Area of Concentration - Education
ED 220 - The Exceptional Child (IAI: ECE 913, SED 904)
3-0-3
(Prerequisite: successful completion of ENGL 101) focuses on the following children: the mentally impaired, the gifted, the visually impaired, the hearing impaired, the emotionally disturbed, the speech impaired, the physically impaired, the health impaired, and those at risk. Each area of study will include a historical background, a study of characteristics, nonbiased assessment methods, and information about specialized services and educational adaptations. The course may require formal classroom field experience to be arranged with the instructor. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Electronics

ELTRN 101 - Basic Electricity-AC
.5-1-1
is designed for those with no previous training in electronics. Fundamental concepts, terminology, and mathematical tools required to understand basic AC circuits are presented. Lab sessions follow in parallel, familiarizing students with test equipment, components, and safe laboratory procedures. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## ELTRN 102 - Basic Electricity-DC

.5-1-1
is designed for those with no previous training in electronics. Fundamental concepts, terminology, and mathematical tools required to understand basic DC circuits are presented. Lab sessions follow in parallel, familiarizing students with test equipment, components, and safe laboratory procedures. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable


ELTRN 120 - Fundamentals of Servicing 1-3-2
(Prerequisite: ELTRN 112 or concurrent enrollment) is a laboratory-oriented course designed to acquaint the student with systematic procedures for locating problems in the basic electronic circuits and systems. Proper use of instruments in testing components and tracing signals through circuits and systems is emphasized. The student is also introduced to the various sources and proper use of technical service data and is instructed in the proper use of the small hand tools commonly used in electronic repair work, including soldering and de-soldering devices. Electronic assembly techniques are emphasized by requiring each student to participate in a construction project during the semester. A tool kit required for this course will cost approximately $\$ 75.00$. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 140 - Solid State Fundamentals for Electronics
2-2-3
(Prerequisite: ELTRN 110 and ELTRN 111) presents an overview of solid state devices and systems, including fiber optics, integrated circuits, and light-activated components. The course is designed for electricians, students, and others who have some basic knowledge of electricity. Component and system construction, operation, installation, and service are emphasized. Various practical applications are presented throughout the course as they relate to temperature, light, speed, and pressure control. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## ELTRN 160 - Digital Electronics <br> 2-4-4

(Prerequisite: ELTRN 110 and ELTRN 111) is a laboratory-oriented course that emphasizes analytical reasoning and basic digital design using the standard integrated circuits that are used in industry today. The student will become proficient at using the symbols and procedures that are the standard in manufacturers' data manuals and industrial settings. Topics include numbering systems and codes, digital electronic signals and switches, basic logic gates, inverting logic gates, Boolean Algebra and reduction techniques, Exclusive-Or and Exclusive-Nor gates, code converters, multiplexers and de-multiplexers, and logic families and their characteristics. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 203 - Programmable Controllers
2-2-3
(Prerequisite: ELTRN 109 or previous motor control experience) is a laboratory-oriented course that utilizes an Allen Bradley PLC $2 / 16$ processor and the IBM PS-2 Model 30 computer with ICOM ladder logistic software for programming. Topics include relay type instructions, timer, counters, sequencers, arithmetic functions, files, shift registers, block functions, analog input and output, and troubleshooting. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 210 - Advanced Electronic Devices \& Circuits
2-2-3
(Prerequisite: ELTRN 112) is a continuation of ELTRN 112 (Electronic Devices and Circuits). Devices studied include Bipolar Power Transistors, Field Effect Transistors (small signal and power types), Operational Amplifiers, and Linear Integrated Circuits. Both the theory of operation of these devices and their typical circuit applications are covered. Special emphasis is given to Operational Amplifiers and their applications in negative feedback circuits. An introduction to Integrated Circuit manufacturing technology and a thorough treatment of discrete and IC Sinusoidal Oscillators are also provided. Extensive use of computer-assisted instruction is used to supplement the lectures and traditional hands-on laboratory sessions. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 211 - Pulse, Digital, \& Switching Circuits
(Prerequisite: ELTRN 112) begins with applications of diodes, transistors, and other semiconductors operating in the switching mode. Topics include wave shaping circuits (clippers, clampers, Schmitt triggers, differentiators and integrators), SCRs, TRIAC's Unijunction Transistors, and other thyristors. Applications to DC and AC power control and relaxation oscillators are also covered. Also included are triggered multi-vibrators, counters, shift registers, memory circuits, various digital display devices, digital speech synthesis, stepper motors, switching type regulators, switching power supplies, and analog-to-digital and digital-to-analog converters. A project utilizing the building blocks covered in the course is required of each student. Computer simulations of digital circuits and other instructional computer activities are used throughout the course. Use of logic analyzers, digital oscilloscopes, and other digital test equipment is covered in the lab sessions. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: ELTRN 210) covers the theory of AM and FM communication systems and their applications to radio, television, and satellite communication. Topics include AM and FM receivers, transmitters, antennas, transmission lines, and wave propagation. Each student builds, tests, and aligns a complete AM and FM stereo receiver. Students also design, build, and test a directional antenna and learn to use the College's antenna test range. An introduction to television broadcasting and TV receivers is also included. Using an Earth station in the electronics lab, students also work with fully operational communications satellites of both the geostationary and low Earth orbit types commonly used in modern communication systems. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## ELTRN 240 - Introduction to Microprocessors

2-2-3
(Prerequisite: ELTRN 160 or ELTRN 211) is a specialized course introducing three general areas: hardware, software, and troubleshooting. Special emphasis is placed on how microprocessor systems function and how to maintain them. Microprocessor hardware and software is used for most lab activities. Lab sessions include troubleshooting and repair with topics to include signature analysis and use of logic analyzers. Students may also be expected to write simple programs for purposes of troubleshooting and maintenance. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 250 - Electrician Internship 1
0-10-2
(Prerequisite: admittance into the Electrician Apprenticeship program) has been developed and established as the on-the-job component of the Electrician Apprenticeship program. The on-thejob component will consist of work relating to the wiring of residential, commercial, industrial, and/or specialized electrical systems. All of the on-the-job work-related activities will be performed under the direct supervision of a journeyworker. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 251 - Electrician Internship 2
0-10-2
(Prerequisite: ELTRN 250) has been developed and established as the on-the-job component of the Electrician Apprenticeship program. The on-the-job component will consist of work relating to the wiring of residential, commercial, industrial, and/or specialized electrical systems. All of the on-the-job work-related activities will be performed under the direct supervision of a journeyworker. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 252 - Electrician Internship 3
0-10-2
(Prerequisite: ELTRN 251) has been developed and established as the on-the-job component of the Electrician Apprenticeship program. The on-the-job component will consist of work relating to the wiring of residential, commercial, industrial, and/or specialized electrical systems. All of the on-the-job work-related activities will be performed under the direct supervision of a journeyworker. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 253 - Electrician Internship 40-10-2(Prerequisite: ELTRN 252) has been developed and established as the on-the-job component ofthe Electrician Apprenticeship program. The on-the-job component will consist of work relatingto the wiring of residential, commercial, industrial, and/or specialized electrical systems. All ofthe on-the-job work-related activities will be performed under the direct supervision of ajourneyworker. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 254 - Electrician Internship 5
0-10-2
(Prerequisite: ELTRN 253) has been developed and established as the on-the-job component of the Electrician Apprenticeship program. The on-the-job component will consist of work relating to the wiring of residential, commercial, industrial, and/or specialized electrical systems. All of the on-the-job work-related activities will be performed under the direct supervision of a journeyworker. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ELTRN 295 - Electronics Internship (Variable Credit)
1-20-5
(Prerequisite: sophomore standing in Electronics) is an on-the-job experience course where the student will be placed in a job related to his or her career goals. The work setting selected will be determined by consultation with the student's faculty advisor and the prospective employer. Students will be required to interview for their internship position. Credit received will depend on the number of hours worked each week but must range between two and five credit hours. Each semester hour of credit will correspond to five hours per week of employment up to a maximum of five credit hours. Students will be required to attend a weekly seminar to be scheduled at the convenience of the student. Payment of an hourly wage will be at the option of the employer. Students will be required to keep an accurate record of their activities and to write a report on their work study experiences at the end of the semester. The work supervisor's reports will be a major factor in determining the student's final grade. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Emergency Medical Technology

## EMT 100 - First Responder Training Course <br> 2-2-3

(Prerequisite: HLTH 110 CPR or valid BLS Healthcare Provider CPR certification for the length of the course) is designed to provide students with the core knowledge, skills, and attitudes to function in the capacity of a first responder. The curriculum is based on the First Responder designated level of the emergency medical care provider as outlined by the National EMS Education and Practice Blueprint. The First Responder uses a limited amount of equipment to perform initial assessment and intervention and is trained to assist other EMS providers. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EMT 120 - EMT - Basic

5-3-6
(Prerequisite: pass reading test, HLTH 110-CPR, or current BLS Health Care Provider CPR certification, 18 years of age, and high school diploma or GED) is based on the goals and training experiences mandated by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in cooperation with U.S. Department of Health and Human Services Public Health Service and Health Resources and Human Services Administration. It is the Illinois Department of Public Health's approved 110-hour curriculum for training Emergency Medical Technicians. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EMT 140 - EMT - Intermediate 1 <br> (Prerequisite: current BLS Health Care provider CPR certification, current EMT-Basic license for the length of the course) is based on the goals and training experiences mandated by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in cooperation with U.S. Department of Health and Human Services Public Health Service and Health Resources and Human Services Administration. The course includes roles and responsibilities, patient assessment, examination and care, medications, venipuncture, and medical emergencies. Offered as needed. <br> Applicable toward graduation where program structure permits: <br> Certificate or Degree - All Certificates, AAS, ALS <br> Group Requirement - Not Applicable <br> Area of Concentration - Not Applicable <br> EMT 150 - EMT - Intermediate 2 <br> (Prerequisite: current BLS Health Care provider CPR certification, current EMT-Basic license for the length of the course, and completion of EMT 140 EMT-Intermediate 1) is a continuation of EMT-Intermediate training as mandated by U.S. Department of Transportation, National Highway Traffic Safety Administration, in cooperation with U.S. Department of Health and Human Services Public Health Service and Health Resources and Human Services Administration. The course includes, but is not limited to, EMT-I roles and responsibilities, assessment and emergency treatment, medications, venipuncture, cardiovascular anatomy and physiology, electrocardiography, cardiovascular treatment skills, and endotracheal intubation. Offered as needed. <br> Applicable toward graduation where program structure permits: <br> Certificate or Degree - All Certificates, AAS, ALS <br> Group Requirement - Not Applicable <br> Area of Concentration - Not Applicable

5-6-7 3-3-4

## EMT 200 - Paramedic 1

5-6-7
(Prerequisite: current BLS Health Care provider CPR certification, and current EMT-B or higher license) is based on the State standards mandated by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in cooperation with U.S. Department of Health and Human Services Public Health Service and Health Resources and Human Services Administration. Included are Modules 1 and 2 of the National Standards for Emergency Medical Technology - Paramedic Curriculum. Offered in Spring as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EMT 220 - Paramedic 2 <br> 4-6-6

(Prerequisite: currently licensed as EMT-B or higher, and completion of EMT 200-Paramedic 1) is based on the State standards mandated by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in cooperation with U.S. Department of Health and Human Services Public Health Service and Health Resources and Human Services Administration. Included are Modules 3 and 4 of the National Standards for Emergency Medical Technology Paramedic Curriculum. Offered in Summer as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EMT 240 - Paramedic 3

8-3-9
(Prerequisite: currently licensed as EMT-B or higher, and completion of EMT 220-Paramedic 2) is based on the State standards mandated by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in cooperation with U.S. Department of Health and Human Services Public Health Service and Health Resources and Human Services Administration. Included is Module 5 of the National Standards for Emergency Medical Technology - Paramedic Curriculum. Offered in Fall as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EMT 260 - Paramedic 4 <br> 4-9-7

(Prerequisite: currently licensed as EMT-B or higher, and completion of EMT 240-Paramedic 3) is based on the State standards mandated by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in cooperation with U.S. Department of Health and Human Services Public Health Service and Health Resources and Human Services Administration. Included are Modules 6, 7, and 8 of the National Standards for Emergency Medical Technology - Paramedic Curriculum. Offered in Spring as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EMT 290 - Paramedic 5
1-12-5
(Prerequisite: currently licensed as EMT-B or higher, and completion of EMT 260-Paramedic 4) is based on the State standards mandated by the U.S. Department of Transportation, National Highway Traffic Safety Administration, in cooperation with U.S. Department of Health and Human Services Public Health Service and Health Resources and Human Services Administration. It encompasses all classroom, laboratory, and clinical skills as included in Modules 1, 2, 3, 4, 5, 6, 7, and 8 of the National Standards for Emergency Medical Technology - Paramedic Curriculum. This course consists mainly of ride-time with an emergency response team on calls, at the scene, and during transport of a patient. Upon successful completion of this course, a student is eligible to apply for and take the EMT-Paramedic licensure examination for an additional fee. Offered in Summer as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Energy Distribution

## EDT 290 - Energy Distribution Apprenticeship 1

0-15-3
provides students in the Energy Distribution Program the opportunity to apply principles learned in other courses to the work situation by employment in or observation of activities necessary for the student to succeed in the workplace. A student will need to work a minimum of 225 hours to receive credit for this course. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDT 291 - Energy Distribution Apprenticeship 2
0-15-3
(Prerequisite: EDT 290) provides students in the Energy Distribution Program the opportunity to apply principles learned in other courses to the work situation by employment in or observation of activities necessary for the student to succeed in the workplace. A student will need to work a minimum of 225 hours to receive credit for this course. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDT 292 - Energy Distribution Apprenticeship 3
0-15-3
(Prerequisite: EDT 291) provides students in the Energy Distribution Program the opportunity to apply principles learned in other courses to the work situation by employment in or observation of activities necessary for the student to succeed in the workplace. A student will need to work a minimum of 225 hours to receive credit for this course. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EDT 297 - Emerging Technologies

1-25-6
(Prerequisite: successful completion of Ameren Training modules or consent of the Dean) provides the journey-level student with the opportunity to explore, experiment, and apply new technologies in the Energy Distribution field. A significant portion of this study will be applied in the work environment. Therefore, a student will need to work a minimum of 450 hours to receive credit for this course. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTL 101 - Lineman Apprentice 1
0-15-3
provides instruction to prepare students to fulfill basic OSHA training requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be instructed and then tested (passing grade required for apprenticeship). Students will be able to identify hand tools, line-related tools, various cutter tools, connectors, preformed materials, anchors \& extensions, wire, repair sleeves and line material. The required knowledge for installing proper grounding, down guys, various pole hardware, street lights, sidewalk guys, cutouts, lightning arresters, etc. The proper operation and maintenance of line trucks, trouble trucks, ladders, lifting hoist and chains, climbing tools, forklifts and chainsaws. Proper care and testing of rubber gloves, sleeves and other personal safety equipment. Finally, the student will be able to employ all required basic safety (OSHA, OQ and NESC) rules to electric distribution construction methods employed by him or her. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EDTL 105 - Lineman Apprentice 2

0-15-3
(Prerequisite: EDTL 101) provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be followed during class and any construction that is performed by the student. Students will enter an enclosed space (as defined by OSHA) and practice confined space rescue (as defined by OSHA). Students will be able to articulate (practice) proper Pole top rescue and PCB Clean up. Students will learn the basics of underground electric construction (methods and practices). Students will learn the basics of overhead electric construction (methods and practices). Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTL 110 - Lineman Apprentice 3
0-15-3
(Prerequisite: EDTL 105) provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be followed during class and any construction that is performed by the student. Students will continue pole top rescue practice and proper pole climbing methods. Learn the basics of Electric Distribution Standards usage. Students will extend their knowledge of UG distribution construction and OH distribution construction methods and practices. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable enstruction will be dent. Students will continue nt will study and practice hods and practices. Introduction of trouble
(Prerequisite: EDTL 115) provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be followed during class and any construction that is performed by the student. Students will continue Pole Top Rescue practice and proper Pole climbing methods II. The student will study and practice bucket rescue from the ground. Student will extend their knowledge of UG distribution construction and OH distribution construction methods and practices. Introduction of trouble outage work, interpretation of circuit maps and working energized conductors. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EDTL 125 - Lineman Apprentice 6

0-15-3
(Prerequisite: EDTL 120) provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be followed during class and any construction that is performed by the student. Students will identify substation equipment, its operation and maintenance - methods and practices. Review overhead and underground construction and maintenance methods. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTM 101 - Polyphase Meter Apprentice 1
6-2-7
(Prerequisite: MATH 104 or permission of AmerenIP Training Coordinator) provides instruction to prepare students to fulfill basic OSHA training requirements and demonstrate proper use of personal protective equipment. Students will be able to identify and demonstrate proper use of hand tools, construction tools, conduit, conduit fittings, and related materials. Students will be able to describe the transformation of electric power and display proficiency in the use of electrical measuring instruments. Students will demonstrate an understanding of the fundamentals of electricity metering. Students will gain familiarization with the organization of the Illinois Power Electric Meter Standards as well as sections pertaining to single-phase metering. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTM 105 - Polyphase Meter Apprentice 2 4-2-5
(Prerequisite: EDTM 10) prepares students to demonstrate proficiency of bucket truck operation, related personal protective equipment, and rescue from ground controls. Students will understand and demonstrate the application and installation of single phase self-contained electricity metering. Students will learn the basics of investigating metering and billing problems. Students will be introduced to single phase metering concepts. Students will gain familiarization with electric meter accuracy testing equipment and procedures. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: EDTM 105) concentrates on the applications, installations, and accuracy testing of self-contained polyphase metering, including socket and A-base types. Demand and time-of-use metering concepts are introduced at this level. Instruction also includes the transformation of single-phase and three-phase power, three-phase phasor concepts, and recording voltmeter operation. Applicable portions of the Illinois Power Electric Meter Standards are included. Safe work practices are emphasized. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTM 115 - Polyphase Meter Apprentice 4 3-2-4
(Prerequisite: EDTM 110) presents fundamental concepts of transformer-rated electric metering theory, applications, and accuracy testing. Study of primary voltage electric metering is included. Concepts and applications of solid-state electric meters and related software are presented. Electric metering circuit analysis fundamentals and equipment utilization are emphasized. Safe work practices are emphasized. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTM 120 - Polyphase Meter Apprentice 5
(Prerequisite: EDTM 115) instructs students in concepts, applications, and accuracy testing of VAR and Q electric metering. Principles of meter data re-transmittal and customer energy management systems will be studied. Students will gain proficiency in concepts and applications of specialized solid-state metering and remote metering interrogation equipment. Principles, applications, and accuracy testing of electric interchange metering will be instructed. In this course, students will complete the journeyman polyphase meter final examination. Safe work practices are emphasized. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTN 101 - Gas Distribution Apprentice 1
0-15-3
provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Students will be introduced to natural gas, including its composition, emergency procedures, ignition sources, conditions causing open flame ignition, electrical spark, and sources resulting from work on piping. Also covered in the course are recognizing and reporting natural gas leaks, use of personal protective equipment, power tool safety, proper firefighting techniques, controlling the accidental release of gas and gas standards. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTN 105 - Gas Distribution Apprentice 2
0-15-3
(Prerequisite: EDTN 101) provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction, and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Students will be introduced to natural gas hazards, proper leak investigation, and resolution. Emergency response and customer leak investigation will be introduced. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTN 110 - Gas Distribution Apprentice 3 ..... 0-15-3(Prerequisite: EDTN 105) provides instruction to prepare students to fulfill basic OSHArequirements and demonstrate proper safety protocols for gas distribution construction andmaintenance. OQ (Operator Qualification) requirements for gas distribution construction will befollowed during class and any construction that is performed by the student. Students will beintroduced to natural gas service requirements to customers (appliance maintenance, adjustments,repairs and safety requirements). Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTN 115 - Gas Distribution Welding 1
0-15-3
(Prerequisite: EDTN 110) provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Student will be introduced to job site protection, locating and marking, flagging, construction equipment excavating \& shoring safety, competent person program and confined space entry. Basic construction and maintenance of gas facilities along with proper welding techniques will be learned by the student throughout length of class. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTN 120 - Gas Distribution Welding 2
0-15-3
(Prerequisite: EDTN 115) provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Students will be introduced to natural gas basic regulation, inspecting pressure regulating and limiting stations and system uprating procedures/requirements. The proper procedure to inspect and maintain valves and safe vault entry will be learned. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTN 125 - Gas Distribution Apprentice 4
2-2-3
prepares and evaluates gas apprentices to comply with the requirements of the operator qualification rule within the Minimum Federal Safety Act, part 192 sections 192.801 through 192.809. Students will review the code, covered task summary, and performance evaluation criteria guide and then be evaluated using the performance evaluation form. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTP 101 - Power Engineer Apprentice 1
7-2-8
(Prerequisite: MATH 091 or satisfactory score on the mathematics placement exam) provides instruction to prepare students to fulfill basic OSHA training requirements and demonstrate proper safety protocols for both gas and electric power distribution. Students will be able to use township survey information, maps, easement and right-of-way information to design basic residential gas and electric services. Students will be able to locate underground facilities using both the inductive and conductive processes. Finally, the student will be able to employ corrosion control techniques for buried metal. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EDTP 105 - Power Engineer Apprentice 2

7-2-8
(Prerequisite: EDTP 101) provides instruction to prepare students to fulfill basic OSHA training and demonstrate proper safety protocols for designing both gas and electric power distribution services and basic extensions. Students will be expected to use basic township survey information, maps, easement and right-of-way information to support basic residential gas and electric service designs. Students will expand their knowledge of locating underground facilities using both the inductive and conductive processes. Students will be able to employ basic corrosion control techniques for buried metal on basic gas services. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTP 110 - Power Engineer Apprentice 3
5-1-5
(Prerequisite: EDTP 105) provides instruction to prepare students to fulfill basic OSHA training and demonstrate proper safety protocols for designing both gas and electric power distribution primary and main; use basic township survey information, maps, easement and right-of-way information to support basic residential/commercial (small) gas and electric primary/main extension design; practice locating underground facilities; employ basic corrosion control techniques for buried metal on basic gas services; gain an understanding of rotary gas meters relative to their practical/economical use; study high pressure gas metering concepts; apply appropriate surveying techniques to cross sections of rail roads, state highways, and waterways; and acquire basic knowledge of three-phase transformers, vertical/horizontal clearances, threephase extensions and single-phase rebuilds. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EDTP 115 - Power Engineer Apprentice 4

(Prerequisite: EDTP 110) provides instruction to prepare students to fulfill basic OSHA training and demonstrate proper safety protocols for designing both gas and electric power distribution primary and main; use basic township survey information, maps, easement and right-of-way information to support basic residential/commercial (small) gas and electric primary/main extension design; practice locating underground facilities; employ basic corrosion control techniques for buried metal on gas extensions; apply knowledge of rotary gas meters, high pressure gas metering to designs; apply appropriate surveying techniques and cross sections of construction sites to designs; articulate proper gas regulator design and basic testing requirements of gas distribution system design; apply knowledge of three phase transformers, vertical/horizontal clearances, single/three-phase extensions rebuilds and three-phase electric theory to designs; gain a broader understanding of basic three-phase metering, electric underground extensions (three phase/single phase); and create an initial electric and gas distribution system design for a 10-400 lot residential subdivision. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTP 120 - Power Engineer Apprentice 5
4-1-4
(Prerequisite: EDTP 115) prepares students to apply basic law of physics to electric and gas power distribution systems. Students will take field notes, locate existing facilities, perform field surveys, prepare commercial and industrial power distribution designs, bill customers, order materials, and perform cost estimates as dictated by appropriate design standards, building codes, and customer need. In addition, each student will complete an advanced design electric and gas power distribution system project. This project will include advanced problems on many aspects of utility design, and all requirements for design will be need to be completed in order for the student to receive credit. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: EDTP 120) provide instruction for students to prepare a natural gas and electric power design project from scratch. To do so, the student will employ data collection and previous learning from all prior experiences using field notes, locating techniques, field survey data, material data, cost estimate data as dictated by appropriate design standards, building codes, and customer need. The project design will include the relocation of gas and electric lines, extension of new gas and electric lines, surveying and research to ensure that all safety, building codes, and standards are met. Calculations and related information will be noted for grading and review, and all requirements for design will be need to be completed in order for the student to receive credit. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTS 101 - Substation Apprentice 1
0-15-3
prepares the student to be a hands-on team member of the substation maintenance or construction crew. Training modules included are mobile radio procedures, how to identify and use hand and power construction tools, OSHA 1910.269 compliance training, including substation entry training, use of bucket trucks, bucket truck rescue, AC-DC and OHMs laws, or secured area use of electrical test instruments, electrical safety and use of high voltage rubber gloves, sleeves and cover-up materials. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTS 105 - Substation Apprentice 2
0-15-3
(Prerequisite: EDTS 101) prepares the student to be a hands-on team member of the substation maintenance or construction crew. Training Modules include use of precision tools, ridged, thin wall and PVC conduit bending, use of oxygen/acetylene torch, transformer identification, identification and replacement of substation power fuses, substation inspections, and steel structure rescue. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTS 110 - Substation Apprentice 3
0-15-3
(Prerequisite: EDTS 105) familiarizes students with major substation transmission and distribution equipment. Training modules include power transformer no-load tap changer operation, installation and adjustment of disconnect and air break switches, safe handling of compressed gases, substation batteries, installation of transformer and circuit breaker fall protection, and mobile substation training. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTS 115 - Substation Apprentice 4
0-15-3
(Prerequisite: EDTS 110) consists of $30 \%$ classroom and $70 \%$ practical exercise at the Training Center Substation. Tasks included in this module are switching and clearance procedures, personal protective grounding, energized hot work safety and cover up techniques, operation of air break and transfer switches, and working with one-line diagrams. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
EDTS 120 - Substation Apprentice 5 ..... 0-15-3
(Prerequisite: EDTS 115) prepares students for most aspects of substation breaker maintenance and performance tests. Tasks include vacuum pump set up and operation; maintenance of pneumatic, hydraulic and solenoid mechanisms; circuit breaker tests including timing, contact penetration, contact wipe or compression, breaker stroke; and high potential testing (doctor). Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## EDTS 125 - Substation Apprentice 6

4-4-6
(Prerequisite: EDTS 120) prepares trainees for complex diagram and schematic use for construction or trouble shooting. Modules included are identifying electrical symbols and electrical devices, component change-out or additions, wiring of control panels, wiring techniques and proper wiring devices, transformer load tap changer maintenance and back up relay devices, and single-phase step regulator theory and maintenance. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Engineering

ENGR 110 - Engineering Graphics (IAI: EGR 941) 1-4-3
(Prerequisite: DRAFT101 or permission of the instructor) is designed for pre-engineering students and includes shop terms and processes, geometry of engineering drawing, working drawings, intersections and developments, advanced projection systems, use and construction of graphs, charts and monographs, and design problems and applications. Offered in Fall.
Applicable for graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Engineering, Drafting
ENGR 211 - Statics (IAI: EGR 942) 4-0-4
(Prerequisite: PHYS 151 and MATH 122 and concurrent enrollment in or completion of MATH 221) introduces basic concepts concerning force systems as applied to particles and rigid bodies in static equilibrium. Vector methods and calculus are used to examine two- and three-dimensional systems such as trusses, beams, and frames. Topics include resultants of force systems, moments of inertia, couples, distributed forces, center of mass, analysis of structures, and friction. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - General Science, Physics, Mathematics, Engineering
ENGR 212 - Dynamics (IAI: EGR 943)
(Prerequisite: ENGR 211 and concurrent enrollment in or completion of MATH 221) applies elements of vector calculus to two- and three-dimensional motion of a particle and of a rigid body. Topics include kinematics, kinetics, absolute and relative motion, translation, rotation, Newton's laws of motion, work and energy, power, and impulse and momentum. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - General Science, Physics, Mathematics, Engineering

## Engineering Technology

ENGT 100 - Industrial Processes (formerly MFG 120)(IAI: MTM 913) 3-0-3
is designed to give a basic understanding of the various processes used in industry. The student will understand the various methods of product manufacturing and processing with respect to technical attributes, product design, process routings, and business decision making. Industrial Processes explores practical applications of industrial processes, including metal working, fabrication, welding, machining, casting and molding, assembly techniques, and automated manufacturing concepts including robotics and CNC technology. Industrial processes also include those commonly utilized in grain processing. Topics covered include the integration of people, processes, and information and the development of a process routing. Other topics include interrelationship among materials, their selection for use in product design and processes, and conversion of these materials into finished components. Business concepts of profitability, productivity, JIT, Lean Manufacturing, and quality assurance are covered. The course relies heavily upon plant visits and demonstrations. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining
ENGT 101 - Motor Control Fundamentals (formerly ELTRN 109) 3-3-4
is a practical, hands-on class, centered on the study and application of controls and systems in the industrial environment. This course begins at the introductory level and progresses through advanced manual and automatic electromechanical and solid-state controls. Quizzes will be given regularly and will include lab activities. Selected lab activities will be taken for grades. The course emphasizes the on-the-job knowledge and skills required to troubleshoot and maintain modern industrial control systems. Safe work habits are emphasized throughout the course. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 102 - Blueprint Reading (formerly MFG 100)
3-0-3
provides experiences in reading industrial prints and some sketching of orthographic and pictorial drawings. Topics covered include the interpretation of detail and assembly drawings; auxiliary views; sections, dimensions, and tolerances; lists of materials; notes; drawing change systems; threads; callouts for machine processes; positional and form tolerances; gears; splines; CNC documents; and sheet metal, welding, and control diagrams. Students will produce engineering drawings using manual drafting tools and computer-aided design systems. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 103 - Fluid Power Fundamentals (formerly MEC S 112)
2-2-3
(Prerequisite: eligibility for MATH 091) is a hands-on course in the fundamentals of pneumatic and hydraulic systems. Topics covered include the principles of work, force, energy and flow and their relationships in linear displacement systems. The student also learns schematics, symbols, and notation used in pneumatic and hydraulic systems. Cylinders, accumulators, and various common fluid power components are used in laboratory experiments. Planned maintenance and troubleshooting are discovered through the experiments. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

ENGT 104 - CNC Fundamentals (formerly CIM 102)(IAI: MTM 915)
2-2-3
is an introduction to CNC machinery as it applies to the operator. CNC (computer numerical controlled) Fundamentals is a hands-on course in the setup, operation, and basic programming of CNC machines including both turning (lathes) and milling machines. Topics will include an introduction to basic CNC program codes, set up, tooling, and operation. The MDI mode will be utilized for manual axis control and basic machine functions. Work shift and tool offsets will be programmed. Offline programming will be used to create basic CNC programs. The programs will be downloaded, called up, edited, and tool path code graphically verified before being run. Machine operation will include basic fixturing, feed and speed rates, machine maintenance, and adjustments to meet part quality requirements. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining
ENGT 105 - Occupational Safety (formerly IND S 100)
3-0-3
is an introductory course and is appropriate for operators, technicians, supervisors, and managers desiring to learn the fundamentals of occupational safety and health. Most topics discussed relate to the General Industry Standards established by the Occupational Safety and Health Administration (OSHA). This course identifies common hazards in business and industry and investigates various methods of controlling those hazards. This is primarily a lecture and discussion course; however, several hands-on demonstrations are used to enhance instruction. Presentations are similar to shop floor safety meetings. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 111 - Motor Control Applications (formerly ELTRN 113) 3-3-4
(Prerequisite: ENGT 101) is a practical, hands-on class, centered on the study and application of controls and systems in the industrial environment. This course includes a study of Programmable Logic Controllers, reduced voltage starting techniques, variable speed drives, soft starters, singlephase motors, three-phase theory and applications, solid-state controls, photo switches, proximity switches, horsepower and torque calculations, motor performance and testing, and motor applications. Quizzes will be given regularly and will include lab activities. Selected lab activities will be taken for grades. The course emphasizes the on-the-job knowledge and skills required to troubleshoot and maintain modern industrial control systems. Safe work habits are emphasized throughout the course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## ENGT 120 - Process Control Fundamentals (formerly ELTRN 201)

(Prerequisite: ENGT 101) is a practical, hands-on class, centered on the study and application of instrumentation and process controls and systems in the industrial environment. This course begins at the introductory level with basic measurement techniques for temperature, pressure, level, and flow. Current loops, PID control and calibration are discussed and applied in the lab. Quizzes will be given regularly and will include lab activities. Selected lab activities will be taken for grades. The course emphasizes the on-the-job knowledge and skills required to troubleshoot and maintain modern process control systems. Safe work habits are emphasized throughout the course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

ENGT 130 - Power Transmission Fundamentals (formerly MEC S 101) 3-2-4
(Prerequisite: MATH 091 and eligibility for ENGL 101 or approval of the instructor) is an introduction to mechanical drives. Systems that are common in factories and processing plants are discussed. Topics include rotating equipment mounting, shaft alignment, couplings, AC motors, torque, rotary mechanical power, belt drives, gear drives, and chain drives. Students will work with handbooks, manufacturers' catalogs, and trade literature to solve mechanical power transmission problems. Theory gained in the classroom is applied in laboratory exercises. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 150 - Machining Fundamentals (formerly MACH 101) (IAI: MTM 921) 1-2-2
provides a hands-on introduction of the basic principles of introduction to the various machining operations, setups, and procedures. The course focuses on traditional machining methods including lathes, mills, drills, cut-off saws and grinders. Topics include machine capabilities, basic process planning, setup, and machine operation. Additional topics include bench work, the use of hand tools, basic measurement tools, and layout tools. Shop safety is covered in every operation. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining
ENGT 151 - Cutting \& Workholding (formerly Mach 102)(IAI: MTM 922) $\quad \mathbf{1 - 2 - 2}$
introduces the theory and operation of metal cutting tools used manual and CNC machining. Tools covered include drills and reamers, end mills, mill cutters, tool bits, single-point turning tools, indexable tooling, and thread tap and dies. Topics also include tool selection, machinability of different materials, calculation of speeds and feeds, and spindle horsepower requirements. Elementary heat treatment of metals and case hardening are covered as to how they effect tool selection. Work holding topics include the operation, selection and proper use of chucks, vises, clamps, and custom fixturing. Students will also perform simple operations such as basic grinding, face, turn, bore, knurl, chamfer, center drill, tap, groove, cut tapers, adjust feeds and speeds, mill flat, square surfaces, and make slots. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining

## ENGT 160 - Metrology

1-2-2
is a hands-on introduction to precision measurement. Topics include an overview of measuring instruments, including their advantages and limitations. Tools include micrometer and vernier tools, dial indication instruments, gauge blocks, hand tools, layout tools and layout methods. Advanced technologies are utilized including coordinate measuring machine (CMM) and vision inspection system. Measurement data is analyzed with basic statistical methods including control charts, and sampling plans. Data is analyzed to determine correction plans. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 200 - Industrial Materials (formerly MFG 110) (IAI: MTM 912)
3-0-3
is an introduction to the types and uses of industrial materials. Topics include general classifications of materials: ferrous metals, nonferrous metals, composites and plastics. Physical, chemical, electrical properties of materials and testing criteria will be covered. Emphasis will be placed on the manufacture, properties, benefits, limitations, and applications of these materials in contemporary industry. Additional topics include the heat treatment of metals to improve performance and manufacturability. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining

ENGT 210 - PLC Fundamentals (formerly ELTRN 204)
3-2-4
(Prerequisite: ENGT 111) is a practical, hands-on class, centered on the study and application of programmable logic controllers in the industrial environment. This course begins at an intermediate level, assuming prior knowledge of or experience with Programmable Logic Controllers and progresses through advanced programming concepts. Quizzes will be given regularly and will include lab activities. Selected lab activities will be taken for grades. The course emphasizes the on-the-job knowledge and skills required to troubleshoot and program PLC based control systems. Safe work habits are emphasized throughout the course. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 211 - PLC Applications
2-2-3
(Prerequisite: ENGT 210) is an advanced course, centered on the study and application of programmable logic controllers in the industrial environment. This course assumes prior experience with or knowledge of Programmable Logic Control systems. Topics include analog I/O, block transfers, remote I/O, remote chassis configuration, DH + and RIO communications, PLC networking, RSLinks driver configuration, indexed addressing, indirect addressing, message instructions and processor status file concepts. The course includes a study and application of SCADA/HMI software. Quizzes will be given regularly and will include lab activities. Selected lab activities will be taken for grades. The course emphasizes the on-the-job knowledge and skills required to troubleshoot and program PLC based control systems. Safe work habits are emphasized throughout the course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 212 - Motor Control Systems (formerly ELTRN 151)
3-3-4
(Prerequisite: ENGT 111) introduces the student to the methods used to maintain, troubleshoot, install, and repair industrial electrical systems. Topics include wiring and piping methods, the effective use of test equipment, various approaches to troubleshooting electrical systems, a review of electric motor theory, and expanded coverage of three-phase power and distribution systems. Preventive maintenance of electrical systems is discussed. Application portions of the National Electrical Code are included. Safe work habits are emphasized throughout the course. There will be two lecture hours and four laboratory hours per week. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 213 - Robotic Fundamentals (formerly ROBOT 101)
2-2-3
(Prerequisite: ENGT 104 or ENGT 210) is a hands-on introduction to industrial robot systems including hardware, software, and system integration. Topics include operation, programming, troubleshooting, proper application, system integration, profitability analysis, and safety issues. The course covers an overview of current robotics industry, terminology, mechanical components, power sources, end effectors, robot controllers, and system sensors. A variety of robotic systems are studied, including servo and non-servo systems. Programming is done both on the PC and "teach" pendants. Robots will be integrated with CNC machines, programmable logic controllers and electrical controls to create a flexible manufacturing system (FMS). Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 214 - Motion Control Applications (formerly ELTRN 231)
(Prerequisite: ENGT 111) introduces the student to the methods and equipment used to program, configure, troubleshoot, and repair AC and DC drive systems, closed loop servo drives, and motion control systems. Topics include the effective use of test equipment, variable speed drive applications and configuration, various approaches to troubleshooting drive systems, servo systems, an overview of electrical motor theory, position and speed feedback devices, and closed loop control. Safe work habits are emphasized throughout the course. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## ENGT 215 - Motion Control Systems (formerly ELTRN 232)

(Prerequisite: ENGT 214) introduces the student to the methods and equipment used to maintain, troubleshoot and repair Computer Numerical Controls. Topics include the effective use of test equipment, various approaches to troubleshooting CNC's and a review of motion control theory and PLC's. Quizzes will be given regularly and will include lab activities. Selected lab activities will be taken for grades. The course emphasizes the on-the-job knowledge and skills required to troubleshoot and maintain CNC control systems. Safe work habits are emphasized throughout the course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 220 - Process Control Applications
2-2-3
(Prerequisite: ENGT 120) is a practical, hands-on class, centered on the study and application of instrumentation and process controls and systems in the industrial environment. This course assumes the student has prior knowledge of basic instrumentation and process control systems. Topics include "smart" instrumentation, valves and actuators, ratio control, cascaded control loops, PLC control, analog I/O, PH, conductivity, and an introduction to HMI/SCADA systems. Quizzes will be given regularly and will include lab activities. Selected lab activities will be taken for grades. The course emphasizes the on-the-job knowledge and skills required to troubleshoot and maintain modern process control systems. Safe work habits are emphasized throughout the course. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 230 - Power Transmission Applications (formerly MEC S 102)
2-2-3
(Prerequisite: ENGT 130 and eligibility for MATH 091 or approval of instructor) provides students with enhanced training in mechanical power transmission systems. Topics covered include plain bearings, ball bearings, roller bearings, bearing selection and maintenance, right angle gears, speed reducers, gaskets and seals, clutches and brakes, and linear drives. Students will work with handbooks, manufacturers' catalogs, and trade literature to solve power transmission problems. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 231 - Piping Fundamentals (formerly MEC S 240)
1-2-2
(Prerequisite: eligibility for MATH 091 and ENGL 101 or approval of the instructor) is designed to give students the skills to specify and assemble basic pipe, tube, and hose systems. Topics include pipe materials, pipe schedules, pipe threading, fittings, valve operation and maintenance, schematic interpretation, tube bending, and hose construction. This course also covers the operation and performance of steam distribution systems. Skills are acquired using hands-on laboratory exercises. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 232 - Rigging \& Cranes (formerly MEC S 230)
1-2-2
(Prerequisite: eligibility for MATH 091 and ENGL 101 or approval of the instructor) demonstrates how to select and configure cranes, hoists, and slings for safe load movement. Course topics include load weight estimating and balancing, hook and eyebolt installation, hoist selection, sling design, and crane identification. Skills are acquired through classroom lectures and hands-on laboratory exercises. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: eligibility for MATH 091 and ENGL 101 or approval of the instructor) investigates the function of lubrication in mechanical systems. It also provides students with the skills to operate series/progressive and piston distributor central lubrication systems that are furnished with Lubriquip Maxi-Monitor controllers. Troubleshooting principles are covered in detail and primarily applied to lubrication systems; however, troubleshooting of other electro-mechanical systems is also discussed. Analysis of oil samples will be undertaken to determine viscosity, metallic wear rates, level of degradation, and level of foreign substance contamination. Complex components, such as divider valves, will be disassembled to give students a clear understanding of their operation. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 234 - Pump Applications (formerly MEC S 210)
1-2-2
(Prerequisite: eligibility for MATH 091 and ENGL 101 or approval of the instructor) covers the operation of dynamic and positive displacement pumps. Discussion of positive displacement pumps will focus on those types not covered in the industrial fluid power courses. Pump theory will be discussed in detail to provide students with skills to troubleshoot and evaluate pump systems. Course topics include pump classification, head calculations, specific speed, pump curves, fluid viscosity, net positive suction head, cavitation, pump corrosion, seals, packings, series pump systems, and parallel pump systems. Students will use hands-on exercises to investigate centrifugal pumps, diaphragm pumps, and peristaltic pumps. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 235 - Industrial Machinery Repair (formerly MEC S 201)
1-2-2
(Prerequisite: ENGT 230 or approval of instructor) allows students to solve mechanical problems by combining skills obtained from other mechanical courses; therefore, students are encouraged to enroll for this course during their second year of study. Machine tools are the center for most discussions in this class. Topics include leveling, anchoring, axis alignment, gib adjustment, chip conveyors, and ball screws. Planned maintenance of equipment is emphasized, and initial lectures cover preventive and predictive maintenance practices. Students will perform predictive maintenance techniques such as oil analysis, vibration analysis, and thermography. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 240 - Hydraulic Applications (formerly MEC S 110) 2-2-3
(Prerequisite: ENGT 103 and eligibility for MATH 091) applies those concepts learned in ENGT 103, Fluid Power Fundamentals. This course focuses entirely on industrial hydraulics. Students will design and test hydraulic circuits using computer simulation. Once satisfactory results are obtained from computer modeling, students will build the circuits using industry-grade components. Students will learn how to use the core system and hydraulics module of Automation Studio, a design, animation, and simulation software tool created for the automation industry. The majority of class time will be used for laboratory and project work. Students must have basic computer skills and be able to manipulate the Windows operating system. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: ENGT 103 and eligibility for MATH 091) provides comprehensive instruction in the area of industrial pneumatics. Pneumatic concepts not covered in ENGT 103, Fluid Power Fundamentals, will be discussed. The role of pneumatics in industrial automation will be emphasized. Topics covered include air-logic circuits, vacuum systems, air bearings, pneumatic actuators, pneumatic valves, schematics, compressor sizing and maintenance, air drying, air filtration, and electronic sensors. Students will design and validate electro-pneumatic circuits using computer simulation. Students must have basic computer skills and be able to manipulate the Windows operating system. Lecture and laboratory are given equal emphasis in this course. Industry-grade pneumatic components are used for all laboratory work. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 242 - Fluid Power Systems (formerly MEC S 250)
2-2-3
(Prerequisite: ENGT 103 and eligibility for MATH 091 or approval of instructor) provides advanced training in the area of industrial hydraulics. Instruction will focus on component performance, circuit design, and troubleshooting. Students will become proficient in the sizing, installation, and maintenance of pumps, valves, motors, cylinders, and accumulators. Students will also refine troubleshooting skills using an electro-hydraulic system. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 250 - CNC Turning (formerly MACH 201) (IAI: MTM 923)
2-2-3
(Prerequisite: ENGT 104, ENGT 150, ENGT 151) covers the programming, setup, and operation of a CNC turning machine to create a variety of parts. Topics include an advanced use of the various functions of the turning machine's controller and advanced skills and knowledge of tooling and machine setups. CNC Turning programming techniques and machine setup will include roughing, finishing, profiling, facing, threading, and boring. Job setup sheets will be created utilizing the part print. Machine capabilities will be utilized in both a production and job-shop environment. The students will CNC machine a major metal working project requiring the use of all the equipment in the machine shop. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining
ENGT 251 - CNC Milling (formerly MACH 202) (IAI: MTM 923) 2-2-3
(Prerequisite: ENGT 104, ENGT 150, ENGT 151) is an advanced course covering the programming, setup, and operation of a CNC milling machine to create a variety of parts. Topics include an advanced use of the various functions of the machine's controller, and advanced skills and knowledge of tooling and machine setups. CNC programming techniques and machine setup will include roughing, finishing, profiling, pocketing, and drilling and tapping. Job setup sheets will be created utilizing the part print. Machine capabilities will be utilized in both a production and job-shop environment. The students will CNC machine a major metal working project requiring the use of all the equipment in the machine shop. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining
ENGT 252 - CAM Applications (formerly CIM 101) (IAI: MTM 933)
2-2-3
(Prerequisite: DRAFT 236 or DRAFT 215 and ENGT 104 or consent of full-time Engineering Technology instructor) is a hands-on course that utilizes commercial CAM software to create CNC machine code directly from a CAD model database. Various two-dimensional and threedimensional surfaces are modeled and edited to generate CNC code. CAD models will be edited for manufacturability. Job setup files will be customized to represent the specific CNC machine to be utilized. Post processing and code editing techniques are utilized to customize the generated code for specific machines. Tool path modeling and simulation methods will be utilized to optimize machining performance. Codes will be downloaded for machining. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining

ENGT 260 - Quality Fundamentals (formerly PROD C 130) (IAI:MTM 914) 2-2-3
(Prerequisite: ENGT 160 or approval of instructor) is an introduction to industrial quality control systems and the development of the concept of total quality control engineering, process improvement, and quality information systems. An analysis of the step-by-step process for quality assurance and improvement is studied. Topics include Total Quality Management (TQM), Total Quality Control (TQC), Statistical Process Control (SPC), Continuous Improvement Processes (CIP), Six Sigma, Organizations Development, Supplier Quality, benchmarking, and the economic impact of quality costs to provide for a complete view of manufacturing today. The course includes quality systems selection, project implementation including sampling plans, data gathering, data analysis, problem solving, interpretation, X-R charts, and attribute charts. Emphasis is placed on how the quality process is utilized to determine the process refinements necessary to improve quality, process capability, improve productivity, and determine continuing improvement strategies. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining
ENGT 290 - Work Experience Practicum \& Seminar (formerly ELTRN 290) 1-10-3
(Prerequisite: approval of instructor) provides students the opportunity to apply their technical training in a workplace setting. The practical nature of this course will enhance the knowledge and skill base of the student. Students must work 10 hours per week once appropriate employment is secured and are expected to participate in solving real-life technical problems under the supervision of an experienced technician(s). A list of suggested work-based learning sites, with contact names and phone numbers, will be given to the student by the instructor; however, it will ultimately be up to the student to find applicable employment. The instructor will counsel the student during the search for a work-based learning site. The student and the instructor will communicate at least once a week to review progress. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ENGT 295 - Workplace Simulation \& Project
1-10-3
(Prerequisite: student should be in last semester of study) is to provides for supervised independent projects in Engineering Technology and is only for students in their last semester. The student will keep a log of progress, prepare written reports, and present an oral report at the end of the semester. The student will apply classroom knowledge to a workplace situation in the form of a hands-on technical project. The project will provide advanced students with the opportunity to integrate and practice previous coursework in a simulated work environment under the supervision of an instructor. The work project will be developed cooperatively with the instructor and each student to provide a variety of technical experiences directly related to the student's career goals. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## ENGT 299 - Systems Integration 1-4-3

(Prerequisite: This is the capstone course for the Engineering Technology degree program. This course will be offered to fourth-semester students after successful completion of all preceding courses within each student's respective discipline.) is designed to provide the student with a realistic cross-disciplinary work experience. The students are given a complete specification for a functional system. The students are then expected to design, build, wire, pipe, program, test, and document the system. A variety of system packages are available. The system chosen for each class will be determined by the enrollment and make-up of each class. Students are expected to collaborate with students from other disciplines to complete the project. Safe work habits are emphasized throughout the course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## English

ENGL 088 - Reading and Study Skills 1
is designed to help the students gain greater understanding of written material by providing
students with an introduction to fundamental reading comprehension necessary for success in
college and life. The focus is on comprehending main ideas and supporting details. Vocabulary
acquisition in context and study skills as well as reading rate improvement will be introduced. This
course is supplemented with required lab work. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to other studies
Area of Concentration - Preparatory to other studies
ENGL 090 - Reading and Study Skills 2
(Prerequisite: "C" or better in ENGL 088) is designed to develop college-level reading
comprehension, vocabulary and study skills. The focus is on comprehending main ideas,
supporting details, organizational patterns and vocabulary in context, as well as increasing reading
rate. Critical reading/thinking skills are introduced. This course is supplemented with required
lab work. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to other studies
Area of Concentration - Preparatory to other studies
is designed for non-native speakers of English to improve their communication skills in phonics, spelling, vocabulary, grammar, punctuation, and effective writing. Intensive practice in productive and receptive oral communication and a review of phonetics, intonation, stress, and rhythm of spoken American English will be included. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificate
Group Requirement- Preparatory to other studies
Area of Concentration - Preparation to other studies
ENGL 095 - Developmental Writing 1
3-0-3
is designed for those students who desire or need additional preparation in English composition prior to taking ENGL 097. The course reviews those elements of mechanics and grammar necessary in all writing and provides intensive practice in construction of sentences and paragraphs. Much of the writing is done in a supervised laboratory setting. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to other studies
Area of Concentration - Preparatory to other studies
ENGL 097 - Developmental Writing 2
3-0-3
(Prerequisite: "C" or better in ENGL 095) prepares students for classes in which college-level writing is required. The course reviews mechanics and grammar basic to all writing and requires intensive practice in construction of sentences, paragraphs, and short themes. Much of the writing is done in a supervised laboratory setting. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to other studies
Area of Concentration - Preparatory to other studies
ENGL 101 - Composition 1 (IAI: C1 900)
3-0-3
(Prerequisite: one of the following: 1) "C" or better in English 090 and/or 097; 2) score of $40^{\text {th }}$ percentile or above on ACT (English and Reading) or SAT (Verbal); 3) satisfactory scores on Richland's English and Reading Comprehension placement tests; or 4) evidence of equivalent competencies) is a basic course in college writing. Students write and revise essays using a variety of rhetorical methods. Through extensive writing and careful reading, students cultivate their ability to think critically and improve their ability to compose acceptable and effective academic papers. Special attention will be paid to persuasive writing. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications
Area of Concentration - Not Applicable
(Prerequisite: ENGL 101 with "C" or better) is the conclusion of the first-year, college-level writing program. The course continues the study and practice of composition begun in English 101 with a major focus on source-based arguments. Students learn to recognize various levels of formality and to develop a style of writing appropriate for a formal research paper. All elements of research are taught: choosing a topic, focusing on a thesis, locating and evaluating varied sources, organizing materials, writing and documenting the text, and revising. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications
Area of Concentration - Not Applicable

## ENGL 110 - Communicating in the Workplace

3-0-3
(Prerequisite: eligibility for ENGL 101) provides instruction and practice in the preparation of reports appropriate for business and industry. Various rhetorical strategies for identifying and reaching particular audiences are presented. Students learn all aspects of preparing reports: choosing a topic, identifying a primary audience, completing various kinds of research, which may include phone or personal interviews, surveys, letters, and questionnaires, organizing materials, writing and documenting the text, revising, designing graphics appropriate to the text, and as needed, creating glossaries and appendices to the text. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - Production Control, Supervision of Personnel, Welding
ENGL 114 - Comprehensive Speed Reading
is designed to improve the student's reading rate while maintaining a high level of comprehension. The course is designed for students who have been able to function effectively with their present reading rate and level of comprehension but who now desire to learn to read faster. This course may not be taken concurrently with ENGL 090. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - Not Applicable
ENGL 115 - Introduction to Literature (IAI: H3 900)
3-0-3
(Prerequisite: eligibility for ENGL 101) introduces students to the careful reading, discussion, and written analysis of literature. Students read and discuss poetry, fiction, and drama. The course also includes practice in the skills necessary to write about literature. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
ENGL 124 - Introduction to Fiction (IAI: H3 901, EGL 917)
3-0-3
(Prerequisite: eligibility for ENGL 101) introduces students to the careful reading, discussion, and written analysis of short stories and novels. Students learn the use of various critical methods in examining the elements, aims, and effects of fiction. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
ENGL 126 - Introduction to Poetry (IAI: H3 903, EGL 915) 3-0-3
(Prerequisite: eligibility for ENGL 101) introduces students to the reading, discussion, and written analysis and understanding of poetry through the study of techniques, themes, and some major poets of the English and American tradition. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
(Prerequisite: eligibility for ENGL 101) introduces students to the reading, discussion, and written analysis of plays. Students read representative plays of the Western tradition from those of early Greece to recent American productions, studying dramatic conventions, techniques, and themes. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
ENGL 140 - Introduction to Film Art (IAI: F2 908)
2-2-3
(Prerequisite: eligibility for ENGL 101) examines the aesthetic and cultural qualities of film as a contemporary art form. By viewing and discussing a variety of films, students will become familiar with the unique properties of cinematic art along with the qualities it shares with other art forms. In addition, the place of film in American culture and society is explored. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Not Applicable
ENGL 150 - Topics on Literature
3-0-3
(Prerequisite: eligibility for ENGL 101) examines a selected topic or movement through careful reading, discussion, and written analysis of representative works of literature. The course content will vary each time it is offered. This course may be repeated once with a different topic. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - English
ENGL 160 - Literature and Gender (IAI: H3 911D)
3-0-3
(Prerequisite: eligibility for ENGL 101) introduces students to literary works written by major women writers or about women through reading, discussion, and written analysis. Students are also exposed to historic, educational, and social trends that relate to women and the impact of women on these same trends. Emphasis may be placed on specific genres or groups of writers, such as women of color. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirements - Humanities
Area of Concentration - English
ENGL 201 —American Literature to 1900 (IAI: H3 914, EGL 911)
3-0-3
(Prerequisite: ENGL 101, 124, 126, 128, 140, or 150) is a historical survey of American literature from its beginning to 1900 . Some of the authors read are Poe, Emerson, Thoreau, Hawthorne, Melville, Twain, Whitman, and Dickinson. Particularly examined are the cultural and political milieus of the periods in which this literature was created. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
ENGL 202 - American Literature in the $\mathbf{2 0}^{\text {th }}$ Century (IAI: H3 915, EGL 912) 3-0-3
(Prerequisite: ENGL 101, 124, 126, 128, 140, or 150) is a historical survey of American literature from 1900 to the present. Some of the authors read are Frost, Hemingway, Faulkner, Cummings, Eliot, Stevens, Baldwin, Bellow, Plath, and Walker. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English

ENGL 220 - Introduction to Creative Writing
3-0-3
(Prerequisite: ENGL 101 or equivalent competencies) offers instruction and practice in writing fiction and poetry. Students learn the main critical and structural approaches to these genres. Students produce a set amount of writing in each genre, and more in a chosen genre, and discuss student work in class. The work must be creative and also mechanically acceptable. Students learn about acceptable manuscript practices and market opportunities. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - English
ENGL 222 - Advanced Creative Writing 3-0-3
(Prerequisite: ENGL 220 or equivalent competencies) offers students the opportunity to develop advanced skills in one of the genres presented in ENGL 220. Each student will be expected to produce a significant body of writing such as a collection of poems, a full-length play, a major part of a novel, or a collection of short stories. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - English
ENGL 231 - Masterpieces of Western/World Literature 1 (IAI: H3 906)
3-0-3
(Prerequisite: ENGL 101, 124, 126, 128, 140, or 150) is a selective survey of European literature in translation from its beginnings to the Renaissance. Stressed are the permanence and the current relevance of this literature. The course deals with such works and authors as the Bible, Homer, Virgil, Dante, Cervantes, and Rabelais. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
ENGL 232 - Masterpieces of Western/World Literature 2 (IAI: H3 907)
3-0-3
(Prerequisite: ENGL 101, 124, 126, 128, 140, or 150) is a selective survey of European literature in translation from the Renaissance to the present. Stressed are parallels and relationships between this literature and that of the English-speaking world. The course includes writings by Voltaire, Goethe, Dostoevsky, Tolstoy, Ibsen, Kafka, and Sartre. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
ENGL 240 - Film and Literature
2-2-3
(Prerequisite: ENGL 101, 124, 126, 128, 140, or 150) examines the formal, thematic, and historical relationships between literary and cinematic forms. Through careful reading/viewing, discussion, and written analysis of novels, short stories, plays, and their cinematic adaptations, students will come to a greater understanding of the characteristics of each medium. Offered as needed.

Applicable toward graduation where program instruction permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - English
ENGL 241 - Film History (IAI: F2 909)
2-2-3
(Prerequisite: ENGL 101, 124, 126, 128, 140, or 150) is an international survey of the historical development of film, emphasizing a study of films and innovation in film production that have significant influence on film as an art form. It will include study of films by such directors as Eisenstein, Chaplin, Lang, Renoir, Welles, Ford, Hitchcock, de Sica, Fellini, Bergman, Kurosawa and some contemporary directors. Offered as needed.

Applicable toward graduation where program instruction permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts (AAS, ALS only)
Area of Concentration - English
(Prerequisite: ENGL 101, 124, 126, 128, 140, or 150) is a selective historical survey of English literature from its beginnings to 1800 . Some of the authors read are Chaucer, Spenser, Shakespeare, Milton, Dryden, Swift, Pope, and Johnson. Emphasis is on the interpretation of each work, the cultural context in which it was created, and the present relevance of the work. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
ENGL 252 - English Literature: 19th \& 20th Centuries (IAI: H3 913, EGL 914) 3-0-3
(Prerequisite: ENGL 101, 124, 126, 128, 140 or 150) is a selective survey of English literature from the beginning of the Romantic era, through the Victorian period, and into the twentieth century. Some of the authors read are Wordsworth, Keats, Tennyson, Browning, Conrad, Yeats, Lawrence, Joyce, Auden, Hughes, and Larkin. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - English
ENGL 260 - Science Fiction 3-0-3
(Prerequisite: completion of ENGL 101) will introduce major writers and works of science fiction, including poetry, short stories, novels, and films. Students will examine the genre through its literary history and contexts, its major themes, devices, writers, and adaptation into films. Offered as needed.

Applicable toward graduation where program instruction permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - English
ENGL 261 - Fantasy \& Mythology (IAI: H9 901)
3-0-3
(Prerequisite: eligibility for ENGL 101) will study the nature of mythology through the study of folklore and legendary narratives, themes, archetypal figures/situations, symbolism, and figurative language. Offered as needed.

Applicable toward graduation where program instruction permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - English
ENGL 270 - Literature and the Bible (IAI: H9 900)
3-0-3
(Prerequisite: eligibility for ENGL 101) introduces students to the Bible as a literary and historical document and to the use of the Bible by writers of English and American literature. Offered as needed.

Applicable toward graduation where program instruction permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - English

## Fire Science

FIRE 110 - Introduction to Fire Science (Module A) ..... 4-0-4is a basic introduction to the history and philosophy of fire protection and includes fire behavior,self-contained breathing apparatus, ladders operation, fire hose and appliances, personal safety,and portable extinguishers. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 111 - Techniques of Firefighting 1 (Module B)
4-0-4
is designed to teach and to develop the knowledge and manipulative skills needed by the firefighter. This course includes water supply operations, fire streams, ventilation techniques, rescue operations, emergency medical care, forcible entry techniques, overall operations, and building construction. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## FIRE 112 - Techniques of Firefighting 2 (Module C)

4-0-4
is designed to expand the knowledge to a higher skill level. This course includes communications, sprinkler systems, salvage operations, fire prevention activities, rope operations, and hazardous materials awareness. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 113 - Techniques of Firefighting 3 (Module C Extension)
3-0-3
is designed to teach, develop, and train the student in the specialized areas of Firefighting 2. This course includes hazardous materials, awareness, terrorism training, firefighter safety and survival, and live firefighting operations. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 120 - Fire Prevention Principles 1
3-0-3
is a course required of eligible candidates pursuing Fire Officer I certification. This course is designed to meet the needs of individuals who are expanding their knowledge about fire department operations within the fire service. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 130 - Fire Service Laws and Regulations 3-0-3
enables the student to acquire a basic knowledge of the laws that directly or indirectly affect the fire service by providing a basic knowledge of methodology through which to locate, read, and comprehend the various statutes, regulations, and cases that are the framework of the law. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 140 - Fire Service Instructor-Basic
3-0-3
meets the guidelines of the Office of the State Fire Marshal to qualify fire service personnel to conduct training and educational courses for the fire service. This course is designed to give students the knowledge and ability to teach from prepared materials that are predominantly skillsoriented. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## FIRE 170 - Rescue/Roadway Extrication <br> 2-2-3

is designed to develop student skills in the use of extrication techniques needed to perform rescue, extrication, and hazardous control functions. This course qualifies students for state certification as a Roadway Extrication Specialist. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 200 - Tactics and Strategy 3-0-3
is an introduction to the basic principles and methods associated with fire ground operations as required of the company officer. The course emphasizes size-up, fire ground operations, pre-fire planning, and engine company and truck company operations. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 210 - Tactics and Strategy II
3-0-3
is designed for the fire officer who is responsible for commanding a fire or emergency operation involving multiple companies. Areas covered are strategic concepts in firefighting, responsibilities of command officers, multi-company operations, high rise operations, disasters, and critical incident stress. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 220 - Fire Instructor II
3-0-3
emphasizes teaching formalized lessons from materials prepared by the instructor including relating information from one lesson or class to the next. This course qualifies the student for certification as Fire Instructor 2. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 230 - Fire Service Hydraulics
4-0-4
is designed for those beginning the operation of fire pumps and those who wish to expand their knowledge in pump operations. Practical evolution of pump operations will be performed. This course qualifies the student for certification as a fire Apparatus Engineer. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 250 - Hazardous Materials
3-0-3
is designed to provide the basic skills needed to evaluate and work defensively at an incident involving the release of hazardous materials. The student will understand the relevance of standard operating guidelines and how they play a role in hazardous materials operations. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 260 - Fire Investigation
3-0-3
covers techniques and procedures for the investigation of fires. This course includes determining the cause and origin of fire, fire behavior, detection of arson, investigation techniques, and the legal aspects of arson investigation. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
is designed to acquaint the student with the role of the company officer and provides an introduction to basic management theories, practices, and functions. This course is a requirement for Fire Officer I. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 280 - Management 2
is designed to acquaint the student with the principles of communications and group dynamics
is designed to acquaint the student with the principles of communications and group dynamics as they relate to the company officer. This course is a requirement for Fire Officer I. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 285 - Fire Science Management III 3-0-3
is designed to acquaint the student with the role of the company officer and provides an introduction to organizational management, social service, capital resources, public finance, and public relations. This course is a requirement for Fire Officer II. This course follows all requirements set forth by the Office of the State Fire Marshal. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
Fire 286 - Fire Service Management IV
3-0-3
is designed to acquaint the student with the role of the company officer and provides knowledge of personnel management, health \& safety, labor relations, and information management. This course is a requirement for Fire Officer II and follows all requirements set forth by the Office of the State Fire Marshal. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
FIRE 297 - Fire Science Technologies (Variable Credit)
1-0-1 to 3-0-3
(Prerequisite: Firefighting experience or previous Fire Science course recommended) offers an introduction to what is current and what is coming in fire science practice and technology. Specific topics will change to reflect the state of the art. Three credit hours may be used as directed electives in the AAS Fire Science Degree. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Food Service Management

(See Hospitality Management)

## French

FREN 101 - Beginning French 1 4-0-4is an introduction to contemporary French, including oral practice, listening and readingcomprehension, and the grammar necessary for spoken and written expression. Two assigned 25-minute laboratory periods per week are required in addition to scheduled class hours. Togetherwith FREN 102, it is designed for students with no previous study of French and also is theappropriate first college course for students who have accumulated fewer than five quality pointsfor high school French or those whose prior study of French was completed more than five yearsago regardless of earned quality points. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
FREN 102 - Beginning French $2 \quad$ 4-0-4
(Prerequisite: FREN 101 or 5 to 11 quality points for high school French completed within the past five years) is a continuation of FREN 101. Two assigned 25-minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
FREN 201 — Intermediate French $1 \quad$ 4-0-4
(Prerequisite: FREN 102 or 12 to 14 quality points for high school French completed within the past five years) includes readings in French, intensive aural-oral practice, and review of grammar and writing skills. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
FREN 202 - Intermediate French 2 (IAI: H1 900)
4-0-4
(Prerequisite: FREN 201 or 15 or more quality points for high school French completed within the past five years) is a continuation of FREN 201, with increased attention to composition and conversation. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - Foreign Language

## German

## GERM 101 - Beginning German 1

4-0-4
includes elementary grammar, pronunciation, and reading of graded texts. The aural-oral approach is utilized toward acquiring skills in speaking, understanding, and reading German. Together with GERM102, it is designed for students with no previous study of German and also is the appropriate first college course for students who have accumulated fewer than five quality points for high school German or those whose prior study of German was completed more than five years ago, regardless of earned quality points. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS,ALS only)
Area of Concentration - Foreign Language
GERM 102 - Beginning German 2
4-0-4
(Prerequisite: GERM 101 or 5 to 11 quality points for high school German completed within the past five years) is a continuation of GERM 101. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
GERM 201 - Intermediate German 1 ..... 4-0-4(Prerequisite: GERM 102 or 12 to 14 quality points for high school German completed withinthe past five years) includes reading of intermediate texts (Novellen and essays) and a review ofgrammar utilizing aural-oral practice in the classroom and laboratory. Two assigned 25 -minutelaboratory periods per week are required in addition to scheduled class hours. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
GERM 202 - Intermediate German 2 (IAI: H1 900) 4-0-4
(Prerequisite: GERM 201 or 15 or more quality points for high school German completed within the past five years) is a continuation of GERM 201, with increased attention to composition and conversation. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.
Applicable toward gradation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - Foreign Language

## Health

## HLTH 035 - Activity Program Director Course <br> is an introduction to activity programming for persons working with residents of long-term care facilities. The content meets the thirty-six (36)-hour basic orientation training required of activity directors. Topics include philosophy, coordination, communication skills, organizational structure, and evaluation techniques. Offered as needed. <br> Applicable toward graduation where program structure permits: <br> Certificate or Degree - All Basic Certificates in General Studies except <br> Personal Development <br> Group Requirement - Not Applicable <br> Area of Concentration - Not Applicable

 2-1-2HLTH 040 — Nurse Assistant Competency Skills Assessment 0-2-1
(Prerequisite: Student must have completed an approved Basic Nurse Assistant Training program and be listed on the Illinois Nurse Aide Registry.) is designed to assess the basic nursing skills of a certified nursing assistant who has not worked for a period of twenty-four (24) consecutive months as a CNA, performing nursing assistant duties for monetary compensation. This course will determine if the student is competent in the Illinois Department of Public Health (IDPH) identified skills prior to reporting to a clinical site with a trained and IDPH approved competency evaluator. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except
Personal Development
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## HLTH 100 - First Aid Training

1-0-1
will train students in lifesaving and first aid techniques. Students will be able to differentiate between emergency care and first aid treatment. Topics to be covered include life-threatening conditions - airway obstruction, shock, asthma, bleeding, diabetes, drowning, electric shock, head injuries, poisoning; non life-threatening conditions - abrasions, minor skin wounds, bites, blisters, bruises, burns, eye injuries, fractures, frostbite, heat exhaustion/stroke; nosebleeds, seizures, splinters, sprains tick bites, tooth emergencies; and written emergency plans and procedures. Offered Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
will train students for Basic Life Support (BLS) Health Care Provider CPR Certification according to Emergency Cardiac Care Guidelines established by the American Heart Association. Performance skills must be passed for barrier devices, AED Training, Adult - One Rescuer CPR, Adult - Two Rescuer CPR, Adult - FBAO Management: Conscious, Adult - FBAO Management: Unconscious, Child - FBAO Management, Conscious, Child FBAO Management, Unconscious, Infant CPR, Infant FBAO Management: Conscious, and Infant FBAO Management: Unconscious. This course may be repeated. A student may enroll in and receive credit for this course a maximum of three times to renew certification. Offered Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## HLTH 111 - Introductory Seminar on Alcoholism

prepares the alcohol health professional and interested people to deal with the problems of alcoholics. The course includes an overview of alcoholism, pharmacology, the progression of the disease process, and a review of special populations. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except
Personal Development, ALS
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Alcoholism
HLTH 115 - Introduction to Health Careers
1-0-1
is designed to train students to become familiar with and learn about the many allied health occupations and the organizational structure within the health care delivery system. Students will learn about various career descriptions, educational requirements, job skills, job availability, and career hierarchy. Students will evaluate health careers most suited to their individual interests, abilities, and goals. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HLTH 120 - Wellness and Healthful Living
3-0-3
is designed to provide students with concepts and skills for wellness and healthful living. Students will learn about past and current health trends, as well as new health discoveries that will have an effect on health care in the future. The course covers the topics of physical health, emotional health, intellectual health, nutrition, social health, relationships, communicable diseases, substance abuse, emergency care, death and dying, community health programs, and environmental issues relating to optimal health. Offered Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Teacher Education
HLTH 130 - Phlebotomy
4-3-5
(Prerequisite: high school diploma or GED certificate, eligibility for MATH 091, eligibility for ENGL 101, and approval of the Assistant to the Dean of Health Professions) studies (a) phlebotomy techniques including venipuncture, dermal puncture, special procedures techniques; (b) medicolegal, infection control, and safety aspects of the professions; and (c) anatomy, physiology, and terminology of the body systems. Clinical experiences provide the opportunity to use phlebotomy techniques including communication and additional skills needed by a phlebotomist in the clinical setting. Offered Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HLTH 140 - Medical Terminology3-0-3focuses on vocabulary used in medicine, nursing, and other allied health occupations. Studentswill learn structures, functions, and terms related to diagnosis, pathology, and treatments for eachbody system. This course is recommended for students entering any Health Professions program.Student cannot receive credit for both HLTH 140 and OT 140. Offered in Fall, Spring, andSummer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## HLTH 141 - Nurse Assistant Training

5-4-7
(Prerequisite: high school diploma or GED certificate, at least 17 years of age, pass the Health pretest in English and Math, and approval of the Assistant to the Dean of Health Professions) is designed to give the student who desires employment as a nurse assistant or orderly training in the basic nursing skills. The course provides 142 hours of approved Illinois Department of Public Health course instruction in classroom work and clinical experience. Classroom work will consist of 92 hours, and clinical assignment will consist of 50 hours. Upon successful completion of both theory and clinical sections, the student receives a certificate of completion. To become fully certified and placed on the Nurse Aide Registry in Illinois, students must also take and pass the State's approved Competency Evaluation for an additional fee. Offered Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except
Personal Development, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Development
HLTH 143 - Alzheimer's Disease and Related Dementia Training 1-0-1
is designed to prepare the student to care for the Alzheimer's Disease or related dementias clients. It will cover normal aging, Alzheimer's Disease and related dementias, communication techniques, activity programming, nutrition, family and caregiver roles, community resources, and support resources for the family/caregiver. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except
Personal Development, ALS
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Development
HLTH 150 — Pharmacology $\quad$ 4-0-4
(Prerequisite: acceptance into Pharmacy Technician Program, eligibility for MATH 091 and ENGL 101, and completion of [with a grade of "C" or above] or co-enrollment in HLTH 152 and CIS 110) is designed to present an introduction to pharmacology concepts and drug classifications. Each drug classification is presented as it applies to anatomy, physiology, and the disease-state concepts. Descriptions of leading drug and their administration and specific uses are included. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Pharmacy Technician
HLTH 152 - Pharmacy Calculation $\quad \mathbf{2 - 0 - 2}$
(Prerequisite: acceptance into the Pharmacy Technician Program, eligibility for MATH 091 and ENGL 101, and completion of [with a grade of "C" or above] or co-enrollment in HLTH 150 and CIS 110) is designed for students in the Pharmacy Technician program to learn the essential mathematic concepts and skills used on the job in a pharmacy. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Pharmacy Technician
HLTH 155 - The Pharmacy Technician ..... 6-0-6(Prerequisite: completion of HLTH 150, HLTH 152, and CIS 110, with a grade of "C" or above)is a review of health care and pharmacy, past and present. Course will include requirements fortechnician certification, drug regulation and controls, and pharmaceutical terminology. Thiscourse will contain training on filling a prescription, routes and formulations, parenterals,compounding, basic biopharmaceutics, factors affecting drug activity, references used inventorymanagement, financial issues, and various areas of pharmaceutical care including communitypharmacy, institutional pharmacy, and other environments. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Pharmacy Technician
HLTH 156 - Pharmacy Technician Work Experience
1-3-2
(Prerequisite: HLTH 150, CIS 110, and HLTH 152 with a grade of " $C$ " or above, completion of or co-enrollment in HLTH 155 and HLTH 157) provides students the opportunity to apply the knowledge and skills learned in Pharmacology and Pharmacy Technician course to the workplace. The students are assigned to complete a rotation of work experiences in several working environments available to a Pharmacy Technician. This course assists the student with transition from school to work. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Pharmacy Technician
HLTH 157 — Pharmacy Technician Certification Review 1-0-1
(Prerequisite: completion of [with a grade of "C" or above] or co-enrollment in HLTH 155 and HLTH 150) is designed to prepare the student who has completed the pharmacy technician course to take the national certification examination. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Pharmacy Technician
HLTH 197 — Special Topics in Health Care (Variable Credit) 1-0-1 to 3-0-3
enables the student to explore a topic of special interest in healthcare. The course provides an opportunity to explore a new area of interest. A student may enroll in and receive credit up to four times for this course to have an opportunity to emphasize a different area during each enrollment. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HLTH 200 - Advanced First Aid Training
2-2-3
(Prerequisite: HLTH 100) trains students in comprehensive first aid techniques and Basic Life Support. Topics include basic anatomy and physiology of body systems, victim assessment, emergency care for life-threatening and non life-threatening conditions, activation of the Emergency Medical Services (EMS) system, and general principles of lifting and moving a victim. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HLTH 220 - Nutrition \& Diet Therapy
3-0-3
(Prerequisite: completion of ENGL 090 with a grade of "C" or above, or tested out of ENGL 090) is designed for students in health care professions and food service programs. It includes fundamentals of nutrition, maintenance of health through good nutrition, diet therapy, and food preparation. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Group Requirement - Not Applicable
Certificate or Degree - All Certificates and All Degrees
Area of Concentration - Dietetic Assistant/Technician, Allied Health and Nursing
HLTH 250 - Rehabilitation Nursing Course5-0-5
(Prerequisite: RN or LPN with current Illinois license) is designed to enable the nurse to define the concept and philosophy of rehabilitation nursing, identify the role and responsibilities of the nurse in the rehabilitation process, identify aspects of the aging process, and utilize basic principles and practices of restorative nursing within the framework of the nursing process. This course is accepted by the Illinois Department of Public Health, Office of Health Care Regulation, as meeting the criteria for licensure standards of skilled and intermediate Nursing Care Facilities. Certificate of completion will be awarded to students upon successful completion. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except
Personal Development, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HLTH 297 - Advanced Topics in Health Care (Variable Credit) 1-0-1 to 3-0-3
(Prerequisite: permission of the instructor) enables the student who is or has been enrolled in a health professions course or who is a graduate of a health professions program an opportunity to explore a topic of special interest in health care. Students will build on prior learning and apply knowledge and concepts learned in other courses as they explore new/expanded topics. A student may enroll in and receive credit for this course up to four times to have an opportunity to emphasize a different area during each enrollment. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

# Heating, Ventilation, Air Conditioning, \& Refrigeration 

HVAC 100 - Refrigeration Fundamentals (Formerly HVAC 100 \& HVAC 101) 3-0-3
focuses on safety hazards, principles of refrigeration physics, temperature and pressure measurement, heat content, composition of refrigerants, refrigeration compressors, metering devices, refrigerant recovery techniques, and acquisition of certification in the E.P.A. Section 608 refrigerant management laws. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 102 - Refrigeration Applications
2-2-3
(Prerequisite: HVAC 100 or concurrent enrollment) concentrates on applying the fundamentals learned in Refrigeration Fundamentals. Emphasis is on refrigerant recovery, pressure testing, evacuation and proper system charging. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## HVAC 106 - Tools \& Piping (formerly HVAC 200)

concentrates on the identification, utilization, and appropriate application of common hand and power tools used in the HVACR industry. Emphasis is on the proper piping design and the application of tools when working with tubing, pipe, fittings, bends, and multiple assembly techniques. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 130 - Electricity Fundamentals ..... 2-2-3analyzes the application of electron theory; DC/AC fundamentals; electrical quantities; OHM'sLaw; magnetic principles; solenoids, meter usage; power generation and distribution; wiringsystems and materials; transformers and relays; schematic diagram development; and thedevelopment of a diagnostic plan for HVACR electrical equipment. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 132 - Control Applications (formerly HVAC104) ..... 2-2-3
covers control construction, operation, and applications; and the development, wiring, andtroubleshooting of control schematics for basic HVACR systems. Also covers pneumatic motors\& controls. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 140 — Troubleshooting Air Conditioning Systems (formerly HVAC 105) 2-2-3(Prerequisite: HVAC 132 or ENGT 111; and HVAC 102 or concurrent enrollment) promotes thedevelopment of diagnostic and repair skills by simulating both electrical and mechanical systemfaults in computer-generated HVAC systems. Emphasis is on professionalism, accuracy, propertool selection, and timeliness of the repair. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 202 - Residential \& Self-contained Refrigeration ..... 2-2-3
(Prerequisite: HVAC 140 or concurrent enrollment) introduces basic refrigeration components;piping systems sizing and selection; installation, servicing, and troubleshooting of residentialrefrigeration systems; and controls for reach-in coolers/freezers, ice machines, and dehumidifiers.Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 204 - Commercial Refrigeration
2-2-3
(Prerequisite: HVAC 202 or concurrent enrollment) emphasizes medium and low temperature refrigeration systems and equipment used in commercial applications (e.g., walk-in coolers/ freezers; supermarket rack refrigeration; ultra-low temp freezing systems; and ice making systems). Emphasis is on the diagnosis and repair of these systems. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 206 - Troubleshooting Refrigeration Systems (formerly HVAC 215) 2-2-3
(Prerequisite: HVAC 102 and HVAC 132) promotes the development of diagnostic and repair skills by simulating both electrical and mechanical system faults in computer generated refrigeration systems. Emphasis is on professionalism, accuracy, proper tool selection, and timeliness of the repair. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## HVAC 230 - Motors \& Controls

2-2-3
(Prerequisite: HVAC 132) allows students to analyze, set up, and troubleshoot single and polyphase motor starting systems, damper actuators, and economizers. Emphasis is on the service and repair of residential and light commercial HVACR systems including open and hermetic motors, rooftops, and split systems. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 240 - Residential Air Conditioning (formerly HVAC 210)
2-2-3
(Prerequisite: HVAC 140 or concurrent enrollment) concentrates on the use of psychrometrics, manufacturer specifications, and test instruments to determine proper installation and system operation of residential air conditioning units, split systems, and self-contained units. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 242 - Residential Heating Systems (formerly HVAC 220) 2-2-3
(Prerequisite: HVAC 132 or ENGT 111) explores procedures and principles used in the service of residential heating systems, emphasizing the heating properties, combustion, burners, controls, ignition systems, safety and operating controls, installation, venting combustion, air \& troubleshooting for both gas-fired and electric furnaces. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 250 - Commercial Air Conditioning
2-2-3
(Prerequisite: HVAC 132 or ENGT 111 and HVAC 140 or concurrent enrollment) focuses on the various types of commercial air conditioning units including split and self-contained roof-top units. Emphasis will be on multistage cooling, three-phase applications, energy management, and indoor air quality requirements. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 252 - Commercial Heating Systems (formerly HVAC221)
2-2-3
(Prerequisite: HVAC 242 or concurrent enrollment) emphasizes the installation and service of high efficiency and commercial heating and humidifying systems, including steam and hydronic heat, heat pumps and heat recovery systems. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HVAC 290 - Work Experience \& Seminar
1-10-3
(Prerequisite: HVAC 140 and sophomore standing) provides the student with a work-based learning experience aimed at applying the knowledge and skills learned in previous HVACR courses. The suitability of the work setting is determined through consultation with the HVACR faculty and the prospective employer. A one-hour-per-week seminar is required. This seminar will be arranged at the mutual convenience of the student and HVACR faculty. Additionally, the student will have to work for a minimum of 150 hours in a semester to receive credit for the course. Payment of an hourly wage to the intern will be at the option of the employer. Interns will be required to keep a daily $\log$ of their activities and to write a report detailing their work-study experiences at the end of the semester. This is a capstone course and should be taken in the student's final semester. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: HVAC 140 and sophomore standing) provides individuals or groups of students an opportunity to work on a specific project - real or simulated - under the guidance of a HVACR faculty mentor. Students are required to present a written proposal to the HVACR faculty for consideration. The student(s) must meet to discuss specific objectives, timelines, success criteria, and other topics. This is a capstone course and should be taken in the student's final semester. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## History

HIST 101 — United States to 1877 (IAI: S2 900, HST 911) 4-0-4
(Prerequisite: eligibility for ENGL 101) covers the development of the United States from the colonial era through the Reconstruction period after the Civil War. Particular attention is given to the founding of the Colonies, Puritan thought and culture, Anglo-French rivalry, the political and economic background of the War of Independence, the formation of the American government, the Federalists, the Jeffersonians, the settlement of the West, Jacksonian democracy, "Manifest Destiny," sectional issues, the Civil War, and Reconstruction. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - History, Social Science
HIST 102 - United States since 1877 (IAI: S2 901, HST 912)
4-0-4
(Prerequisite: eligibility for ENGL 101) surveys industrialization and urbanization, the Progressive Era, the background and American entry into World Wars I and II, the Depression, the New Deal, Cold War diplomacy, and domestic issues since World War II. The course will also examine the roles of women and minority peoples in our culture. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - History, Social Science
HIST 105 - History of Illinois
3-0-3
(Prerequisite: eligibility for $E N G L$ 101) is a survey of Illinois history from the earliest times to the present. Topics covered include Indian cultures, Illinois under French and British rule, early statehood, settlement patterns, Land of Lincoln, growth of industrial and urban power, Progressivism, World Wars I and II, the New Deal, and post-World War II problems and growth. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - History, Social Science
HIST 111 - European Civilization through the Reformation (IAI: H2 901, HST 913) 4-0-4
(Prerequisite: eligibility for $E N G L$ 101) consists of a survey of European civilization from earliest times through Greece, the Roman Empire, the Middle Ages, the Renaissance, and the Reformation with particular emphasis on the development of Western thought, religion, art, culture, law, and government. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - History

## HIST 112 - European Civilization: The Modern Era (IAI: H2 902, HST 914) <br> 4-0-4

(Prerequisite: eligibility for ENGL 101) examines the impact of intellectual, artistic, technological, and political developments from the rise of absolutist monarchies in the 17th century to the present day. Particular emphasis is given to the Enlightenment, Liberalism, the growth of Nationalism, the Industrial Revolution, Imperialism, World Wars I and II, and the decline of Colonialism. Attention is also given to major artistic, musical, and literary trends. Offered in Spring and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - History
HIST 201 - The Origin and Development of Imperial China \& Japan (IAI: H2 903N) 4-0-4
(Prerequisite: eligibility for ENGL 101) surveys early Chinese and Japanese history, religion, philosophy, art, and literature. China's "golden age" and Japanese feudalism are covered, and special emphasis is placed on how present-day East Asian attitudes and beliefs were originally formulated. Meets third-world course requirements. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - History
HIST 202 - Modern East Asia (IAI: H2 903N) 4-0-4
(Prerequisite: eligibility for ENGL 101) provides a survey of China's and Japan's entry into the modern world. The last 300 years are surveyed, but particular emphasis is placed on Japan's transition from feudalism to Asia's industrial leader and China's evolution from empire to Communism. Meets third-world course requirements. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - History
HIST 270 - History of Non-Western Civilization: China (IAI: H2 903 N) 4-0-4
(Prerequisite: eligibility for ENGL 101) provides a survey of China's premodern and modern culture/society and its entry into the modern world. The last 250 years are surveyed, but particular emphasis is placed on China's cultural modernization evolution from empire through Communism. Meets third-world course requirements. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - History

## HIST 290 - Selected Topics in History

3-0-3
(Prerequisite: eligibility for ENGL 101) deals with a particular topic in History. The topic is specified in the subtitle of the course listed in the class schedule. It is specifically designed to address topics that necessitate a broader scope, a greater depth, and a fuller assimilation of the course methods and materials. The student may take this course three times for credit as long as a different topic is selected. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (ALS and AAS only)
Area of Concentration - Not Applicable

## Horticulture

HORT 100 - Horticulture Science (formerly HORT 190) (IAI: AG 905) ..... 3-2-4
provides a general background in horticulture plant growth and development. Areas include the
production, utilization, and marketing of fruits, vegetables, ornamentals, floriculture, landscap-
ing, turf, and nursery. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (ALS and AAS only)
Area of Concentration - Agriculture
HORT 110 - Turf Management (formerly HORT 101)2-2-3
emphasizes general types of turf grasses, their growth habits, and the establishment of turf.
Fertilizers, diseases, insects, weeds, and some turf equipment are included. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 111 - Turf Production (formerly HORT 104) ..... 2-2-3
(Prerequisite: HORT 110 or previous turf experience) covers certain topics related to the care andproduction of fine turf. Among the topics are irrigation systems, weed control, and the moreadvanced aspects and practices for the growth of fine turf grass. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - Turf Grass Management
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 120 - Landscape Plant Identification (formerly HORT 102) ..... 2-2-3
identifies commonly used ornamental trees, shrubs, and vines. In addition, their special growthand moisture requirements and their uses in a landscape plan are emphasized. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## HORT 121 - Landscape Design Principles (formerly HORT 103)

(Prerequisite: HORT 120) emphasizes cost, specifications, land and plant material calculations, and layout design of specific landscape areas. Skills of surveying are introduced as they are needed. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 145 - Floral Design Fundamentals (IAI: AG 912)
2-2-3
introduces students to the principles of design applied to floral arrangements, including color, forms, and lines, balance, types of floral arrangements, floral materials and accessories, and production techniques. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Agriculture
HORT 146 - Silk \& Dry Arrangements
(Prerequisite: HORT 145) applies the principles of form, style, and composition to the design of silk and dry floral arrangements. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 150 - Garden Center Management (formerly HORT 110) ..... 2-2-3
examines the management and operation of commercial nurseries and garden centers. Offered

    in Spring.
            Applicable toward graduation where program structure permits:
            Certificate or Degree - All Certificates, AAS, ALS
            Group Requirement - Not Applicable
            Area of Concentration - Not Applicable
    HORT 200 -Perennial Plant Material
emphasizes identification, selection, use, and management of perennials and ornamental grassesin the landscape. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 201 — Interior Plantscaping (formerly HORT 170) 2-2-3
emphasizes installation, maintenance, and management of interior plantscapes. Topics include plant lighting, planting, watering, acclimatizing, cultural problems, containers, installation, and maintenance contracts. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 211 - Turf Equipment (formerly HORT 105)
2-2-3
(Prerequisite: HORT 110 or previous turf experience) will cover topics related to the maintenance and operation of turf equipment. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - Turf Grass Management
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 221 - Landscape Design and Construction (formerly HORT 191)
2-2-3
emphasizes the techniques and materials used in landscape construction. Students will also learn to use standard practices in estimating the costs of landscape construction projects. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 230 - Greenhouse Operations (formerly HORT 150)
2-2-3
includes a study of greenhouse construction and operation. Special emphasis is given to temperature, light, soils, gases, nutrition, and the growth of bedding plants. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 231 - Bedding \& Plant Production 2-2-3
(Prerequisite: HORT 230) introduces students to identification and commercial production of bedding plants. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 245 -Sympathy Design Techniques 2-2-3
(Prerequisite: HORT 145) focuses on sympathy floral tributes and the proper mechanics for construction of these specialty designs. Etiquette, business management, and delivery will also be discussed. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 246 - Wedding Flowers ..... 2-2-3(Prerequisite: HORT 145) applies the principles of form, style, and composition to the design ofbridal arrangements and theme development. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 290 - Work Experience Practicum \& Seminar
1-10-3
(Prerequisite: minimum completion of 30 credit hours toward a Horticulture degree or approval from Horticulture faculty) provides students in the Horticulture program the opportunity to apply principles learned in other courses to the work situation by employment in or observation of activities necessary for the student to succeed in the workplace. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 291 - Advanced Work Experience \& Practicum
1-10-3
(Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward a Horticulture degree or approval from the Horticulture faculty) provides students in the Horticulture Program the opportunity to apply advanced principles learned in other courses to the work situation by employment in or observation of activities necessary for the student to succeed in the workplace. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
HORT 295 - Workplace Simulation \& Project
1-10-3
(Prerequisite: minimum completion of 30 credit hours toward a Horticulture degree or approval from the Horticulture faculty) designed to give students the opportunity to apply their technical skills and ability to work successfully in the workforce, to demonstrate learning and thinking skills, and to develop individual resourcefulness. The student will have an opportunity to work independently and as a team member on a specific project(s) under the guidance of a faculty mentor. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Hospitality Management

## (Required courses for this degree program are listed under Business)

HOSP 110 - Food Service Sanitation (formerly FSM110)
is a course designed for food service operators and management. The course covers techniques for protecting food from contamination in storage, preparation and service, cleaning and sanitizing, pest control, cleanability of facilities and equipment, sanitation and the customer, personnel training, and detailed procedures for self-inspection by the food service manager. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Humanities

HUMAN 100 - Introduction to the Arts (IAI: HF 900)
(Prerequisite: eligibilitiy for ENGL 101) examines types of art such as music, film, theater, painting,
sculpture, literature, and architecture as illustrating the values, capacities, and achievements of
human beings. Various approaches to viewing, discussing, and writing about the arts are stressed.
Offered in Fall, Spring, and Summer.
Applicabbe toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities/Fine Arts
Area of Concentration - Not Applicable
HUMAN 104 - Introduction to Latin American Culture
(Prerequisite: eligibilility for ENGL 101) is an interdisciplinary survey of the significant intellectual
and artistic achievements of several non-Western cultures through selected works of literature,
philosophy, visual art, music and other performing arts, as well as a comparative examination of
their values, motifs and aesthetics with those of Western cultural expression. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities/Fine Arts (AAS, ALS only)
Area of Concentration - Not Applicable
HUMAN 201 - Humanities Honors Seminar (IAI: HF 9000)
(Prerequisite: completion of or concurrent enrollment in ENGL 101, either admission to the Honors
Opportunities Program or a 3.0 GPA, and permission of the instructor) has the student practice
interpreting work of art, literature, and music. Various contexts for this interpretation will be used
each time the course is offered, such as an emphasis of the historical period, the aesthetic analysis
of the works, the cultural and philosophical background, or the relationships with the lives of the
creators. This context will be specified each term the course is offered. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities/Fine Arts
Area of Concentration - Not Applicable

## Information Technology

## CIS 101 - Computer Literacy

1-0-1
provides the student with brief overview of basic computer concepts and hands-on learning for students who are new to the use of a computer and the Internet. Topics will include basics of the following: PC navigation, PC hardware and software, logging on to a network, accessing e-mail, use of the Internet, use of a course management tool, downloading and uploading files, and how to use an online library database. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - Computer Literacy Certificate, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
introduces students to the concepts and applications of operating systems, word processing, spreadsheets, databases, the Internet, and presentation software. Topics will include exposure to software for each of the areas of study and how to evaluate software and hardware. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Not Applicable
Area of Concentration - Business
IT 105 - Information Technology Systems (IAI: CS 910)
2-2-3
provides the student with an overview of the computing field and its typical applications. The student learns key terminology and components of computer hardware, software, operating systems, systems development methods, management information systems, and using application software and the Internet. Offered in Fall, Spring, and Summer.

Applicable for graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AS, AA
Group Requirement - Not Applicable
Area of Concentration - Computer Science
IT 115 - Windows Fundamentals 2-2-3
introduces students to Microsoft Windows. Topics include pull-down menus, Windows utilities, running of multiple applications and sharing data between applications, Program Manager, File Manager, and system customization. Intensive lab experiences are involved. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 116 - Windows Client Operating Systems
2-2-3
teaches students the skills and knowledge necessary for installing, configuring, administering, and supporting Windows client operating systems. Through lectures, demonstrations, textbook exercises and classroom labs, students will learn about installation methods, troubleshooting, hardware device installation and management, storage management, disaster recovery, performance analysis, network configurations and user profiles. This course prepares Information Technology students to take the Microsoft certification exams and to become a Microsoft Certified Professional (MCP). Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## IT 120 - Spreadsheet Applications

(Prerequisite: CIS 110 or OT 116 or consent of full-time Information Technology instructor) presents the student with comprehensive spreadsheet techniques using MS Excel. Students learn to develop a professional workbook, work with formulas, charts and graphics, lists, outlines, sorting, filtering, subtotaling, 3-D references, advanced functions, conditional formatting, data validation, templates, data tables, scenario management, import and export data, audit formulas, create hyperlinks and a web page, work with large documents, and automate a worksheet with Visual Basic macros. This course is designed for those students pursuing training in office productivity software and/or MOS certificate preparation. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: CIS 110 or OT 114 or consent of full-time Information Technology instructor) presents the student with comprehensive word processing techniques using MS Word. The student will learn to create, edit, and format professional letters, newsletters and multiple-page reports, create mail merge documents, sections, columns, styles, templates, tables, outlines, table of contents, index, hyperlinks, web pages, on-screen forms, fill-in fields, Visual Basic macros, track changes, embed and link data from other programs, customize toolbars, work with long master documents, and the basics of XML. This course is designed for those students pursuing training in office productivity software and/or MOS certificate preparation. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## IT 131 - Programming Logic

2-2-3
is an introduction to the program development and design process, including computer-based concepts of problem-solving, structured Visual Basic and techniques, algorithm development and program design. Topics include program flowcharting, algorithms, input/output techniques, looping, modules, selection structures, file handling, control breaks, pseudocoding, and user documentation. Offers students an opportunity to apply skills in a laboratory environment. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 141 - Networking Fundamentals
2-4-4
provides foundational education in local networking and internetworking, as well as specific training using Cisco technology. This is the first of four preparatory courses for the Cisco Certified Network Associate (CCNA) exam. Topics include networks and layered communications, network service layers of OSI model, networking device, IP addressing, basic routing protocols, media and network design, topology, structured cabling, electrical issues in networking, IP addressing, IP address subnetting, and basic network management. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 151 - Internet Techniques (formerly CIS 287)
2-2-3
presents the student with an introduction to the Internet and its services, applications, and tools. Topics include Internet history, a survey of Internet-based facilities and applications (e.g., e-mail, web browsers, file transfer utilities, list servers, etc), and Web-based research and information resources. The World Wide Web service is emphasized, and basic Web page creation with HTML is introduced. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 153 - Web Development 2-2-3
(Prerequisite: CS 105 or CIS 110 and IT 131) introduces students to the fundamentals of website creation. Students will develop, manage, and maintain professional web sites using HTML, XHTML and Cascading Style Sheets. The complete production process including pre-production planning, layout and design considerations, testing, implementing the site, and maintenance is covered. Professional production tools such as Adobe Premier, Illustrator, and Photoshop, or an equivalent Windows-based suite are used for graphics and layout in the hands-on laboratory exercises. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Computer Science
prepares a student for the A+Certification exam. The course covers computer architecture, memory, storage, printers, local area networks, operating systems and troubleshooting techniques. Completion of IT 105 is recommended but not required. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## IT 205 - Help Desk Techniques

2-2-3
(Prerequisite: IT 105 and CIS 110) prepares the students to meet the demands of the computer user support industry. Topics covered include computer user support, customer service skills, common problems, help desk management, user needs analysis, and training computer users. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 206 - Operating Systems Support 2-2-3
(Prerequisite: IT 115 (or IT 116) or consent of full-time Information Technology instructor) covers the desktop support technical role and environment, installing and updating the operating system, configuring Windows user interface, installing drivers, troubleshooting, desktop management, network, file and folder, installation, and hardware issues. This course prepares a student for the 70-271 Microsoft Certified Desktop Support Technician (MCDST) core exam. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 207 - Software Applications Support
(Prerequisite: CIS 110 and IT 115 (or IT 116) or consent of full-time Information Technology instructor) covers how the desktop support technician uses troubleshooting guidelines and tools to support end users and computers running the Microsoft suite of productivity applications. Students will be able to troubleshoot application usability, compatibility, recoverability, customization, and security issues related to applications on client computers running Windows, Internet Explorer, Outlook, Outlook Express, and Office. This course prepares a student for the 70-272 Microsoft Certified Desktop Support Technician (MCDST) core exam. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## IT 210 - Presentation Graphic Applications

2-2-3
(Prerequisite: CIS 110 or consent of full-time Information Technology instructor) presents students with presentation graphics techniques using MS PowerPoint. Students learn how to design a professional slideshow, format text, change background color, rotate, crop, and size graphics, create design templates, incorporate graphics and sound, create column and organization charts, create diagrams, hyperlinks and buttons, create automatic presentations, change transitions, add animations, integrate data from other programs, present a slide show, and use online collaboration. This course is designed for those students pursuing training in office productivity software and/ or MOUS certificate preparation. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## 262 Course Descriptions

## IT 220 - Data Management Applications (formerly CIS 221)

(Prerequisite: CIS 110 or consent of full-time Information Technology instructor) introduces the student to database design, implementation, and management techniques for a Windows environment using Microsoft Access. Students will learn how to determine entities, attributes and relationships, create tables, define data types, build forms and reports, query the database using structured and action queries, incorporate security, develop switchboards, and automate tasks using macros. The curriculum uses case-based, problem-solving activities to prepare the student for typical business-world needs. This course is also designed for those students pursuing MOS certification preparation for Access. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## IT 221 - Database Design

2-2-3
is an introductory course on database concepts, design and implementation. This course incorporates both theoretical concepts and the practical application of those concepts through lectures, text assignments, projects and case studies. Students will learn how to analyze a business problem, model data flow, create a conceptual Entity-Relationship model of a database to solve the problem and develop the database application using modern software tools. This course will be driven by a semester-long case study project. Microsoft Access will be used as the relational database software for the practical aspect of this course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 222 - Structured Query Language
2-2-3
(Prerequisite: IT 131 or consent of full-time Information Technology instructor) introduces the student to the study of relational database systems and the practices of incorporating Structured Query Language (SQL) in the development and maintenance of those systems. This course offers the student practical experience using case-based, problem solving learning activities using Oracle PL/SQL and Microsoft SQL. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 230 - Project Management
2-2-3
(Prerequisite: CIS 110 or consent of full-time Information Technology instructor) presents the student with e-mail, project management, and collaboration techniques using MS Outlook and MS Project. Students learn how to manage e-mail, meeting invitations, and mail folders, attach files, create distribution lists, search, filter and block e-mail, assign tasks, manage contacts, schedule appointments and resources, create tasks, add durations, lead or slack time, set milestones and constraints, modify the network diagram, create and edit a resource pool and calendar, and adjust resource leveling. This course is designed for those students pursuing training in office productivity software and/or MOS certificate preparation. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## IT 241 - Network Routing Technologies (formerly IT 142)

(Prerequisite: IT 141 with a grade of "C" or better) continues to build foundational education in local networking and internetworking, as well as specific training using Cisco technology. This is the second of four preparation courses for the Cisco Certified Network Associate (CCNA) exam. Topics include the OSI model, Wide Area Networks (WAN), routing concepts, router components and implementation (including installation, configuration and troubleshooting), Cisco IOS software, TCP/IP, IP addressing, and routed and routing protocols. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: IT 105, IT 115, and IT 141 or consent of full-time Information Technology instructor) introduces the student to wireless networking technologies, wireless network design, implementation, operation, and troubleshooting. Topics include WLANs, IEEE 802.11, site surveys, wireless topologies, basic configuration and use of wireless access points, network interface cards, wireless bridging, principles of antenna design, and security issues. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 243 - Network Switching Technologies (formerly IT 143)
2-4-4
(Prerequisite: IT 241 with a grade of "C" or better) continues to build foundational education in local networking and internetworking, as well as specific training using Cisco technology. This is the third of four preparation courses for the Cisco Certified Network Associate (CCNA) exam. Topics include the network switching, virtual networks, network design, additional routing protocols, access lists, and IPX. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 244 - Wide Area Networks (formerly IT 144)
2-4-4
(Prerequisite: IT 243 with a grade of "C" or better) continues to build foundational education in local networking and internetworking, as well as specific training using Cisco Technology. This course is the final course for preparation for the Cisco Certified Network Associate (CCNA) exam. Topics include wide area networking (WAN), WAN design, WAN presence and connectivity with PPP, ISDN, frame relay and other telecomm services and techniques, and extensive review in preparation for the CCNA examination. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 245 - Network Security
2-2-3
(Prerequisite: IT 141 or consent of full-time Information Technology instructor) designed to provide a fundamental understanding of network security principles and implementations. Mapping fully to CompTIA's "Security +" certification objectives, IT 245 focuses on the five main areas of network security:

General Security - authentication methods, common network attacks
Communication Security - remote access, e-mail, the Web, Directory/File transfer
Infrastructure Security - network devices \& media, security topologies, DMZs, Extranets
Cryptography Security - asymmetric and symmetric algorithms, PKI certificates
Operational/Organizational Security - disaster recovery, business continuity, forensics Students will learn through classroom instruction as well as a variety of extensive action-learning experiences and research projects simulating the role of a security professional. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## 264 Course Descriptions

## IT 271 - Windows Server Operating Systems (formerly CIS 245)

(Prerequisite: IT 116 or consent of full-time Information Technology instructor) introduces the student to the fundamentals of implementing, administering, and troubleshooting Network Operating Systems (NOS), using Microsoft Server 2003. Based on a typical heterogeneous WAN with multiple servers, multiple domains and sophisticated server applications, students will learn strategies and skills in planning network protocols and compatibility, server hardware, server installation, server configuration, operating system requirements, Active Directory implementation, configuring storage, backup maintenance, managing clients through groups and accounts, managing security, printer installation and management, Internet and intranet services, network monitoring and tuning, and network troubleshooting. The materials used in this course prepare the student for Microsoft's MCSA/MCSE Exam \#70-290 Installing, Configuring, and Administering Windows Server 2003. Students will have an opportunity to apply their knowledge through hands-on projects and case study assignments. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## IT 272 - Unix/Linux Fundamentals

2-2-3
(Prerequisite: IT 105 or consent of full-time Information Technology instructor. Students should possess basic computer literacy skills before attempting this course. An understanding of command-line programming would be very helpful to the student.) is an introduction to the fundamentals of Network Operating Systems, focusing on UNIX/Linux. Students will learn how to use the UNIX operating system while operating inside a Solaris environment. This course introduces the Common Desktop Environment (CDE) and includes such topics as learning the fundamental command-line interface, UNIX directory and file system management, file system security, the vi text editor, features and customizing Korn and C shells, basic network administration in UNIX, Applications Manager, Style Manager, Text Editor, printing, and electronic mail. IT 272 is for new users of the UNIX environment and CDE. This course incorporates hands-on learning through numerous lab projects using Sun Microsystems Solaris UNIX software. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 273 - Managing Windows Networks
(Prerequisite: IT 271 or consent of full-time Information Technology instructor) is an intermediate-level course that introduces the student to the theory and skills involved in installing, configuring, monitoring and troubleshooting Windows Server 2003 on a small to medium size network infrastructure. Students will learn how to plan, implement, manage and monitor DHCP, DNS, RRAS, network security, update services and maintain the network infrastructure. The materials used in this course prepare the student for Microsoft's MCSA/MCSE Exam \#70-291 Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure. Students will have an opportunity to apply their knowledge through hands-on projects and case study assignments. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 274 - Windows Active Directory
(Prerequisite: IT 271 or consent of full-time Information Technology instructor) teaches students the skills and knowledge necessary for planning, implementing, and maintaining Windows Active Directory. Through lectures, demonstrations, textbook exercises and classroom labs, students will learn how to implement and manage forests, sites, domains organizational units (OUs) that meet the accessibility, performance, and security goals of a business plan. Students will also learn troubleshooting techniques that are valuable for the maintenance of the network environment. This course prepares students to take the Microsoft 70-294 exam, one of the core exams for the Microsoft Certified Systems Engineer (MCSE) certification track. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## IT 280 - Advanced Systems Development

(Prerequisite: CS 161 and CS 230) is a course in advanced programming techniques designed to prepare students for large-scale program and system design and implementation. Topics include single and multi-dimensional array processing, string manipulation, exception handling, sorting and searching techniques, on-line/interactive programming, subprogramming and program linkage, program verification and complexity analysis, advanced file processing, multiple form usage, comprehensive file updating involving both sequential and random access, and database linkage and manipulation. Intensive lab experiences are involved using IBM-compatible microcomputers and coding large-scale programs with both COBOL and Visual Basic.NET programming languages. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 282 - Dynamic Web Development (formerly IT 183) 2-2-3
(Prerequisite: IT 153) presents the student with a comprehensive introduction to Dynamic HTML client-side website development using scripting (JavaScript and VBscript) and coding to enhance the performance and functionality of a website. Particular attention is given to client-side applications of JavaScript and ActionScript (via Flash applications). Students will also be given an opportunity to utilize website development tools including web-authoring, graphics, and multimedia tools. Students will learn to use these tools to add new functionality and design flare to their websites. This course requires the student to build multiple web pages and implement at least one major website design. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 284 - Web Programming 2-2-3
(Prerequisite: IT 282 or consent of full-time Information Technology instructor) presents the student with a comprehensive introduction to web programming technologies including CGI/Perl, Active Server Pages, PHP, JavaApplets, and Web databases to enhance the performance and functionality of a website. This course requires the student to build multiple WebPages and implement at least one major website design that interacts with a database. Particular attention is given to server-side applications. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 285 - Systems Analysis \& Design
2-4-4
(Prerequisite: sophomore standing and a minimum completion of 45 credits hours toward an IT degree, or approval from the full-time Information Technology faculty) is an intermediate-level course that introduces the student to a practical approach to information technology and systems development. Students will learn how to use the Systems Development Life Cycle (SDLC) model to translate business requirements into information systems that support a company's short-and long-term objectives. Real-world case studies and assignments teach analytical, problemsolving, and decision-making techniques, which in turn develop critical thinking skills. Systems Analysis \& Design is the capstone course for the IT programs and will introduce such topics as needs analysis, strategic planning, feasibility studies, requirements modeling, enterprise modeling, data design, user interfaces, input and output design, systems architectures, systems implementation, project management, and CASE tools. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
IT 290 - Work Experience Practicum ..... 1-10-3(Prerequisite: sophomore standing and a minimum completion of 45 credits hours toward an ITdegree, or approval from the full-time Information Technology faculty) provides students in theInformation Technology Program the opportunity to apply principles learned in other coursesto the work situation by employment in or observation of activities necessary for the student tosucceed in the workplace. Students will need to work a minimum of 150 hours during the semesterto receive 3 credit hours for this course. Students wishing to enroll in this course must completean application for enrollment and submit it to the instructor. Applications are available in theBusiness and Technology Division office. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirements - Not Applicable
Area of Concentration - Not Applicable
IT 295 - Workplace Simulation \& Projects
1-10-3 (Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an IT degree or approval from the full-time Information Technology faculty) provides individuals or groups of students an opportunity to work on a specific project - real or simulated - under the guidance of a faculty mentor. Students are required to present a written proposal to the IT instructional team for their consideration. Students and the team will meet to discuss specific objectives, timelines, success criteria, and other topics. A faculty mentor will be identified at this time. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirements - Not Applicable
Area of Concentration - Not Applicable
IT 297 - Emerging Technologies (Variable credit)
1-0-1 to 3-0-3
is a special topics course that introduces and discusses current and emerging technologies as they relate to business, industry, and the public sector communities. This course may be repeated twice only if topic areas are different. A maximum of three credit hours may be used toward an IT AAS Degree. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Journalism

## JOURN 101 - News Writing

(Prerequisite: eligibility for ENGL 101 and typing ability) introduces the students to basic techniques of news writing and news gathering with experience in the gathering, writing, and rewriting of news copy. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Journalism
JOURN 102 - News Reporting
3-0-3
(Prerequisite: JOURN 101) continues study and practice in writing and gathering news with added emphasis on editing, information sources, interviewing, and page make-up. The goals of accuracy, comprehensiveness, and appropriate interpretation are applied to investigative and interpretive reporting of public affairs. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Not Applicable
Area of Concentration - Journalism
(Prerequisite: eligibility for ENGL 101) examines the mass media of our society: newspapers, magazines, radio, and television. The course treats the development of the media to their present forms, the process and theory of mass communications, and issues arising from the present state of mass media, such as "new journalism," "protected sources," and freedom of the press. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Journalism, Speech
JOURN 220 - Introduction to Television Production (IAI: MC916)
2-2-3
(Prerequisite: completion of $E N G L$ 101) is an introduction to television production, including terminology, basic script writing, and direction, audio, lighting, camera operation, and video editing. Course will examine program types, television criticism, and creative treatment of visual, artistic, and non-verbal elements of communications in television. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Journalism, Speech
JOURN 221 - Introduction to Radio Production (IAI: MC915)
2-2-3
examines workings of radio stations, coupled with hands-on experience in audio production techniques, operation of related equipment and systems, and sales and management. Radio production protocol, terminology, script writing, and editing will be studied to produce commercials, public service announcements, features, and news casting in a studio setting. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Journalism, Speech
JOURN 222 - Radio/TV Broadcasting
2-2-3
(Prerequisite: completion of SPCH 101 with a " $C$ " or better) includes topics such as voice and diction, microphone training, news presentations, interviewing, commercial delivery, and ad-lib announcing. Time will also be spent on basic radio formats. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Journalism, Speech

## Leadership

L DEV110 - Leadership Development
is designed to help students develop leadership skills and techniques within a group setting. Students will explore various styles of leadership and learn about parliamentary procedure (Robert's Rules of Order). Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
L DEV111 - Community Leadership
3-0-3
will emphasis a holistic review and development of the critical aspects of leadership, linking its personal and professional dimensions, to broaden knowledge and skills, and to develop a style of positive, functional and visionary leadership for work, the community, state, nation, and the world. Classes will be held in numerous community settings in interaction with professionals and community leaders and with active engagement of students in lectures, discussions, and applied practice. Topics will include collaborative management, marketing strategies, effective communications, innovation, finance and development strategies, politics, career assessment, civic engagement, global and intercultural diversity, conflict management, and personal wellness. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Mathematics

All mathematics courses that are prerequisites for other mathematics courses must be completed with a "C" or better grade if they are to be used as prerequisites.


#### Abstract

MATH 087 - General Mathematics Skills 3-2-4 is designed to teach basic operations with whole numbers, fractions, and decimals. The concepts of estimation, rounding off, percents, ratio and proportion, and measurement are discussed. Problem solving and simple average problems will be introduced. Offered in Fall and Spring.

Applicable toward graduation where program structure permits: Certificate or Degree - Basic Certificates Group Requirement - Not Applicable Area of Concentration - Not Applicable MATH 090 — Pre-Algebra 4-0-4 (Prerequisite: both of the following: (1) MATH 087 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL 101 or concurrent enrollment in ENGL 090) is designed to teach the use of fractions, mixed numbers, and decimal numbers in any and all operations. It is also designed to teach procedures for solving simple word problems. The concepts of area, percent, ratio, and order of operations are introduced. The beginning concepts of algebra are practiced thoroughly. Some of the basic concepts of spatial geometry including pyramids, spheres, and cones are integrated in the course. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates Group Requirement - Not Applicable Area of Concentration - Not Applicable MATH 091 - Basic Algebra 4-0-4


(Prerequisite: both of the following: (1) MATH 090 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097) is a concentrated study of the topics in Beginning Algebra. The topics include the real number system, first degree equations, signed numbers, integer exponents, elementary graphing, products and quotients of algebraic expressions, systems of linear equations in two variables, radicals and quadratic equations, scientific notation, ratio problems, percent, and variation. A thorough discussion is presented on applied (word) problems with strong emphasis on identifying word problems by type and learning the procedures for each type. Algebraic methods are used in geometry problems, concentrating on finding the areas and perimeters of two-dimensional geometric figures. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
MATH 095 - Basic Geometry
(Prerequisite: both of the following: (1) MATH 091 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097) introduces topics such as lines and plane and solid figures with concepts of congruence, similarity, symmetry, and logic. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
MATH 098 - Intermediate Algebra
4-0-4
(Prerequisite: all of the following: (1) MATH 091 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097) is designed for (1) students who have successfully completed two years of high school algebra or (2) students who need to review Intermediate Algebra concepts. The topics include real numbers, polynomials, rational expressions, equations, inequalities, problem solving, complex numbers, systems of equations, graphing, functions, relations, exponents, and logarithms. A graphing calculator is required. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
MATH 104 - Technical Mathematics ..... 4-0-4(Prerequisite: both of the following: (1) MATH 091with a "C" or better grade or satisfactory scoreon the mathematics placement exam and (2) eligibility for ENGL 101 or concurrent enrollmentin ENGL 090 and ENGL 097) includes the following topics: whole numbers, common fractions,decimal fractions, percents, measure, bar and line graphs, introductory algebra, signed numbers,basic algebraic operations, simple equations, complex equations, ratio and proportion, introduc-tion to plane geometry, angular measure, angular geometric principles, triangles, similar figures,polygons, circles, areas of common polygons, areas of circles, sectors, segments, and ellipses,prisms and cylinders and their volumes, surface areas, and weights, pyramids and cones, spheresand composite objects and their volumes, surface areas, and weights, introduction to trigonometricfunctions, trigonometric functions with right triangles, practical applications with right triangles,law of sines, and law of cosines. Offered in Fall, Spring, and Summer as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Mathematics
Area of Concentration - Industrial Maintenance, Machine Tool Processes

## MATH 106 - Mathematics for Health Careers

2-0-2
(Prerequisite: eligibility for MATH 091) includes a review of fractions, decimals, and percents; the household, apothecaries, and metric systems of measurement; ratio and proportion; rate of flow of intravenous fluids; drugs measured in units; stock solutions; application problems; pediatric dosage formulas; insulin dosages; and mill equivalents. Offered in Fall, Spring, and Summer as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Mathematics
Area of Concentration - Nursing
MATH 110 - Concepts of Mathematics (IAI: MI 904)
4-0-4
(Prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a " $C$ " or better grade or one year of high school geometry, and (3) eligibility for ENGL 101) provides an overall view of mathematics for students whose primary interests are not in engineering or the physical sciences. The course is designed to fulfill general education requirements. It is not designed as a prerequisite for any other college mathematics courses. The course focuses on mathematical reasoning and the solving of real-life problems, rather than on routine skills and appreciation. Three or four topics are studied in depth, with at least three chosen from the following list: geometry, counting techniques and probability, graph theory, logic/set theory, mathematical modeling, mathematics of finance, game theory, linear programming, and statistics. A graphing calculator is required. Offered in Fall, Spring, and Summer as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Mathematics
Area of Concentration - Not Applicable
MATH 111 - Mathematics for Elementary School Teaching 1
4-0-4
(Prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a " $C$ " or better grade or one year of high school geometry, and (3) eligibility for ENGL 101) includes the language of sets and their application to elementary mathematics; mathematical reasoning and problem solving; history of numeration; work in bases other than ten; whole numbers and operations; integers and rational numbers; decimals, irrational numbers, and elementary number theory; calculators and applications; the language and nature of deductive and inductive logic in mathematics; and an introduction to statistics. Some of the issues underlying elementary school mathematics are analyzed. A graphing calculator is required. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Mathematics (AAS only)
Area of Concentration - Teacher Education - Elementary


#### Abstract

MATH 112 - Mathematics for Elementary School Teaching 2 (IAI: M1 903) 4-0-4 (Prerequisite: MATH 111 with a "C" or better grade or equivalent competencies and eligibility for ENGL 101) is a continuation of MATH 111. Topics include geometry and geometric figures, probability and statistics, graphing, measurement, and basic computer literacy. Students are introduced to some of the current literature, innovations, methods, and proposals for the modern elementary mathematics curriculum. A graphing calculator is required. Offered in Spring.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates and All Degrees Group Requirement - Mathematics Area of Concentration - Teacher Education - Elementary MATH 113 - Introduction to Applied Statistics (IAI: M1 902) 4-0-4 (Prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) MATH 095 with a " $C$ " or better grade or one year of high school geometry, and (3) eligibility for ENGL 101) is a beginning level course for the student in elementary applied statistics. Topics include basic statistical principles, graphic presentation, descriptive measures of central tendency, dispersion and location, inferential statistics and hypothesis testing, analysis and inference of linear correlation, and coefficient and slope of regression line. Students will apply statistical concepts to real-world situations. Current technology will be utilized in examining statistical information. A graphing calculator is required. Offered in Fall, Spring, and Summer as needed.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates and All Degrees Group Requirement - Mathematics Area of Concentration - Not Applicable MATH 116 - College Algebra $\quad$ 4-0-4 (Prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101) is a concentrated study of the topics traditionally found in College Algebra. The topics include a quick and intense review of the topics from Intermediate Algebra, including real numbers, algebraic expressions, polynomials, equations, problem solving, complex numbers, and graphing. Major topics include functions, exponential and logarithmic functions, matrices, polynomial equations, inequalities, introduction to analytic geometry, conic sections, systems of equations, mathematical induction, and the binomial theorem. A graphing calculator is required. Offered in Fall, Spring, and Summer as needed.


Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Mathematics (AAS only)
Area of Concentration - Not Applicable

## MATH 117 - Trigonometry <br> 3-0-3

(Prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101) helps students develop skills sufficiently to write and use the definition of trigonometric functions; sketch the graph of the trigonometric functions; prove identities; solve trigonometric equations; learn and then apply the law of the sines and cosines; learn how to write a complex number in trigonometric form and find all the roots of a complex number; learn polar coordinates system and the graphs of some simple equations in polar; learn about conic sections (rectangular \& polar), vector (applications \& operations), and the exponential and logarithmic functions with applications and modeling. A graphing calculator is required. Offered in Fall, Spring, and Summer as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Mathematics (AAS only)
Area of Concentration - Mathematics

[^9]
## 272 Course Descriptions

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& \text { MATH } 190 \text { - Calculus for Business and Social Science (IAI: M1 900) 4-0-4 } \\
& \text { (Prerequisite: successful completion of MATH } 116 \text { with a "C" or better grade or satisfactory score } \\
& \text { on the mathematics placement exam) is an introductory calculus course for the non-mathematics } \\
& \text { major. The course includes sequences, limits, differentiation and integration of polynomials, and } \\
& \text { exponential and logarithmic functions with applications to business and social science. A graphing } \\
& \text { calculator is required. Offered in Fall and Spring. } \\
& \text { Applicable toward graduation where program structure permits: } \\
& \text { Certificate or Degree - All Certificates and All Degrees } \\
& \text { Group Requirement - Mathematics } \\
& \text { Area of Concentration - Not Applicable } \\
& \text { MATH } \mathbf{2 1 0} \text { - Discrete Mathematics }
\end{aligned}
$$

(Prerequisite: MATH 121 with a "C" or better grade or concurrent enrollment) provides an overall view of mathematics for students whose primary interests are in computer science and mathematics. The course is designed to fulfill requirements for computer science and mathematics majors preparing to transfer to a four-year institution. This course focuses on mathematical reasoning and the solving of real-life problems rather than on routine skills. Mathematical modeling and projects are included as part of the course. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Degrees
Group Requirement - Mathematics
Area of Concentration - Mathematics, Computer Science
MATH 221 - Calculus \& Analytic Geometry 3 (IAI: M1 900, EGR 903, MTH 903) 4-0-4
(Prerequisite: MATH 122 with a "C" or better grade or equivalent competencies) begins with the rectangular coordinate system in three-dimensional space, vectors, and operations with vectors. Lines, planes, quadric surfaces, spherical and cylindrical coordinates, vector-valued functions, curvature, Kepler's Laws of Planetary Motion, partial derivatives, relative extrema of functions of two or more variables, centroid, LaGrange Multipliers, and multiple integrals in different coordinate systems are introduced. At the end, students will learn integrals of functions over a curve or a surface, Green's theorem, the divergence theorem, and Stoke's theorem. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Mathematics
Area of Concentration - Mathematics, Engineering
MATH 230 - Differential Equations (IAI: EGR 904, MTH 912)
4-0-4
(Prerequisite: MATH 122 with a " $C$ " or better grade or equivalent competencies) begins with some definitions and terminology and mathematical models used in a differential equations course. First-order and higher-order differential equations, along with the methods of solutions and their applications, are introduced. Modeling with higher-order, Laplace transform, and systems of linear first-order differential equations are covered. At the end, students learn series solutions of linear equations. Numerical methods are covered throughout the course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Mathematics (AAS only)
Area of Concentration - Mathematics, Engineering

## MATH 240 - Introduction to Linear Algebra

3-0-3
(Prerequisite: successful completion of MATH 122 with a "C" or better grade) is an introductory course in vectors, matrices, vector spaces, and linear transformations. The concepts discussed in this course not only serve as an introduction to the more abstract courses a mathematics or engineering student meets at the junior-senior level but also have many useful applications outside of mathematics. The course begins with a review of algebra, followed by a study of vectors, vector spaces and subspaces, linear transformations, linear dependence and independence, basis and dimension, rank of a matrix, kernel and range, eigenvalues and eigenvectors, diagonalization, and applications of concepts covered in an introductory linear algebra course. If time permits, the student will learn additional topics such as least squares fitting to data, applications to differential equations, angle and orthogonality in inner product spaces, and quadratic surfaces. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Mathematics (AAS only)
Area of Concentration - Mathematics

## Music

MUSIC 100 - Music Appreciation (IAI: F1 900)
includes the various periods and styles of music with minimum attention to theory and harmony.
The course requires listening to live and recorded performances. It is designed for students who
do not intend to major in music. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Fine Arts
Area of Concentration - Music
MUSIC $\mathbf{1 0 1}$ - Class Piano 1
provides group instruction for those who have little or no previous experience playing the piano,
including non-keyboard music majors and elementary education majors as well as others.
Materials are used that correlate basic keyboard skills to musicianship. Activities include reading
popular, folk, and serious music, transposing, harmonizing, improvising, writing, and playing
by ear. The course may be repeated for credit a maximum of four times. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music
MUSIC $\mathbf{1 0 2}$ - Class Piano $\mathbf{2}$
(Prerequisite: MUSIC 101 or consent of the instructor) is a continuation of Class Piano 1. Topics
include chord inversions, seventh chords, pedaling, and various scales. Activities include reading
popular, folk, and serious music, transposing, harmonizing, improvising, writing, and playing
by ear. Materials correlate skills to musicianship. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music
provides instruction in the rudiments of music: scales, intervals, triads; rhythm and melody in singing, writing, playing, and dictation; diatonic harmony including analysis and part writing; and sight singing and ear training correlated with the rhythmic, melodic, and harmonic activity. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music
MUSIC 104 - Theory and Ear Training 2 (IAI: MUS 901)
(Prerequisite: MUSIC 103) is a continuation of MUSIC 103 and provides instruction in the rudiments of music: scales, intervals, triads; rhythm and melody in singing, writing, playing, and dictation; diatonic harmony including analysis and part writing; and sight singing and ear training correlated with the rhythmic, melodic, and harmonic activity. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music
MUSIC 105 - Music Fundamentals
3-0-3
includes basic principles of interpreting and understanding the language of music. Introduces study of notation, meter and rhythm, scales, keys, intervals, triads, basic forms, musical terms, and introduction to keyboard. (Designed for pre-teaching and non-music majors, or music major with insufficient background in theory.) Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Fine Arts (AAS, ALS)
Area of Concentration - Music

## MUSIC 110 - Orchestra

0-5-1
is designed for students who have the proficiency and wish to participate in orchestra. It is open to all students with registration subject to an audition. Members must attend all rehearsals and concerts. The course may be repeated for credit a maximum of four times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music
MUSIC 120 - Band 0-6-1
is open to all students with registration subject to an audition. Marching is stressed during the football season. Members must attend all rehearsals and concerts. This course may be repeated for credit a maximum of four times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music

## MUSIC 123 - Jazz Band

0-5-1
is preparation and performance of a variety of jazz literature to develop abilities in reading and listening to music and to provide an opportunity for instrumentalists with some background to perform in a jazz combo. Jazz music techniques and improvisation, musical role awareness, and interpretation of lead sheets will be emphasized. Registration will be subject to an audition. This course may be repeated for credit a maximum of three times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music
MUSIC 130 — Chorus
0-2-1
provides an opportunity to perform major choral works and public concerts. The course is open to all students with registration subject to an audition. Members must attend all rehearsals and concerts. The course may be repeated for credit a maximum of four times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music

## MUSIC 140 - Small Ensemble <br> 0-2-1

provides an opportunity for study and performance of musical works written for smaller instrumental and vocal ensembles. Students must be nominated by their band or orchestra instructor. Students enrolled in this course are required to present at least one public performance during the term. The course may be repeated for credit a maximum of four times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Not Applicable
Area of Concentration - Music

## MUSIC 180 - Non-Western Music

explores the basic elements of music (melody, rhythm, harmony, and form) and perceptive listening as they relate to non-Western music. Examines the music culture of non-Western societies. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Fine Arts
Area of Concentration - Music
MUSIC 190 - Introduction to American Music (IAI: F1 904)
studies the origins, growth, and significance of the music of the United States as a distinctive art form derived from the nation's pluralistic culture. The course includes some listening to recorded performances and involves such types of music as classical, religious, folk, jazz, and pop. It is designed for students who do not plan to major in music. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Music
MUSIC 192 - Rock and Roll ..... 3-0-3(Prerequisite: eligibility for ENGL 101) will study a survey of the styles and personalities in popularmusic from the 1950's to the present. Included will be discussions of the concepts and aestheticsof popular music, as well as comparisons of rock styles, genres, and stylistic traits with other musicalforms. The development of rock music, its multicultural roots, its connections with the other arts,and interrelationships with the political and economic conditions of its time will be explored.Offered as needed..
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Fine Arts
Area of Concentration - Music
MUSIC 201 - Class Piano 3 ..... 2-0-2(Prerequisite: MUSIC 102 or consent of the instructor) is a continuation of Class Piano 2. Topicsinclude various scales, harmonizing using primary chords in minor keys, teaching technicalexercises and studies, and solo repertoire. Activities include reading popular, folk, and seriousmusic, transposing, harmonizing, improvising, writing, and playing by ear. Materials correlatekeyboard skills to musicianship. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music
MUSIC 202 - Class Piano 4 2-0-2
(Prerequisite: MUSIC 201 or consent of the instructor) is a continuation of Class Piano 3. Topics include various scales and modes, harmonizing using substitute chords and secondary dominants, seventh chords qualities, technical exercises and studies, and solo repertoire. Activities include reading popular, folk, and serious music, transposing, harmonizing, improvising, writing, and playing by ear. Materials correlate keyboard skills to musicianship. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Music

## Nursing

## NURS 111 - Introduction to Nursing

(Prerequisite: admission to Associate Degree Nursing Program) is a self-esteem and introspective course that will help students to understand their own personal strengths and skills capabilities so they can be better prepared for success in the nursing program. Team building exercises, time management, and test taking skills are introduced in this class. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Nursing

## NURS 112 - Medical-Surgical Nursing 1 Concepts Basic to Nursing Practice 6-9-9

(Prerequisites: completion of NURS 111 and completion of or concurrent enrollment in BIOL 201, PSYCH 110, and ENGL 101) describes the roles of the ADN graduate as member of the healthcare team, provider and manager of care, and member of the profession. This course introduces and utilizes the program's conceptual framework for nursing practice: nursing, individual, environment, health, nursing process, critical thinking, communication, professionalism, legal/ethical concepts, teaching, and learning, systems theory, stress, adaptation, responses to illness, and caring. It outlines the role of the nurse in promoting, maintaining, and restoring health and in assisting clients and families with adaptation to health problems. Respect for diversity is fostered. Accountability and commitment to excellence in nursing skills for meeting needs related to safety, principles of mobility, fluid and electrolytes, ambulation, nutrition, elimination, medication administration, asepsis, and infection control are the goals. Clinical experiences involving adult health care consumers and hospitals require outside class and clinical preparation and provide nursing experience. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Nursing
NURS 150 - Family Health Nursing4-6-6(Prerequisite: completion of NURS 112 and completion of or concurrent enrollment in NURS 152,NURS 154, PSYCH 145, and BIOL 202) examines issues relevant to the promotion of sexual andreproductive health throughout the life span and the management of developmental needs andhealth problems that may occur from infancy through adolescence. The nursing process andcritical thinking are applied to the management of clients and families from preconception throughadolescence and to clients with diseases of breasts and the reproductive system. Individual andgroup teaching, assessment, and nursing skills are emphasized. Students will demonstrate the rolesof healthcare team member, and provider of care. Clinical experiences in clinics, hospitals, andselected community agencies will be provided. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Nursing

## NURS 152 - Psychiatric Mental Health Nursing 2-6-4

(Prerequisite: completion of NURS 112 and completion of or concurrent enrollment in NURS 150, NURS 154, PSYCH 145, BIOL 202) applies the nursing process and critical thinking to the management of psychiatric and mental health problems in clients and families. Emphasis is placed on the interactive nature of clients with their environment and the use of various treatment modalities, therapeutic communication, and relationship skills to care for clients with alterations in mental health. Students function in the roles of member of the healthcare team and provider of care. Clinical experiences provide students the opportunity to care for clients in both acute and chronic settings. Students will have the opportunities to apply the nursing process, utilize therapeutic communication, and exercise critical thinking. Students will plan and administer care to individual clients and small groups. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Nursing
NURS 154 - Pharmacological Principles for Nursing Practice
3-0-3
(Prerequisite: must be accepted into the ADN or LPN nursing program, or lhave current LPN licensure, or approval of the Dean of Health Professions) presents an overview of the basic drug knowledge nurses need for safe and effective drug administration. The action, characteristics, and adverse effects of drugs classified by body systems are studied. The nursing process is applied to drug therapy. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Nursing
NURS 155 - Medical-Surgical Nursing II - Care of the Chronically Ill Client 3-6-5
(Prerequisite: completion of NURS 112 and completion of or concurrent enrollment in NURS 152, NURS 154, PSYCH 145, BIOL 202) focuses on the use of the nursing process and critical thinking to manage adult clients with chronic and increasingly complex alterations in neurological, oncological, immune, hematological, endocrine and musculoskeletal functioning in medical health care delivery systems. Students will function in the roles of healthcare team member, provider of care, and manager of care. Clinical experience will be in oncology, acute phase of chronic illness, home health, and hospice care. Students will develop insight about the effects of chronic illness on an aging population as it relates to nursing roles and the health care delivery systems. Oncology and Home Health rotations will be included as an observational experience. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group requirement - Not Applicable
Area of Concentration - Nursing

## NURS 203 - LPN Bridge Course

(Prerequisite: Illinois LPN license or license pending, program admission requirements, BIOL 201, 202, and 220, PSYCH 110, 145, SOCIO 110, and NURS 154) presents the philosophy of Associate Degree Nursing and provides the nursing knowledge, cognitive and clinical skills from Nursing 112, 150, and 152 that allows the transition of LPNs into the Associate Degree Nursing program. The class will be conducted in three modules. Module I (3 credit hours) focuses on the nursing process, critical thinking, the teaching and learning process, physical assessment, fluid and electrolytes, acid base, and transition from the LPN to RN role. Module II ( 1 credit hour) focuses on the management of the psychiatric client. Module III (3 credit hours) focuses on
obstetrics and pediatrics. All students are required to take Module I. Students have the opportunity to proficiency out of Modules II and III. A student scoring $65 \%$ or better on the pre-tests and paying the appropriate fee for proficiency by exam will be awarded credit for NURS 150 and NURS 152. Results of pre-tests determine which other modules must be completed. Upon successful completion of this course and paying the appropriate fee for credit by advanced placement, students will receive credits for NURS 112, NURS 150, and NURS 152.
Credits: 7 hours. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group Requirement - Not Applicable

## Area of Concentration - Nursing

NURS 205 - Medical-Surgical Nursing II — Care of the Chronically Ill Client 3-6-5
(Prerequisite: completion of NURS 150, NURS 152, NURS 154, and completion of, or concurrent enrollment in Nurs 250, BIOL 220, SOCIO110, or admission to the LPN Bridge Program) focuses on the use of the nursing process and critical thinking to manage adult clients with chronic and increasingly complex alterations in neurological, oncological, immune, hematological, endocrine and musculoskeletal functioning in medical health care delivery systems. Students will function in the roles of healthcare team member, provider of care, and manager of care. Clinical experience will be in oncology, acute phase of chronic illness, home health, hospice care. Students will develop insight about the effects of chronic illness on an aging population as it relates to nursing roles and the health care delivery systems. Oncology and Home Health rotations will be included as an observational experience. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group requirement - Not Applicable
Area of Concentration - Nursing
NURS 206 - Family Health Nursing (Effective Spring 2009)
4-6-6
(Prerequisite: completion of NURS 152, NURS 154, NURS 155, and completion of, or concurrent enrollment in NURS 250, BIOL 220, SOCIO110, or admission to the LPN Bridge Program) examines issues relevant to the promotion of sexual and reproductive health throughout the life span and the management of developmental needs and health problems that may occur from infancy through adolescence. Then nursing process and critical thinking are applied to the management of clients and families form preconception through adolescence and to clients with diseases of breasts and the reproductive system. Individual and group teaching, assessment, and nursing skills are emphasized. Students will demonstrate the roles of healthcare team member, and provider of care. Clinical experiences in clinics, hospitals, and selected community agencies will be provided. Offered in fall and spring.

Applicable toward graduation where program structure permits;
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Nursing
NURS 250 - Medical-Surgical Nursing III - Care of the Surgical Client
3-6-5
(Prerequisite: completion of Nurs 150, Nurs 152, Nurs 154, and completion of or concurrent enrollment in NURS 205, BIOL 220, SOCIO110, or admission to the LPN Bridge Program; beginning spring 2009 completion of NURS 155 instead of NURS 150 and concurrent enrollment in NURS 206 instead of NURS 205) focuses on the nursing management of clients experiencing surgery and the management of cell injury, inflammation, fluids and electrolytes. The nursing process, critical thinking, and systems theory are applied in the management of clients with alterations in the integumentary, urinary, and gastrointestinal systems. Students will demonstrate the roles of healthcare team member, provider of care and coordinator of patient care. Clinical nursing and physical assessment skills will be emphasized. Clinical experiences provide opportunities to use the nursing process, communication, critical thinking, and decision making in caring for adults in hospital settings. Offered in fall and spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - AAS
Group Requirement - Not Applicable
Area of Concentration - Nursing


#### Abstract

NURS 252 - Medical-Surgical Nursing IV - Care of the Acutely Ill Client 3-6-5 (Prerequisites: completion of NURS 205, NURS 250, BIOL 220, concurrent enrollment in NURS 254, Fine Arts elective, general elective, and HLTH 197/297; beginning in fall 2009 NURS 206 instead of NURS 205) nursing process, systems theory, and critical thinking are applied in the management and care of adult clients with acute alterations in the respiratory, cardiovascular, integumentary (burns), and the neurological system. Physical assessment and advanced nursing skills will be emphasized. The student will demonstrate the roles of health care team member, healthcare provider, and manager of care. Clinical experiences provide opportunities to use the nursing process, critical thinking, communication, and decision-making in caring for adult clients who are acutely/critically ill. Offered in Fall and Spring.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates, AAS, ALS Group Requirement - Not Applicable Area of Concentration - Nursing NURS 254 - Transition from Education to Practice 3-9-6 (Prerequisites: completion of NURS 205, NURS 250, BIOL 220, concurrent enrollment in NURS 252, Fine Arts elective, general elective, and HLTH 197/297; beginning in fall 2009 NURS 206 instead of NURS 205) introduces nursing students to the work setting by involving them in as many situations common to everyday clinical practice as possible while providing support and guidance from a nurse preceptor and instructor. Students work one eight-hour day and/or evening shift per week, provide direct care to a group of clients, and manage care given by other health care workers. The course presents concepts and issues pertinent to the effective entry into nursing practice. Students are prepared to perform in their expected role in regard to leadership, time management, and patient care management. The concepts of conflict management, accountability, quality assurance, employment, the health care delivery systems, diagnosis-related groups, and legal/ethical issues are also discussed. Opportunities and challenges related to lifelong learning and professional responsibilities are identified. Offered in fall and spring.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates, AAS, ALS Group Requirement - Not Applicable Area of Concentration - Nursing


## Office Technology

OTK 100 - Keyboarding (formerly Bus 140)
(Note: No previous keyboarding skills required. Recommended course for Business, Information
Technology, Criminal Justice, and Office Technology students and all students needing keyboard
skills) in a beginning keyboarding course designed to teach the touch system of keyboarding using
proper techniques on the alpha/numeric keyboard on microcomputers. Speed and accuracy are
developed. Previous typing is not a requirement. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Aplicable
Area of Concentration - Not Applicable
OTK 101 - Keyboarding Speed \& Accuracy (formerly OT 100)
(Prerequisite: touch-keyboarding skills of 20 net words a minute) is designed to improve speed and accuracy on 1 - to 5 -minute timed writings using the touch-keying technique. Skill level range is 20 to 50 plus WAM. Students entering this class must have previously developed minimal keyboarding proficiency. There will be no keyboarding presentation. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirements - Not Applicable
Area of Concentration - Not Applicable
OT 113 - Editing and Proofreading (Pending ICCB Approval)
3-0-3
(Prerequisite: OT 114 and OT 119) review basic errors dealing with capitalization, plurals, possessives, punctuation, statistical and technical information, and grammar. Proofread and edit realistic business documents such as e-mail messages, newsletters, itineraries, expense reports, letters, memorandums, databases, and spreadsheets. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: Touch-key minimum skills of 25 NWAM for five minutes) prepares students to learn and develop efficient skills in producing business and personal documents using Microsoft Word concepts and applications. Students learn to create, edit, print, and maintain documents in a computerized word processing environment. Speed and accuracy development are stressed. PowerPoint is introduced with an emphasis on creating, editing, formatting, modifying and refining a presentation, and inserting text from a Word document. Student must demonstrate typing speed of 35 NWAM with five or fewer for five minutes errors to pass this course. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 116 - Database Applications (Pending ICCB Approval)
2-2-3
introduces students to computer and software applications. Students will be introduced to the Windows operating system and basic spreadsheet features of Excel focusing on designing and creating spreadsheets, entering data, and editing data. Students will also be introduced to the database management features of Access used in designing, creating, saving, editing, sorting, querying, and preparing and printing reports. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 119 - Business English (formerly BUS 119)
3-0-3
(Prerequisite: eligibility for ENGL 090 and ENGL 097) is designed to review the principles of grammar, punctuation, capitalization, spelling, pronunciation, meaning, and choice of words frequently used in business. The ability to communicate effectively is the main requirement for obtaining, performing, and advancing in any business or technical career. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Business
OT 120 - Business Communications (formerly BUS 120)
3-0-3
(Prerequisite: OT 114 (or concurrent enrollment) and OT 119 or eligibility for ENGL 101) applies standard English to business communication documents. While completing written assignments using electronics technology, students become proficient in organizing and composing business letters, memorandums, reports, and e-mail messages. The course also includes an overview of oral, interpersonal, and intercultural business communication. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Business
OT 140 - Medical Terminology
3-0-3
designed to provide the student with knowledge of the meaning of word parts, pronunciation, correct spelling of medical terms, along with some anatomy. Special emphasis is placed on the medical terminology as it relates to the human body.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 141 - Medical Office - Anatomy (formerly OT 142)
3-0-3
(Prerequisite: HLTH 140 or OT 140) is a lecture course dealing with an introduction to the principles of anatomy and physiology. In association with each body system, common pathological conditions are also covered. This course is recommended for persons interested in allied health professions such as medical coding, transcription, or other medical clerical positions. This is a non-lab course, and a science background is not required. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

OT 142 - Medical Transcription 1 (formerly OT 242) 0-6-3 (Prerequisites: HLTH 140 or OT 140, OT 141 (or concurrent enrollment), and minimum touchtyping speed of 35 NWAM for five minutes with five or fewer errors) involves transcription of medical reports dictated by real physicians. Beginning, intermediate, and advanced dictation is transcribed. Students will transcribe approximately 15 hours of dictation, which includes chart notes, history and physical examinations, consultations, operative reports, discharge summaries, radiology and pathology reports. This course will build upon the previous study of medical terminology, anatomy, and English courses with in-depth coverage of English usage, editing, grammar, punctuation, spelling, and formatting techniques for medical records. In Transcription 1, students will transcribe reports from the following body systems: dermatology, ENT, ophthalmology, pulmonary, cardiology, gastroenterology, and endocrine. Offered in Fall and Spring

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 143 - ICD-9 Coding (formerly OT 246)
2-2-3
(Prerequisite: OT 141 or concurrent enrollment) this course will provide an overview of ICD-9 coding. Students will gain an understanding of the organization and format of the ICD-9-CM manual, coding conventions, guidelines, steps in coding, V and E codes, and coding diseases and procedures in each body system. After a review of coding guidelines for each body system, students will code assigned patient scenarios/medical reports using their ICD-9-CM code book. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirements - Not Applicable
Area of Concentration - Not Applicable
OT 150 - Records Management
3-0-3
(Prerequisite: OT 114 (or concurrent enrollment) and OT 116) introduces students to records and information management systems including issues in planning, creating, managing, and controlling both paper and electronic records. This course includes hands-on database practice. Career opportunities in the field of records management are discussed. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 160 - Office Accounting
3-0-3
emphasizes the use of accounting in keeping financial records with special emphasis on the income, statement of owner's equity, and balance sheet. The course also covers payroll calculations, banking procedures, and petty cash operations. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 170 - Professional Office Procedures (formerly OT 250)
3-0-3
(Prerequisite: OT 114 or concurrent enrollment ) emphasizes the office skills necessary to succeed in a global business in the 21st century. It includes studying workplace ethics, functioning as a team member, managing stress and time, calendaring, developing communication skills, preparing computer-aided presentation, processing mail, arranging conferences and meetings, making travel arrangement, and developing employment-seeking skills. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: OT 114 or concurrent enrollment and OT 119 or concurrent enrollment) is based on longhand and phonetics and is designed to provide students with a quick, easy-to-learn method of writing that is easy to read. Recommended for students who desire to take legible, rapid notes and master SuperWrite skills. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 205 - Voicing \& Transcription
2-2-3
(Prerequisite: OT 113, OT 114, OT 119, or equivalent competencies) covers dictating, formatting, editing, and proofreading business documents using speech recognition software. Also included is transcribing business letters, memos, agendas and meeting minutes from dictation. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 210 - Statistical Keyboard Entry
2-2-3
(Prerequisite: minimum touch-typing speed of 35 NWAM) provides students with a functional knowledge of electronic calculator and entry-level skills in data entry on the microcomputer. It also emphasizes speed development and accuracy in entering data with realistic production jobs and keyboarding exercises. Major emphasis is on numeric entry. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 215 - Document Production (Pending ICCB Approval)
2-2-3
(Prerequisite: IT 120 and IT 130) emphasizes formatting and keying complex business documents using integration of Microsoft Word, Excel, Access, and PowerPoint. Speed and accuracy in the production of documents are emphasized.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 230 - Legal Terminology \& Writing
2-2-3
(Prerequisite: OT 114 or concurrent enrollment) is a specialized course designed to acquaint students with legal terminology, definitions, and formatting of legal documents. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 232 - Legal Procedures
3-0-3
(Prerequisite: OT 230 or equivalent competencies) provides students an understanding of legal libraries. Research skills are developed through the use of digests, encyclopedias, reporter systems, treatises, and practice manuals. An exposure to computerized research is also provided. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 240 - Pharmacology Terminology
3-0-3
(Prerequisite: HLTH 140 or OT 140 or equivalent competencies) provides an introduction to the use of pharmacologic terminology. Medication actions, dosage forms, routes of administration, and uses will be covered. Course emphasis is on the terminology necessary for medical reports. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
OT 242 - Medical Transcription 2 (formerly OT 243)0-6-3(Prerequisite: OT 142 with grade of " $C$ " or better) is an extension of Medical Transcription I.
Students will continue to develop skills in transcribing actual physician dictation. Approximately15 hours of beginning, intermediate, and advanced dictation are transcribed. Specialties coveredinclude urology, OB/GYN, orthopedics, psychiatry, neurology, pathology, and radiology.Offered in Fall and Spring
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirements - Not Applicable
Area of Concentration - Not Applicable

## OT 243 - CPT Coding (formerly OT 245)

2-2-3
(Prerequisite: OT 141 or concurrent enrollment) provides an overview of CPT coding. Students will gain an understanding of the organization and format of the CPT manual, coding conventions, guidelines, modifiers, E\&M coding, and coding procedures in each body system. After a review of coding guidelines for each body system, students will code assigned patient scenarios/medical reports using their CPT code book. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirements - Not Applicable
Area of Concentration - Not Applicable
OT 244 - Interpreting Healthcare Records 3-0-3
(Prerequisite: HLTH 140 or OT 140 and OT 141) is a lecture course dealing with an introduction to the principles of healthcare documentation. Utilizing patient records, emphasis will be placed on content and format of the health record, significance of electronic health records, HIPAA requirements, and deciphering diagnoses and laboratory values in medical records. This course is recommended for persons interested in allied health professions such as medical coding, transcription, or other medical clerical positions. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirements - Not Applicable
Area of Concentration - Not Applicable
OT 245 - Insurance/Patient Billing
2-2-3
(Prerequisite: HLTH 140 or OT 140) emphasizes computerized patient billing procedures in the medical office environment. The students will enter patient and case information, record appointments, process transactions, produce reports and patient statements, and process claims. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirements - Not Applicable
Area of Concentration - Not Applicable

## OT 290 - Work Experience Practicum \& Seminar <br> 1-10-3

(Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an OT degree, or approval from the full-time Office Technology faculty. Students must also pass the typing requirement of 50 NWAM for five minutes with five or fewer errors prior to taking this course) provides students in the Office Technology Program the opportunity to apply principles learned in other courses to the work situation by employment in or observation of activities necessary for the student to succeed in the workplace. Student will need to work a minimum of 150 hours during the semester to receive credit for this course. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an OT degree, or approval from the full-time Office Technology faculty) is a capstone course designed to give students the opportunity to apply their technical skills and ability to work successfully in the workforce, to demonstrate learning and thinking skills, and to develop individual resourcefulness. The student will have an opportunity to work independently and as a team member on a specific project(s) under the guidance of a faculty mentor. Students must demonstrate a typing speed of 50 NWAM for five minutes with five or fewer errors to pass this course. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Personal Development

P DEV 100 - Human Potential Seminar
0-2-1
is a structured, positive group process. Its goals are increasing awareness of the student's present value system, personal achievements, and strengths and relating this awareness to plans for the future. Activities are aimed toward enhancing regard for oneself and others. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P DEV 101 - Seminar in College \& Life Skills
1-0-1
provides motivation, access to inner resources as well as college and community resources, and specific, practical study skills and coping strategies to help each student take control of his or her lifelong self-education and personal development, which can lead to personal and academic success. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P DEV 109 - How to Market Yourself
1-0-1
is a self-esteem and introspective course that helps students to understand their own personal strengths and skills capabilities so they can better present themselves to prospective employers. (Students may not receive credit for C DEV 112 and P DEV 109, 110, and/or 111.) Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## P DEV 110 - Career Exploration

0-2-. 5
provides the individual with an opportunity to explore his or her interests, values, abilities, and other significant factors as they relate to vocational choice and the world of work. Various tests, career materials, guest speakers, and group discussion sessions are used to assist the individual in making educational and career plans. (Students may not receive credit for C DEV112 and P DEV 109, 110, and/or 111.) Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P DEV 111 - Job Preparation
is designed to teach effective job search techniques to students. Students prepare a résumé, and cover letter, prepare for an interview, practice interviewing skill, and organize a job search. The course includes a review of current job search literature. (Students may not receive credit for C DEV 112 and P DEV 109, 110, and/or 111.) Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Personnel Relations


#### Abstract

P REL 100 - Human Relations (Prerequisite: successful completion of OT 119 or eligibility for ENGL 101) explores the fundamentals of human relations in all fields of everyday life. Study includes interpersonal relationships in both the work and home environment. The course is designed to improve the student's understanding of individual behavior and group dynamics. Topics covered include communication skills, assertiveness, setting goals, interviewing, cooperation, and handling conflict. Class activities are used to illustrate various human relations skills. Offered in Fall and Spring.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates, AAS, ALS Group Requirement - Social Science (AAS only) Area of Concentration - Not Applicable


3-0-3

P REL 110 - Supervision
3-0-3
is designed for practicing or potential first-line supervisors and/or managers who hold or expect to hold up to middle-level management positions. The course consists of a survey of basic management concepts in proper combination to assist the individual to diagnose situations encountered by supervisors in their day-to-day activities, to analyze problems, and to work toward solutions. The course emphasizes human relations, motivation, conference leading, leadership training, and the basic managerial functions. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Social Science (AAS only)
Area of Concentration - Not Applicable

## Philosophy

PHIL 100 - Critical Thinking (IAI: H4 906)
3-0-3
(Prerequisite: eligibility for ENGL 101) develops the student's ability to identify and correct faulty reasoning, to distinguish between scientific and pseudoscientific reasoning, and to reason according to elementary valid argument patterns. Throughout the course, students examine and evaluate examples of good and bad reasoning and construct several extended arguments of their own on a variety of topics. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - Philosophy
PHIL 106 - African American Churches in America
3-0-3
(Prerequisite: eligibility for ENGL 101) will examine the socio-historical origins, theology, and practice of the African Americans' religious experience. The relationship between social issues and religiosity will be explored, along with the political and socio-cultural aspects of churches, their evolution in form and structures, major religious leaders, and the churches' impact on the community and the nation. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Philosophy, African-American Studies
PHIL 110 - Introduction to Philosophy (IAI: H4 900) 3-0-3
(Prerequisite: eligibility for ENGL 101) surveys the major methods and systems of philosophy through discussion of questions such as what is really real, what is truth, does God exist, why is evil in the world, and how should moral issues be resolved. Students are encouraged to formulate their own answers to such questions through reading, discussion, and logical argument. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - Philosophy
(Prerequisite: eligibility for ENGL 101) offers a detailed study of the principle theories of moral character and conduct in western culture, such as those of Plato, Aristotle, Hume, Mill, and Kant. Attention is also given to non-normative issues such as free will, determinism, relativism, absolutism, subjectivism and objectivism. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - Philosophy
PHIL 200 - Symbolic Logic
3-0-3
(Prerequisite: eligibility for ENGL 101) surveys the basic elements of deductive reasoning on which the logic of fields such as data processing, electronics, algebra, and geometry are based. Topics include translation from English to symbolic notation, rules of deduction, techniques for proving validity and invalidity of arguments, and basic quantification. The course is useful as preparation for academic and technical fields using deductive logic and as a powerful tool for sound reasoning in any area. It assumes no mathematical or technical background. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Philosophy
PHIL 210 - Introduction to World Religions (IAI: H5 904N)
3-0-3
(Prerequisite: eligibility for ENGL 101) surveys the major religions of the world in order to promote an understanding of the variety of religious beliefs. Major religions studied include Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity, and Islam. The course may also include other religious traditions, if time permits. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - Philosophy
PHIL 215 - Asian Philosophy (IAI: H4 903N)
3-0-3
(Prerequisite: eligibility for ENGL 101) surveys the basic philosophical aspects of Hinduism, Buddhism, Confucianism, and Taoism as a means of expanding the student's understanding of Eastern culture. Emphasis is on concepts of knowledge, reality, and ethics. Meets third-world course requirements. Offered in Spring.

Applicable toward graduation where program permits:
Certificate or Degree - All Certificates and Degrees
Group Requirement - Humanities
Area of Concentration - Philosophy
PHIL 220 - Current Issues in Ethics
(Prerequisite: eligibility for ENGL 101) is a survey of the principles, theories, and concepts of moral character and conduct in Western culture, with an emphasis on how they apply to moral problems and decisions. Offered as needed.

Applicable toward graduation where program permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Philosophy
PHIL 230 - Philosophy of Religion (IAI: H4 905)
3-0-3
(Prerequisite: eligibility for ENGL 101) is a study of selected religious concepts and theories, such as the existence and nature of a deity, the nature of good and evil, reason and faith, ethics, the nature and possibility of an afterlife, and the nature of religious language. Offered as needed.

Applicable toward graduation where program permits:
Certificate or Degree - All Certificates and Degrees
Group Requirement - Humanities
Area of Concentration - Philosophy

## Physical Education

Note: Students may repeat P ED 100 and/or 110, 114, 120, or 214 up to three times for credit. A maximum of four credit hours in P ED may be counted toward graduation. After four credit hours P ED classes may be taken on an audit basis or through the Continuing and Professional Education non-credit option.

$$
\begin{aligned}
& \text { P ED } 100 \text { - Aerobics } \\
& \text { is a low-impact and/or step aerobics activity class designed to improve health and fitness, to increase } \\
& \text { energy levels, and to minimize stress. The class is coeducational and will meet the needs of all adults } \\
& \text { and levels of aerobic fitness from the beginner to the more advanced. Repeatability - } 3 \text { times. } \\
& \text { Offered as needed. } \\
& \text { Applicable toward graduation where program structure permits: } \\
& \text { Certificates or Degree - All Certificates and All Degrees } \\
& \text { Group Requirement - Not Applicable } \\
& \text { Area of Concentration - Not Applicable } \\
& \text { P ED } \mathbf{1 1 0} \text { - Personal Fitness }
\end{aligned}
$$

P ED 110 - Personal Fitness
is a class designed to emphasize the student's body development based on his or her abilities and fitness goals. The course uses stationary bicycles, treadmills, and stairclimbers along with universal weight machines and free weights. Repeatability - 3 times. Offered Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 111 - Basketball
0-2-1
is an activity course designed to provide instruction and practice of the basic skills used in playing the game of basketball. Special emphasis is placed on rules interpretation, skill development, and strategies. Offered as needed.

Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## P ED 112 - Volleyball

0-2-1
is an activity course designed to provide instruction and practice of the basic skills used in playing the game of volleyball. Instruction includes terminology and rules interpretation, skill development of the set, serve, block, and the spike as well as the playing of the game. Offered as needed.

Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 113 - Badminton
0-2-1
is an activity course designed to provide instruction in the basic skills of playing badminton. Special emphasis is placed on singles and doubles play, rules interpretation, terminology, and game strategy. Offered as needed.

Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 114 - Golf - Beginners
0-2-1
is an activity course designed to provide instruction in the basic skills used in the playing of golf. Special emphasis is placed on rules interpretation, terminology, and practice using the various clubs. Repeatability - 3 times. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 115 - Tennis ..... 0-2-1is an activity course designed to provide instruction in the basic skills used in the playing of tennis.Singles and doubles play, rules interpretation, terminology, and various tennis strokes will beemphasized. Offered as needed.
Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 116 - Flag Football
0-2-1
is an activity course designed to provide instruction in the playing of flag football. Emphasis is placed on rules interpretation, team play, and game strategy. Offered as needed.
Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 117 - Soccer
is an activity course designed to provide instruction and techniques in the playing of soccer. Team play, rules interpretation, and game strategy are emphasized. Offered as needed.
Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## P ED 118 - Racquetball

0-2-1
is a course designed to provide instruction and to play the game of racquetball. Emphasis is placed on strategy, singles, and doubles play, rules, and special strokes. Offered as needed.
Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 120 - Personal Defense
0-2-1
is a course designed to proved students with basic self-defense skills, either in the form of generic self-defense training or in the form of one of the various martial arts schools such as jujutsu, judo, aikido, or karate. In addition to physical self-defense skills, students will develop basic skills in awareness, self-control, avoidance of physical confrontations, and defusing imminent physical confrontations. Offered as needed.
Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Physical Education
P ED 121 - Bowling
0-2-1
is a basic skills class to introduce students to bowling as a lifetime activity. Repeatability -3 times. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 122 - Softball 0-2-1
is designed for students who wish to compete in softball at the intercollegiate athletic level. Repeatability - 3 times. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 160 - Beginning Swimming
0-2-1
is designed to aid the non-swimmer in acquiring such fundamental skills as floating, treading water, bobbing, elementary crawl strokes, and the elementary backstroke. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## P ED 161 - Intermediate Swimming

0-2-1
(Prerequisite: P ED 160 or equivalent swimming skills as evaluated by the instructor) is designed for the novice swimmer. Emphasis is placed on improving the crawl stroke, the sidestroke, and the breaststroke. Each student's endurance should improve considerably by the completion of this intermediate swimming course. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 162 - Advanced Swimming 0-2-1
(Prerequisite: P ED 161 or equivalent swimming skills as evaluated by the instructor) allows the student to improve his/her ability to use all basic swimming strokes. Emphasis is on safety, endurance, timing, and water games. Water safety involving boats is included. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 163 - Lifeguard Training
0-2-1
(Prerequisite: P ED 162 or equivalent swimming skills as evaluated by the instructor) offers the American Red Cross principles and techniques of lifesaving. Instruction is given in water safety, accident prevention, defense mechanisms, and the ability to assist and rescue others. Upon successful completion of the course, the student will be eligible for certification as a lifeguard by the American Red Cross. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## P ED 214 - Golf - Intermediate

0-2-1
is designed to continue to develop the fundamental skills necessary to swing a golf club and to apply those skills strategically to improve play on the golf course. Repeatability - 3 times. Offered Fall and Spring.

Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
P ED 215 - Wilderness Camping
0-4-2
provides, beginning with preparatory handouts and readings intended to familiarize the student with the skills, risks, and regulations associated with wilderness camping, a general overview of trip planning, equipment and clothing selection and packing, along with food selection and packaging. Field work will provide for hands-on learning experiences in primitive camping skills, food preparation, wilderness safety and survival, map reading, and backpacking. Repeatability - 3 times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificates or Degree - All Certificates and All Degrees
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

> Physical Science

PHY S 105 - Physics of Sound and Light (IAI: P9 900L)
(Prerequisite: eligibility for ENGL 101 and successful completion of MATH 091 [with a "C" or better grade] or equivalent competencies) is a laboratory course designed for non-science or education majors. Students will be introduced to basic concepts of motion, force, energy, waves, sound, and light. In addition, students are introduced to applications of these concepts, including interference, superposition, resonance, musical sound, pitch, timbre, diffraction, resolution, color, lasers, human vision, and corrective devices/procedures. Offered in Fall and Spring as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and Degrees
Group Requirement - Natural/Physical Science
Area of Concentration - Not Applicable

## Physics

PHYS 100 - Physics of the Modern World (IAI: P1 901)<br>4-0-4<br>(Prerequisite: eligibility for ENGL 101 and successful completion of MATH 091 [with a "C" or better grade] or equivalent competencies) is an introduction to some of the revolutionary ideas of twentieth-century physics, including quantum theory, atomic and nuclear physics, Einstein's theory of relativity, superconductors, and applications to technology. Offered Fall and Spring.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates and All Degrees<br>Group Requirement - Natural/ Physical Science<br>Area of Concentration - General Science<br>PHYS 101 - Introduction to Physics 1 (IAI: P1 900L) 3-2-4

(Prerequisite: successful completion of MATH 098 [with a "C" or better grade] or equivalent competencies and eligibility for ENGL 101) is the first physics laboratory course introducing students to contents and methods useful for careers in engineering, bio-medicine, physics, or mathematics. It is an algebra-based study of the physical world, covering topics such as mechanics, matter, work, energy, rotational dynamics, and sound. Student experiments in the laboratory are used to illustrate the concepts studied in the lecture and practiced in the problems. This course is also a useful introduction for students who have not had physics in high school but who plan to take the engineering physics sequence starting with PHYS 151. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural/Physical Science
Area of Concentration - General Science
PHYS 102 - Introduction to Physics 2
3-2-4
(Prerequisite: successful completion of PHYS 101 [with a " $C$ " or better grade] or equivalent competencies and eligibility for ENGL 101) is the second laboratory course introducing students to contents and methods useful for careers in bio-medicine, physics, or mathematics. It is an algebra-based study of the physical world, covering topics such as electricity and magnetism, optics, wave interactions, and atomic and nuclear physics. Student experiments in the laboratory are used to illustrate the concepts studied in the lecture and practiced in the problems. Offered in Fall as needed and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - General Science
PHYS 151 - Mechanics and Wave Motions (IAI: P2 900L, EGR 911) 3-2-4
(Prerequisite: MATH 121 or equivalent, MATH 122 or equivalent or concurrent enrollment, and one year of high school physics or PHYS 101) is a laboratory course designed for students who plan to major in the field of engineering, physics, or mathematics. It is a calculus-based study of the physical world, introducing students to such topics as vectors, motion, force, work, energy, momentum, torque, and simple harmonic motion. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - General Science, Physics
PHYS 152 - Electricity \& Magnetism (IAI: EGR 912)
(Prerequisite: PHYS 151 or equivalent competencies and MATH 122 or concurrent enrollment) is the second semester of the laboratory courses designed for students who plan to major in the field of engineering, physics, or mathematics. It is a calculus-based study of the physical world, introducing students to such topics as electric charges, electric potential, capacitance and dielectrics, current and resistance, direct current circuits, magnetic fields, magnetic forces, inductance, magnetic properties of matter, electromotive forces, alternating currents, and electromagnetic waves. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - General Science, Physics
(Prerequisite: PHYS 152 or equivalent competencies and MATH 122 or concurrent enrollment) is the third semester of the laboratory courses designed for students who plan to major in the field of engineering, physics, or mathematics. It is a calculus-based study of the physical world, introducing students to such topics as optics, the nature and properties of light, reflection, refraction, lenses and optical instruments; temperature, transfer of heat, thermal properties of matter, and the laws of thermodynamics; atoms, electrons and protons, the structure of the atom and the nucleus, radioactive decay and an introduction to nuclear physics. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Natural Science (AAS only)
Area of Concentration - General Science, Physics

## Political Science

## POL S 100 - People \& Politics (IAI: S5 903) <br> 3-0-3

provides a basic introduction to what politics is all about. It looks at why we think and feel as we do about politics and politicians and better informs the student about his/her own and other governmental systems. It also introduces the student to specific political concepts such as the ideologies of democracy, socialism, and communism. Leading political personalities of our time are discussed. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Not Applicable
POL S 110 - American National Government (IAI: S5 900, PLS 911)
3-0-3
(Prerequisite: eligibility for ENGL 101) uses a contemporary approach to American political behavior by viewing the forces that shaped our constitution, modern attitudes of liberalism and conservatism, the role played by political parties and the independent voter, Congress and the impact of special interest groups on that body, the modern presidency, and the important role the media plays in modern politics. Current topics of political interest are discussed throughout this course. This course is required for state teacher certification. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Political Science, Social Science
POL S 120 - Politics in States \& Communities (IAI: S5 902, PLS 915) 3-0-3
(Prerequisite: eligibility for ENGL 101) is a brief introduction into the history of state and local governments with emphasis on modern decision-making at the state and local level. Special consideration is given to current problems of modern urban America, including the topics of taxes, attempts to cut waste, pollution, and crime, and how government can effectively serve the needs of citizens without excessive cost. In addition, this course better acquaints the student with his/ her own local political environment through guest lectures, possible field trips to local and state seats of power, and other related experiences in the field. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Political Science, Social Science
POL S 290 - Internship in Political Science/Government
1-0-1 to 3-0-3
(Prerequisite: eligibility for ENGL 101 and instructor approval) involves participation in a work/ learning experience in an area of political science under the joint supervision of the College and the government internship sponsor. Internship objectives will be individually identified for each student involved and a paper of substantial quality is required in which the student discusses the internship experience. For 1 hour of credit, 5 hours of internship per week are required. This course may not be repeated for credit. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate of Degree - All Certificates, AAS, ALS, AA, AS
Group Requirement - Social Science
Area of Concentration - Political Science, Social Science

## Practical Nursing


(Prerequisite: completion of PN 103A and NURS 154) covers trends in the field of practical nursing regarding education and employment opportunities; preparation for licensure; job evaluation; legal responsibilities and the principles of a management of patient care will also be discussed. The clinical component provides experience in team building and leadership concepts. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Practical Nursing
PN 105 - Alterations Across the Lifespan
(Prerequisite: grade of "C" or better in PN 104A) facilitates the integration of knowledge from
general education, previous PN courses through a focus on the adaptive responses of the both
adults and children to external threats during acute and chronic illnesses, as well as decision-
making and utilization of the nursing process in delivering care. Nursing focus is on assessment
of adaptive responses to internal and external threats during acute illness, as well as decision-
making and utilization of the nursing process in delivering care. The nurse demonstrates core
values and serves as a caregiver, teacher, communicator, and advocate with growing indepen-
dence in the care of the patient with acute illness. Behaviors demonstrating the core values are
practiced and with growing independence. Supervised clinical experiences in various hospital
settings are included. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Practical Nursing
PN 106 - Alterations Across the Lifespan II
(Prerequisite: grade of "C" or better in PN 105 and completion of or concurrent enrollment in
ENGL 101 and a Special Topics in Healthcare Elective) facilitates the integration of knowledge
from general education and previous PN courses through a focus on the adaptive responses of
the both adults and children to external threats during acute and chronic illnesses, as well as
decision-making and utilization of the nursing process in delivering care. Nursing focus is on
assessment of adaptive responses to internal and external threats during acute, chronic and terminal
illnesses as well as decision-making and utilization of the nursing process in delivering care. The
nurse demonstrates core values and serves as a caregiver, teacher, communicator, and advocate
with independence. Behaviors demonstrate the core values and professional standards indepen-
dently. Supervised clinical experiences in various hospital settings are included. Offered in
Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Practical Nursing

## PN113 - PN Licensure Preparation

1-0-1
(Prerequisite: grade of "C" or better in PN 106, and completion of or concurrent enrollment in ENGL 101 and Special Topics in Healthcare elective) is the concise review of the information necessary to pass the NCLEX-PN licensing examination. This review includes maternity nursing, pediatric nursing, medical/surgical nursing, care of the older adult, pharmacology, nutrition, and psychiatric-mental health nursing. The nursing content has been organized according to the nursing process to enable the student to study according to the patient needs. Test questions and answers with rationales for the correct and incorrect answers are provided for each chapter. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Practical Nursing

## Psychology

## PSYCH 100 - Practical Psychology

is designed for students to develop a basic understanding of human behavior and the factors that influence human behavior and psychological development. Practical applications of psychological theories and research will be used to understand and explain psychological issues that most individuals experience. Topics include childhood, adulthood, aging, sexuality, schooling, career choices, stress, and health. Students who have earned credit for PSYCH 110 may not register for this course. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Not Applicable

## PSYCH 110 - Introduction to Psychology (IAI: S6 900, SPE 912) <br> 3-0-3

(Prerequisite: eligibility for ENGL 101) examines major psychological approaches to the study of human behavior and mental processes. It includes topics on the biological bases of behavior, learning, motivation, personality, stress, mental illness, memory, and perception. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Psychology, Social Science
PSYCH 130 - Psychology of Gender
3-0-3
(Prerequisite: PSYCH 100 or 110 or equivalent introductory Psychology course) is designed to increase students' knowledge and appreciation of the biological, psychological, and social origins and implications of gender differences as well as the similarities between the genders. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Psychology, Social Science
PSYCH 145 - Human Growth \& Development (IAI: S6 902, PSY 904) 3-0-3
(Prerequisite: PSYCH 110) covers the interaction and development of human physical, intellectual, and psychosocial behavior from conception through old age. Similarities and differences in physical, social, emotional, and cognitive development at various stages of the life cycle are studied. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Psychology, Social Science
PSYCH 150 - Child Psychology (IAI: S6 904, EED 902, PSY 901, SPE 913)
3-0-3
(Prerequisite: PSYCH 110) examines the behavioral development of the individual from conception through early adolescence. Consideration is given to the effects of psychological, social, and biological factors on that development. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Psychology, Social Science, Teacher EducationElementary/Secondary
PSYCH 200 - Educational Psychology (IAI: SED 902)
3-0-3
(Prerequisite: PSYCH 110) examines the application of psychological principles to education. Special emphasis is placed on understanding growth and development, the learning process, motivation, intelligence, evaluation, measurement, creativity, and the impact of culture on learning styles. The course requires formal classroom field experience to be arranged with the instructor. A student may not receive credit for both ED 200 and PSYCH 200. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Psychology, Social Science, Teacher EducationElementary/Secondary
PSYCH 210 — Social Psychology (IAI: S8 900, PSY 908)
3-0-3
(Prerequisite: PSYCH 110) studies the ways in which individuals are influenced by others. Topics include research methods, attitude development, person perception, interpersonal attraction, aggression, and group behavior. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Psychology, Social Science
PSYCH 220 - Psychology of Death and Dying3-0-3(Prerequisite: PSYCH 100 or PSYCH 110) examines the psychological aspects of death and thedying process by focusing on the existential problem of dying and on the interaction betweenthe dying person and the significant figures during the last phase of one's own death and the deathsof others, including an evaluation of some of the methods of dealing with the dying patient. Itinvestigates the psychological dynamics involved in those who are left behind (the bereaved) bythe dying person. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Psychology, Social Science

## PSYCH 250 - Human Sexuality

(Prerequisite: PSYCH 110) examines the physiological, psychological, and social dimensions of human sexuality. Topics to be covered include genetic and environmental influences on sexual development, effects of motivation and emotion on sexual behavior, sex-role identification, variations of sexual behavior, sexual abuse, and AIDS and other sexually transmitted diseases. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Psychology, Social Science
PSYCH 260 - Theories of Personality (IAI: PSY 907) 3-0-3
(Prerequisite: PSYCH 110) examines the classical theories of personality as outlined by major theorists of psychology. In addition to covering the basic concepts, the course also examines the origins, development, assumptions, and implications of each theory. Offered in Fall.
Applicable towards graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Psychology, Social Science
PSYCH 280 - Abnormal Psychology (IAI: PSY 905)
3-0-3
(Prerequisite: PSYCH 110) provides a description of abnormal behavior and an introduction to a variety of therapeutic approaches. Selected topics include a review of all major mental illnesses, including symptoms, proposed causes, statistics, and therapeutic treatments and interventions. Offered in Fall, Spring, and Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Psychology, Social Science

## Radiography


#### Abstract

RADT 101 - Introduction to Radiography 3-0-3 (Prerequisite: eligibility for ENGL 101 and MATH 098; may be currently enrolled in MATH 095) introduces students to the field of radiography and to the basic knowledge required to become a member of the profession. The students receive an overview of the content covered and expectations of the RCC Radiography Program. Topics include ethics and law in radiography, radiographic positioning terminology, imaging equipment, radiographic exposure and radiation protection, cultural diversity, and basic patient care. Offered in Fall.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates, AAS, ALS Group Requirement - Not Applicable Area of Concentration - Radiography


RADT 102 - Radiologic Patient Care ..... 3-1-3
(Prerequisite: admission to the Radiography)Program and concurrent enrollment in RADT 108) provides the student with the basic concepts of patient care, including consideration for the physical and psychological needs of the patient and family. Routine and emergency patient care is described, as well as infection control procedures utilizing standard precautions. The role of the radiographer in patient education will be identified. This course also includes basic concepts of pharmacology with an emphasis on contrast media. Student's patient care skills are assessed in a laboratory setting. Offered in Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 108 - Radiographic Procedures I
2-3-3
(Prerequisite: admission to the Radiography Program and concurrent enrollment in RADT 102) is designed to provide a knowledge base necessary to perform standard radiographic procedures. This course includes radiographic anatomy, pathologic indications, and positioning for chest, abdomen, and upper extremities. Consideration will be given to the production of radiographs of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of the course. Offered in Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 110 - Principles of Radiography I
3-0-3
(Prerequisite: completion of RADT 101, RADT 102 and RADT 108 with a grade of "C" or better and concurrent enrollment in or completion with a grade of " $C$ " or better in RADT 115, RADT 116, RADT 118 and BIOL 101) is designed to establish a knowledge base in factors that govern and influence the producing and recording of radiologic images. Students perform radiographic analyses to demonstrate understanding/application of theory. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 115 - Radiography Clinical I
0-18-3
(Prerequisite: completion of RADT 101, RADT 102 and RADT 108 with a grade of " $C$ " or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 110, RADT 116, RADT 118 and BIOL 101) includes content and clinical practice experiences designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patientcentered clinical practice and professional development are discussed, examined and evaluated. Clinical practice experiences provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient preparatory to, during, and following the radiologic procedure. Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 116 - Radiation Physics
3-0-3
(Prerequisite: completion of RADT 101, RADT 102 and RADT 108 with a grade of " $C$ " or better and concurrent enrollment in or completion with a grade of " $C$ " or better in RADT 110, RADT 115, RADT 118, and BIOL 101) is designed to establish a basic knowledge of atomic structure and terminology. Also presented are the nature and characteristics of radiation, x-ray production and the fundamentals of photon interactions with matter. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 118 - Radiographic Procedures II2-3-3
(Prerequisite: completion of RADT 101, RADT 102 and RADT 108 with a grade of "C" or betterand concurrent enrollment in or completion with a grade of "C" or better in RADT 110, RADT115, RADT 116 and BIOL 101) is designed to provide a knowledge base necessary to performstandard radiographic procedures. This course includes radiographic anatomy, pathologicindications, and positioning for lower limb, pelvis, cervical, thoracic and lumbar spines, ribs andsternum. Consideration will be given to the production of radiographs of optimal diagnosticquality. Laboratory experience will be used to complement the didactic portion of the course.Offered in Fall.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 120 - Principles of Radiography II
(Prerequisite: completion of RADT 110, RADT 115, RADT 116, RADT 118 and BIOL 101 with a grade of "C" or better and concurrent enrollment in or completion with a grade of " $C$ " or better in RADT 125, RADT 126, RADT 128, and BIOL 201) content is designed to establish a knowledge base in factors governing and influencing film. The content will also provide a basic knowledge of quality control/assurance, technique chart formulation, multiple exposure factor calculations, and image artifact recognition. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 125 - Radiography Clinical II
0-18-3
(Prerequisite: completion with a grade of "C" or better in RADT 110, RADT 115, RADT 116, RADT 118 and BIOL 101 and concurrent enrollment in or completion with a grade " $C$ " or better in RADT 120, RADT 126, RADT 128 and BIOL 201) is designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Clinical practice experiences provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient preparatory to, during and following the radiologic procedure. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 126 - Imaging Equipment 3-0-3
(Prerequisite: completion with a grade of "C" or better in RADT 110, RADT 115, RADT 116, RADT 118 and BIOL 101 and concurrent enrollment in or completion with a grade " $C$ "or better in RADT 120, RADT 125, RADT 128 and BIOL 201) provides an introduction to computing and information processing. Computer applications in the radiologic sciences related to image capture, display, storage and distribution are presented. Content is designed to establish a knowledge base in digital radiographic, fluoroscopic, digital fluoroscopic, and tomographic equipment requirements and design. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
(Prerequisite: completion with a grade of "C" or better in RADT 110, RADT 115, RADT 116, RADT 118 and BIOL 101 and concurrent enrollment in or completion with a grade " $C$ " or better in RADT 120, RADT 125, RADT 126 and BIOL 201) is designed to provide a knowledge base necessary to perform standard radiographic procedures. This course includes radiographic anatomy, pathologic indications, and positioning for skull and cranial bones; facial bones; paranasal sinuses, mastoids, and temporal bones; GI tracts; and urinary system. Consideration will be given to the production of radiographs of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of the course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 155 - Radiography Clinical III
0-21-3.5
(Prerequisite: completion with a grade of "C" or better in RADT 120, RADT 125, RADT 126, RADT 128 and BIOL 201) is designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Clinical practice experiences provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient preparatory to, during, and following the radiologic procedure. Offered in Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 215 - Radiography Clinical IV
0-24-4
(Prerequisite: completion with a grade of "C" or better in RADT 155 and concurrent enrollment in or completion with a grade "C" or better in RADT 218, RADT 219 and BIOL 202)
is designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Clinical practice experiences provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient preparatory to, during, and following the radiologic procedure. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography

## RADT 218 - Radiographic Procedures IV

2-3-3
(Prerequisite: completion with a grade of " $C$ " or better in RADT 155 and concurrent enrollment in or completion with a grade "C" or better in RADT 215, RADT 219 and BIOL 202) is designed to provide a knowledge base necessary to perform standard radiographic procedures. This course includes positioning for special procedures including arthrography, hysterosalipinography, myelography, venography and long bone measurement. Consideration will be given to the production of radiographs of optimal diagnostic quality. Laboratory experience will be used to complement the didactic portion of the course. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography

## RADT 219 - Radiation Protection \& Radiobiology

2-0-2
(Prerequisite: completion with a grade of "C" or better in RADT 155 and concurrent enrollment in or completion with a grade of "C" or better in RADT 215, RADT 218, and BIOL 202) is designed to present an overview of the principles of radiation protection including the responsibilities of the radiographer for patients, personnel and the public. Radiation health and safety requirements of federal and state regulatory agencies, accreditation agencies and health care organizations are incorporated. An overview of the principles of the interaction of radiation with living systems is covered. Radiation effects on molecules, cells, tissues and the body as a whole are presented. Factors affecting biological response are presented, including acute and chronic effects of radiation. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 225 - Radiography Clinical V
0-24-4
(Prerequisite: completion of RADT 215, RADT 218, and RADT 219, and BIOL 202 with a grade of "C" or better and concurrent enrollment in or completion with a grade of " $C$ ' or better in RADT 228, RADT 230, ENGL 101, and PSYCH 110) includes content and clinical practice experiences designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Clinical practice experiences provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient preparatory to, during, and following the radiologic procedure. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 228 - Radiographic Image Analysis
1.5-0-1.5
(Prerequisite: completion of RADT 215, RADT 218, and RADT 219, and BIOL 202 with a grade of "C" or better and concurrent enrollment in or completion with a grade of " $C$ " or better in RADT 225, RADT 230, ENGL 101, and PSYCH 110) is designed to emphasize principles of image analysis as it relates to anatomy, density, collimation, shielding, positioning and radiographic quality. Evaluation of and recommendations for improvement will be stressed. Identifying pathology and including the changes in technique required to compensate for density differences produced by the underlying pathologic conditions will also be covered. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography
RADT 230 - Radiography Seminar
2-3-3
(Prerequisite: completion of RADT 215, RADT 218 and RADT 219, and BIOL 202 with a grade of "C" or better and concurrent enrollment in or completion with a grade of " $C$ " or better in RADT 228, RADT 225, ENGL 101, and PSYCH 110) is designed to re-examine the knowledge, skills and attitudes required of the radiography profession. Topics addressed will be determined by the results of exams the students take that are similar in structure and content to the registry. Students create individual study plans to address their own areas of need. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Radiography

## Service Learning

SLRN 293 - Service Learning Internship (Variable Credit)
1-5 to 15-1 to 3
(Prerequisite: Students must have completed at least 30 hours of course work at RCC or another college or university and must obtain the approval of the Director of Campus Life and a disciplinelevel faculty member or dean in an appropriate discipline) is designed to provide students with opportunities to engage in their larger community through volunteer activities and service to the community. Students work with the Director of Campus Life and an appropriate faculty member to address community problems, to achieve real outcomes for the community, to gain deeper understanding and awareness of their community, and to develop skills that will enable them to become better citizens. Students are awarded course credit based on the scope of their service learning experience. Repeatable -3 times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Sciences (AAS only)
Area of Concentration - Social Sciences, Sociology
SLRN 294 - Service Learning in the Discipline 2-1-2
(Prerequisite: Students must have completed at least 30 hours of course work at RCC or another college or university and must obtain the approval of the Director of Campus Life and a disciplinelevel faculty member in an appropriate discipline) in this hybrid model, structured class meetings will emphasize theoretical perspectives of service learning, including leadership, citizenship, and community engagement, and will focus on application of discipline-related issues to the larger community. For a two-credit hour course, course requirements will include a minimum of 15 hours of volunteerism and 30 hours of classroom instruction. Within the context of the discipline for which credit is being applied, lecture and instructional activities will promote various aspects of responsible citizenship and will address how students can apply citizenship and leadership skills within their larger community. Lectures and classroom discussions will offer students the opportunity to analyze the relevance of discipline-related studies and the service learning experience. Class meetings will also include opportunities for students to reflect on their experiential learning. Repeatable -3 times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not applicable
Area of Concentration - Discipline-specific, based on the nature of the course
SLRN 295 - Problem Based/Project Based Service Learning (Variable Credit)
0-5 to 15-1 to 3
(Prerequisite: completion of at least 30 hours of course work at RCC or another college or university and approval of the Director of Campus Life and a discipline-level faculty member in an appropriate discipline.) Students participating in this model of service learning relate to the "community" somewhat like "consultants" working for a "client" for the purposes of addressing a specific problem or participating in or completing a service project. Under supervision and direction of the instructor who develops the course in consultation with appropriate stakeholders from the community or from a social service agency, students work collaboratively and in teams throughout the semester or for a designated period to understand the scope of the problem or need and to develop strategies and activities appropriate for addressing the problem or need. Students are expected to maintain logs of all project- or problem-related activities, to practice reflective learning through journaling, to develop and present to stakeholders a formal proposal or action plan for addressing the problem or need, and/or to complete a service learning project. Repeatable - 3 times. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Not applicable
Area of Concentration - Discipline-specific, based on the nature of the course

## Social Science


#### Abstract

SOC S 199 - Topics/Issues in the Social Sciences (Variable Credit) 1-0-1 provides the students an opportunity to participate in comprehensive discussion of a topic dealing with contemporary issue(s) in the social science (psychology, sociology, economics, history, political science, and public affairs). The course requires no prior depth of knowledge, but it is expected that the student has a particular interest in the seminar topic. Offered as needed.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates and All Degrees Group Requirement - Social Science (AAS, ALS only) Area of Concentration - Not Applicable SOC S 280 - Interdisciplinary Field Experiences in the Social Sciences 3-0-3 (Prerequisite: eligibility for ENGL 101) students travel with faculty to international or regional locations that may vary from year to year to study the social sciences and to increase their awareness and understanding of other societies. Each field experience will emphasize the historical, economic, political, and sociological aspects of the society of the locale being visited for the field experience portion of the class. Textbooks and readings from these disciplines will be a significant part of the course. Instructors from two or more of these disciplines will provide teaching relating to the field experience society. Classes will be held on campus prior to and following the offcampus learning experience. Field experiences will include individualized lectures, presentations, and directed field trips. The students will pay travel expenses. Offered as needed.

Applicable toward graduation where program structure permits: Certificate or Degree - All Certificates and All Degrees Group Requirement - Social Science (AAS, ALS only) Area of Concentration - Economics, History, Political Science, Sociology, Social Science


## Sociology

SOCIO 100 - People, Society, and Culture
3-0-3
is designed to provide an opportunity for students to develop a basic understanding of how culture, society, and groups in which they live and participate affect their lives. The course also can serve as a foundation for those who wish to familiarize themselves with fundamental concepts about behavior of people in groups prior to beginning a formal study of sociology. Students who have earned credit for SOCIO 110 should not register for this course except upon special approval of the Dean of Mathematics and Sciences and may receive credit toward graduation for only one of these two courses. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Not Applicable
SOCIO 105 - Domestic Violence and Intervention Techniques
2-0-2
is an overview of historical and societal attitudes toward domestic violence issues. Emphasis is on cycles of violence, abusive family patterns, crisis intervention, advocacy skills, and applicable state laws. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Social Science, Sociology
SOCIO 110 - Introduction to Sociology (IAI: S7 900)
3-0-3
(Prerequisite: eligibility for ENGL 101) provides a basic introduction to the discipline of sociology. The course explores the basic perspectives and methods of sociological inquiry, the relationships between humans, their society, and their culture, and the concept of social organizations. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Social Science, Sociology
(Prerequisite: one college-level course in sociology or psychology) is the study of contemporary issues and trends in parenting. Topics include the nature of parenting; parent-child relationships through various developmental stages; parental guidance of child's personal, social, and educational growth; the influence of different family structures on children; and trends in social attitudes toward children and families. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Social Science, Sociology/Psychology
SOCIO 130 - Criminology
3-0-3
(Prerequisite: eligibility for ENGL 101) is an introduction to criminology and includes basic concepts, coverage of the major criminological theories, and a brief look at the criminal justice system and the forms of crime. Special attention is given to white-collar crime. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Social Science, Sociology
SOCIO 135 - The Study of Substance Abuse 3-0-3
(Prerequisite: eligibility for ENGL 101) is the social-psychological study of the characteristics of substance abuse and the ramifications for society. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Social Science, Sociology/Psychology
SOCIO 141 - Introduction to Social Work (IAI: SW 911)
3-0-3
provides the student with an opportunity to become familiar with contemporary social work practice. This course includes observing the community services available, studying the methods used in the helping relationship, and applying the problem-solving approach to individual, family, and community problems. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Social Science, Sociology

## SOCIO 142 - Social Services Field Experience

1-10-3
(Prerequisite: completion of SOCIO 141 and permission of the Dean of Mathematics and Sciences or the class instructor) provides the student with an undergraduate practicum in social work. The student will work a minimum of 8-10 hours per week in an assigned social agency. One lecture hour includes evaluation of resources, referral and follow-up activity, awareness of unmet needs, and development of new resources when and where needed. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science (AAS only)
Area of Concentration - Social Science, Sociology
SOCIO 150 - Social Problems (IAI: S7 901, SOC 911)
(Prerequisite: SOCIO 110) provides exploratory studies of contemporary social problems using the concepts and techniques of sociological inquiry. Possible topics include alienation, population, drugs, work and leisure, poverty, aging, war, the environment, the sexual revolution, extremism and dissent, and technological progress. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Social Science, Sociology
SOCIO 200 - Marriage and the Family (IAI: S7 902, SOC 912)
(Prerequisite: SOCIO 110 or PSYCH 110) examines patterns of dating, courtship, and marriage with consideration given to the relationship between parents, children, and other members of the family unit. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Social Science, Sociology
SOCIO 210 - Sociology of Deviant Behavior (IAI: SOC 915) ..... 3-0-3(Prerequisite: SOCIO 110) explores causes and forms of deviant behavior. Topics coveredinclude juvenile delinquency, substance abuse and related problems, violent crime, white-collarcrime, victimless crime, and mental illness. Major sociological research and theory are reviewedand applied to explain deviant behavior. Offered in Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Sociology
SOCIO 225 - Race, Class, and Gender in the United States (IAI: SOC 913) 3-0-3
(Prerequisite: SOCIO 110) analyzes ways in which issues of race, class, and gender are embedded in ordinary communication and daily life in the United States. Topics include the social construction, economics, and consequences of difference, issues in U.S. law, maintaining hierarchies, and social control. Major sociological research and theory will be reviewed and applied. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Science
Area of Concentration - Social Science, Sociology

## SOCIO 293 - Service Learning Internship

1-10-1 to 3
(Prerequisite: Students must have completed at least 30 hours of course work at $R C C$ or another college or university and must obtain the approval of the Director of Campus Life.) is designed to provide students with opportunities to engage in their larger community through volunteer activities and service to the community. Students work with the Director of Campus Life to address community problems, to achieve real outcomes for the community, to gain deeper understanding and awareness of their community, and to develop skills that will enable them to become better citizens. Students are awarded course credit based on the scope of their service learning experience. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Social Sciences (AAS only)
Area of Concentration - Social Science, Sociology

## Spanish

SPAN 101 - Beginning Spanish $1 \quad$ 4-0-4
integrates the acquisition of basic Spanish by the communicative approach employing cultural materials. Together with SPAN 102, it is designed for students with no previous study of Spanish and also is the appropriate first college course for students who have accumulated fewer than five quality points for high school Spanish and/or those whose prior study of Spanish was completed more than five years ago regardless of earned quality points. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
SPAN 102 - Beginning Spanish $2 \quad$ 4-0-4
(Prerequisite: SPAN 101 or five to 11 quality points for high school Spanish completed within the past five years) is a continuation of SPAN 101. Two assigned 25-minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
SPAN 110 - Spanish for Educators ..... 4-0-4(Prerequisite: eligibility for ENGL 101) designed for education majors or anyone involved ineducation, the course provides functional basics in understanding and speaking Spanish in theclassroom. Vocabulary, grammar, and structures relevant to educational situations and settingsare emphasized. This is a one-semester career course; no prior Spanish is required. Offered asneeded.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Education, Foreign Language
SPAN 111 - Spanish for Healthcare Professionals
3-0-3
(Prerequisite: eligibility for ENGL 101) is designed for healthcare professional majors and provides functional basics in understanding and speaking Spanish in the medical field. Vocabulary, grammar, and structures relevant to medical situations and settings are emphasized. This is a one-semester career course; no prior Spanish is required. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Health Professions, Foreign Language

## SPAN 115 - Conversational Spanish 1 <br> 3-0-3

is an introduction to conversational Spanish skills with intensive oral practice in listening and speaking. The communicative approach in instruction will emphasize repetitions for natural language acquisition, conversational patterns, idiomatic vocabulary, basic grammar and syntax, cultural information, and selected readings. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language

## SPAN 198 - Selected Topics in Spanish: ICISP Summer Study Abroad <br> 4-0-4

(Prerequisite: six quarters or four semesters of college or four years of high school Spanish or consent of instructor and acceptance into the ICISP Summer Study Abroad Program) is specifically designed to address topics which necessitate a broader scope, a greater depth, and fuller assimilation of the course methods and materials. The student may take this course three times for credit as long as a different topic is selected. The topic is specified in the subtitle of the course listed in the class schedule. Offered in Summer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
SPAN 201 - Intermediate Spanish 1
4-0-4
(Prerequisite: SPAN 102 or 12 to 14 quality points for high school Spanish completed within the past five years) includes a wider range of reading selections than previous courses. Grammatical structure is reviewed, expanded, and incorporated in a communicative approach. Two assigned 25-minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities (AAS, ALS only)
Area of Concentration - Foreign Language
SPAN 202 - Intermediate Spanish 2 (IAI: H1 900)
4-0-4
(Prerequisite: SPAN 201 or 15 or more quality points for high school Spanish completed within the past five years) is a school continuation of SPAN 201, with increased attention to composition and conversation. Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Humanities
Area of Concentration - Foreign Language

## Speech

SPCH 101 - Principles of Speech (IAI: C2 900)
3-0-3
(Prerequisite: eligibility for ENGL 101) instructs students in the fundamentals of the public speaking situation and provides students with an opportunity to build poise and confidence through practice. Units of study include listening, communication theory, and informative and persuasive speaking. Laboratory time is provided to allow additional opportunities for student presentations and discussions. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications
Area of Concentration - Not Applicable
SPCH 110 - Discussion \& Group Conference (IAI: SPC 920)
3-0-3
examines the nature and effects of interpersonal communication in small groups. Major areas of study include effective leadership and participation in groups, problem-solving and decisionmaking discussion, conference planning, and parliamentary procedure. Students plan, lead, participate in, and evaluate discussions. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - Speech and Drama
SPCH 120 - Business \& Professional Speaking 3-0-3
develops and polishes the student's communication skills for business and professional use. Selfinventories are combined with interviewing, group dynamics, listening, negotiating, and conflict resolution as well as practice in specific public speaking situations. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - Speech and Drama
SPCH 140 - Forensic Activities (Repeatable)
0-2-1
(Prerequisite: SPCH 101 or consent of instructor) provides opportunities for students to perform in actual communications situations in the community and/or interscholastic speech competition. This course may be taken a maximum of four times for credit. (Note: Students must be currently enrolled in nine or more credit hours.) Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - Speech and Drama
SPCH 210 - Oral Interpretation of Literature (IAI: SPC 915, TA 916) 3-0-3
(Prerequisite: SPCH 101) emphasizes oral communication as a means of understanding, appreciating, and experiencing literature. Students learn theory and performance techniques through in-class presentations of a variety of literary forms. In addition to individual performances, each student will help plan and participate in a readers' theatre production. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS only)
Area of Concentration - Speech and Drama
SPCH 230 - Readers' Theatre (Group Interpretation)
3-0-3
(Prerequisite: SPCH 210 or consent of instructor) involves the compilation from the three basic genres of literature (prose, poetry, and drama) of a script on a common theme. Each selection is analyzed for character, plot, theme, and dramatic movement. The students will then develop oral interpretation skills in an effort to present this performance in one of several audience settings, i.e., college, community, and/or competition. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - Speech and Drama

## SPCH 240 - Intercultural Communications

3-0-3
provides an overview of the study of communication and culture through examination of communication barriers, dialects, structural, and phonetic differences among ethnic groups and Standard English speaking groups. This course includes both verbal and nonverbal communication. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and All Degrees
Group Requirement - Communications (AAS, ALS only)
Area of Concentration - Speech and Drama

## Surgical Technology

## SURGT 100 - Surgical Technology Orientation 2-0-2

(Prerequisite: admission to Surgical Technology Certificate and/or AAS program, completion of or concurrent enrollment in BIOL 220, ENGL 101, HLTH 140, and PSYCH 110, with a "C" or better or approval of the Surgical Technology Director) introduces and provides an orientation for students to the history of surgical technology, the surgical team members, hospital management, and the physical aspects of the operating room. Basic patient care concepts and issues concerning ethical, moral, and legal responsibilities are addressed. This introductory course includes classroom instruction and field trips to affiliate hospital facilities. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS
Group Requirement - Not Applicable
Area of Concentration - Surgical Technology

## SURGT 101 - Surgical Technology I

4-6-6
(Prerequisite: SURGT 100 or approval of the Surgical Technology Director; concurrent enrollment in or completion of BIOL 201 with a "C" or better) presents the basic patient care concepts, asepsis, and the surgical environment. Students are introduced to the fundamentals of surgical procedural techniques. A basic survey of pharmacology and its application in surgery are discussed. This course includes classroom and laboratory instruction with observational clinical experiences in the operating room. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates
Group Requirement - Not Applicable
Area of Concentration - Surgical Technology

## SURGT 102 - Surgical Technology II

4-9-7
(Prerequisite: SURGT 101 or approval of the Surgical Technology Director) presents the basic patient care and safety concepts, asepsis and the surgical environment, and surgical procedures. The surgical procedures include general surgery, gastrointestinal, and obstetrics-gynecology. Students are introduced to laser use, endoscopic technique, and drainage systems and tubes. With supervision, students participate in the perioperative care of surgical clients, using the concepts and skills presented in this course. Offered in Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS
Group Requirement - Not Applicable
Area of Concentration - Surgical Technology

## SURGT 201 - Surgical Technology III

8-15-13
(Prerequisite: SURGT 102 or approval of the Surgical Technology Director; concurrent enrollment in or completion of BIOL 202 with a "C" or better) studies the objectives, the role of the surgical technologist, and sequence of the following surgical procedures: genitourinary, ophthalmic, ear, nose, throat, plastic, orthopedic, neurological, thoracic, vascular, and cardiovascular. With supervision, students participate in the perioperative care of surgical clients, using the concepts and skills presented in this course. Offered in Fall.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS
Group Requirement - Not Applicable
Area of Concentration - Surgical Technology
(Prerequisite: SURGT 201 or approval of the Surgical Technology Director) affords students the opportunity of applying the knowledge and skills learned in other courses to the realities of the work world. This course introduces students to the world of work and assists them with the transition from school to work. Students' assignments at the surgical facility provide full-shift experiences in the routines and practices of the surgical facilities. Students are introduced to skills for getting and keeping a job. Students also prepare for the certification process. Offered in Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS
Group Requirement - Not Applicable
Area of Concentration - Surgical Technology
SURGT 290 - Internship in Surgical Technology
1-20-5
(Prerequisite: permission of the instructor) allows the student pursuing a degree in Surgical Technology the opportunity to apply the principles learned in the course work to the work situation through employment. In addition, the internship also allows the student to acquire additional knowledge from the work place. The participating student will be paid an hourly wage by the employer, and it will consist of 16-20 hours per week of employment over the semester. Offered Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and Degrees
Group Requirement - Not Applicable
Area of Concentration - Surgical Technology

## Theatre (See Drama)

## Transportation

## CDL 1000 - Tractor/Trailer Driver Training

3.5-7-7
(Prerequisite: ability to read and write the English language, 21 years or older, physically meet Federal Department of Transportation guidelines, possession of a valid driver's license at time of registration, possession of a current Motor Vehicle Report (MVR) from the Secretary of State's Office (Driver's License Bureau), and approval of the CDL Admissions Coordinator) is designed to provide individuals who have little or no commercial driving experience with the knowledge and skills necessary to obtain a Commercial Driver's License Learner's Permit. At the end of the course, students will take a Class "A" License road test administered by the Illinois Secretary of State's personnel. This course will also cover endorsement preparation, state and federal regulation, log books, map reading, trip planning, and complete vehicle training to prepare the individual for an entry level position in the transportation industry. Offered Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CDL 1001 - Class "B" License Training
.5-1-1
(Prerequisite: ability to read and write the English language, 21 years of age or older, physically meet Federal Department of Transportation guidelines, possession of a valid driver's license at the time of registration) is designed to provide individuals with the knowledge and skills necessary to obtain a Commercial Driver's License Learner's Permit. The course will cover endorsement preparation, regulations and complete vehicle (over $26,001 \mathrm{lbs}$ ) training to prepare the individual for an entry-level position in the transportation industry. Administration of the Class "B" road test will be performed by Illinois Secretary of State's personnel. Upon successful completion of the course, students will receive certificates. Offered as needed.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CDL 1002 — CDL Refresher - 8 hours ..... 5-0-. 5(Prerequisite: possession of a valid class " $A$ " License and an evaluation of the individual's currentknowledge and skill level) is designed for individuals who currently possess a valid CDL Licensewith an eight-hour overview of the knowledge and skills necessary to be employed in thetransportation industry that requires a Class "A" License. Information reviewed will be in the areasof endorsement preparation, regulations, log books, map reading, trip planning, and completevehicle review including basic skill and driving control. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CDL 1003 - CDL Refresher - 16 hours 1-0-1
(Prerequisite: possession of a valid Class " $A$ " License and an evaluation of the individual's current knowledge and skill level) is designed for individuals who currently possess a valid CDL License with a sixteen-hour overview of the knowledge and skills necessary to be employed in the transportation industry that requires a Class "A" License. Information reviewed will be in the areas of endorsement preparation, regulations, log books, map reading, trip planning and complete vehicle review including basic skill and driving control. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CDL 1004 - CDL Refresher - 40 hours
2-0-2
(Prerequisite: possession of a valid Class " $A$ " License and an evaluation of the individual's current knowledge and skill level) is designed for individuals who currently possess a valid CDL License (or those who had a CDL license in the past) with a sixteen-hour overview of the knowledge and skills necessary to be employed in the transportation industry that requires a Class "A" License. Information reviewed will be in the areas of endorsement preparation, regulations, log books, map reading, trip planning, and complete vehicle review including basic skill and driving control. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
CDL 1005 - CDL Permit
1-0-1
(Prerequisite: ability to read and write the English language, 21 years of age or older, physically meet Federal Department of Transportation guidelines, possession of a valid driver's license at the time of registration) is designed to provide individuals with the knowledge necessary to obtain a Commercial Driver's License Learner's Permit. The course will cover endorsement preparation and transportation regulations, which will prepare students to take the CDL Learner's Permit Test administered by the Secretary of State. Offered as needed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Welding Technology

## WELD 100 - 0xy-Acetylene and Plasma Arc Cutting

0-2-1
is designed to prepare students to perform oxy-acetylene and plasma arc cutting for production and maintenance work. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 101 - Shielded Metal Arc Welding
2-6-4
(Prerequisite: WELD 100 or equivalent competencies) is designed to prepare students to perform production welding, millwright work, and general maintenance welding. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
(Prerequisite: WELD 101 or equivalent competencies) is designed to prepare students to perform ASME code welds in the 2-G, 3-G, and 4-G positions. This class prepares students for pipe welding. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## WELD 103 - Welding Tools \& Safety

2-2-3
provides students with instruction covering essential, basic skills required for employment opportunities in all construction trade occupations. Subjects covered are safety, hand and power tool application and operation, introduction to blueprints, rigging. Completion of this course will prepare the student to enter further instruction in the Journeyman Pipe Fitter/Pipe Welder course. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 190 - Maintenance Welding
0-4-2
(Prerequisite: WELD 100 and WELD 101 or equivalent competencies) is designed to prepare students to perform basic industrial maintenance welds. These welds include oxy-acetylene brazing and soldering, arc welding of cast iron, and arc air cutting and gouging. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 195 - Industrial Welding Fundamentals (IAI: MTM 936)
1-4-3
introduces students to the basic welding processes commonly used in the mechanical maintenance areas where critical or certified welds are not required. The students learn the basic theory and application of the welding processes. The students become competent in flat position welding using the shielded metal arc welding and gas metal arc welding processes. Students also develop the basic ability to perform the following: oxy-acetylene welding and cutting; soldering and brazing; pipe repair welding; basic heat treat methods; periodic and preventative maintenance measures on welding equipment; and welding safety. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Manufacturing Technology/Machining
WELD 201 - Gas Metal Arc/Flux Core Arc Welding
0-4-2
is designed to prepare students to perform ASME code welds in the 1-G and 2-G positions using the GMAW and FCAW processes. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## WELD 202 - Welder Certification

(Prerequisite: WELD 102, WELD 201 and WELD 204 or equivalent competencies) is designed to prepare students to perform ASME code welds on plate in the 3-G and 4-G positions and pipe in the 6-G position. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 204 - Pipe Welding
0-8-4
(Prerequisite: WELD 102 and WELD 205 or equivalent competencies) allows students to develop the skills to weld pipe in $2-\mathrm{G}, 5-\mathrm{G}$, and $6-\mathrm{G}$ positions using the shielded metal arc welding process. The weld testing in this class is done in accordance with AWS and ASME standards. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AA, AS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not ApplicableWELD 205 - Gas Tungsten Arc Welding0-6-3(Prerequisite: WELD 101 or equivalent competencies) is designed to prepare students to performmaintenance and production welding using the gas metal arc process. Offered in Fall, Spring, andSummer.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AA, AS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## WELD 230 - Pipefitting Fundamentals

(Prerequisite: WELD 103) introduces students to many of the hand and power tools used to complete tasks associated with pipefitting. It also introduces the student to underground piping and excavations. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 231 - Pipefitting Applications
2-6-4
(Prerequisite WELD 103 or approval of instructor) builds upon the skills developed in the WELD 103 by introducing the student to drawings, trade math, advanced rigging, and pipe and piping support fabrication. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 232 - Pipefitting Techniques
2-6-4
(Prerequisite: WELD 103 or consent of instructor) begins to show the student how to apply advanced trade math and advanced blueprint reading along with information covering standards and specifications. This will help students determine installation procedures and proper piping support measures. Students will also become familiar with factors involved in route selection as well as testing systems and equipment. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 233 - Pipe Fabrication
1-4-3
(Prerequisite: WELD 103 or consent of instructor) permits the student to gain knowledge and expertise needed to perform advanced pipe fabrication as well as tasks associated with special piping. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 234 - Field Maintenance \& Safety
2-6-4
(Prerequisite: WELD 103 or consent of instructor) permits the student to gain knowledge and expertise needed to perform supervisory level work as a pipe fitter/welder on issues ranging from quality control, material requisition, and crew safety. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, A.LS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
WELD 240 - Non-Ferrous Welding
1-5-3
(Prerequisite: completion of basic Welding Certificate or consent of instructor) expands on welding techniques and processes learned in earlier courses by using the GTAW process on aluminum plate and SMAW on stainless steel pipe. Students will make welds in the following positions: 1G, 2G, 3G, 5G, 6G, 1F, 2F, 3F, and 4F. Offered in Fall and Spring.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

WELD 241 - GMAW/FCAW Pipe<br>0-7-3<br>(Prerequisite: completion of basic Welding Certificate or consent of instructor) expands on welding techniques and processes learned in earlier courses by using the GMAW and FCAW processes pipe. Students will making these welds in the following positions: 1G, 2G, 5G, and 6G. Offered in Fall and Spring.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates, AAS, ALS<br>Group Requirement - Not Applicable<br>Area of Concentration - Not Applicable<br>WELD 242 - Aluminum Plate \& Pipe<br>1-5-3<br>(Prerequisite: completion of basic Welding Certificate or consent of instructor) expands on welding techniques and processes learned in earlier courses by using the GTAW and GMAW processes on aluminum plate and pipe. Students will making these welds in the following positions:<br>1G, 2G, 3G, 5G, 6G, 1F, 2F, 3F, and 4F. Offered in Fall and Spring.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates, AAS, ALS<br>Group Requirement - Not Applicable<br>Area of Concentration - Not Applicable

## Adult Education Courses

All Adult Education classes (ABE, ASE, ESL) may be repeated up to three (3) times.

## Adult Basic Education - Beginning Level

ABE 010 - Basic Reading 1 (Variable Credit) 2-2-. 5 to 4
is designed for adult readers with a reading level of $0-5.9$ who want to improve their reading comprehension. Individualized or small group instruction is offered for each student with consideration given to individualized needs. Adult reading material is provided for the class. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE 011 - Basic Reading 2 (Variable Credit) 2-2-. 5 to 4
is designed for adult readers with a reading level of 0-5.9 who want to improve their reading comprehension and writing skills. Individualized or small group instruction is offered for each student with consideration given to their individualized needs. Adult reading material is provided for the class. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE 012 - Basic Reading 3 (Variable Credit)
2-2-. 5 to 4
is designed for adult readers with a reading level of $0-5.9$ who want to improve their reading comprehension, writing, and communication skills. Individualized or small group instruction is offered for each student with consideration given to individualized needs. Adult reading material is provided for the class. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE013 - Intermediate Reading 1 (Variable Credit) ..... 2-2-. 5 to 4is designed for adult readers with a reading level of $6-8.9$ who want to improve their readingcomprehension, writing, and communication skills. Individualized or small group instruction isoffered for each student with consideration given to individualized reading needs. Adult readingmaterial is provided for the class. This course is offered tuition free.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studiesexcept Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE 022B - Self-Esteem for the Family ..... 1-0-1
is designed to give parents reading at or below the 0-5.9 grade level tools they need to supporttheir child in school. They will be empowered to communicate with school staff, support schoolprogramming, and encourage their child's school success. This course is offered tuition free.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studiesexcept Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE 022I - Self-Esteem for the Family ..... 1-0-1
is designed to give parents reading at the 6-8.9 level the tools they need to support their child inschool. They will be empowered to communicate with school staff, support school programming,and encourage their child's school success. This course is offered tuition free.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
1-0-1 ABE 025B - Behavior Management ..... 1-0-1
is designed to give parents reading at the 0-5.9 level the opportunity to explore the issues that affect
how children learn acceptable behavior. Promoting respect for self and others and dealingconstructively with negative behavior are discussed. A variety of views on discipline are shared.Parents will keep a journal of their personal experiences for class discussion. At each session,children's books related to the topics are presented and distributed to the parents. This course isoffered tuition free.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE 025I - Behavior Management ..... 1-0-1
is designed to give parents reading at the 6-8.9 level the opportunity to explore the issues that affecthow children learn acceptable behavior. Promoting respect for self and others and dealingconstructively with negative behavior are discussed. A variety of views on discipline are shared.Parents will keep a journal of their personal experiences for class discussion. At each session,children's books related to the topics are presented and distributed to the parents. This course isoffered tuition free.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE O30B — Job Skills 1 (Variable Credit)$1-0-.5$ to 4
is a course designed for adults reading at the 0-5.9 grade level in which employment skills and
job search skills are presented and discussed. This course is offered tuition free.
Applicable toward graduation where program structure permits:
Certificate or Degree - Not Applicable
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## ABE 030I - Job Skills 1 (Variable Credit)

$1-0-.5$ to 4
is a course designed for adults reading at the $6-8.9$ level in which employment skills and job search skills are presented and discussed. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - Not Applicable
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ABE 031B - Job Skills 2 (Variable Credit)
1-0-. 5 to 4
is a course designed for adults reading at the $0-5.9$ level in which skills to obtain a job and to retain a job, the attitudes toward work, fellow employees, and the employing institution are reviewed. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - Not Applicable
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ABE 031I - Job Skills 2 (Variable Credit)
1-0-. 5 to 4
is a course designed for adults reading at the $6-8.9$ level in which skills to obtain a job and to retain a job, the attitudes toward work, fellow employees, and the employing institution are reviewed. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - Not Applicable
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ABE 032B - Job Skills 3 (Variable Credit)
1-0-. 5 to 4
is designed for adults reading at the $0-5.9$ grade level who wish to review and enhance their reading, writing, and math skills in preparation for job specific or employment training. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - Not Applicable
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ABE 032I - Job Skills 3 (Variable Credit)
1-0-. 5 to 4
is designed for adults reading at the $6-8.9$ level who wish to review and enhance their reading, writing, and math skills in preparation for job-specific or employment training. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - Not Applicable
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ABE 040B - Integrated ABE Study Skills (Variable Credit)
1-0-. 5 to 4
is designed for adults with a reading level comparable to the $0-5.9$ grade level who need integrated instructional review in reading, writing, arithmetic, and other basic skills. Individualized, small group instruction and computer-assisted learning are offered for each student with consideration given to individualized basic skills needs. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE 040 I - Integrated ABE Study Skills (Variable Credit) 1-0-. 5 to 4
is designed for adults reading at the 6-8.9 level who need integrated instructional review in reading, writing, arithmetic, and other basic skills. Individualized, small group instruction and computerassisted learning are offered for each student with consideration given to individualized basic skills needs. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills

## ABE 075 - 1 Pre-beginning General Educational Development (Variable Credit)

1-0-. 5 to 4

is designed for adults with a reading level of $0-5.9$ who need to prepare for General Educational Development coursework. Emphasis in the course is placed on basic reading, writing, and math skills. A placement test is required prior to enrollment. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills ABE 076 — Pre-General Educational Development 1 (Variable Credit) 4-0-. 5 to 4
is designed for adults with a reading level of $6-8.9$ who want to prepare for General Educational Development coursework. Emphasis in the course is placed on basic reading, writing, and arithmetic skills. A placement test is required prior to enrollment. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ABE 077 — Pre General Educational Development 2 (Variable Credit) 4-0-. 5 to 4
is designed for adults with a reading level of 6-8.9 who want to prepare for General Educational Development coursework. Emphasis is placed on reading, writing, and mathematics. A placement test is required prior to enrollment. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory or Basic Skills
ABE 078 - General Educational Development 3 (Variable Credit) 4-0-. 5 to 4
is designed for adults with a reading level of 6-8.9 who want to prepare for General Educational Development coursework. Emphasis in the course is placed on basic reading, writing, and mathematics skills. A placement test is required prior to enrollment. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills

## Adult Secondary Education

## ASE 022A - Self-Esteem for the Family

1-0-1
is designed to give parents reading at or above the 9 th grade level the tools they need to support their child in school. They will be empowered to communicate with school staff, support school programming and encourage their child's school success. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills ASE 025A - Behavior Management $\quad \mathbf{1 - 0 - 1}$
is designed to give parents reading at or above the 9 th grade level the opportunity to explore the issues that affect how children learn acceptable behavior. Promoting respect for self and others and dealing constructively with negative behavior are discussed. A variety of views on discipline are shared. Parents will keep journals of their personal experiences for class discussion. At each session, children's books related to the topics are presented and distributed to the parents. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
is a course in which employment skills and job search skills are presented and discussed. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills ASE 031A - Job Skills 2 (Variable Credit)

1-0-. 5 to 4
is a course designed for adults reading at or above the 9 th grade level in which skills to obtain a job and to retain a job, the attitudes toward work, fellow employees, and the employing institution are discussed. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ASE 032A - Job Skills 3 (Variable Credit)
1-0-. 5 to 4
is designed for adults reading at or above the 9 th level who wish to review and enhance their reading, writing, and math skills in preparation for job specific or employment training. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills ASE 040A - GED Test Review Individualized Study (Variable Credit) 1-0-. 5 to 4
is designed for adults with a reading level at or above the 9th grade level who need a review of test preparation skills and a specific overview of the General Education Development test (GED) to include the areas of writing skills, social studies, science, interpreting literature and the arts, and mathematics. Individualized, small group and computer-assisted learning is offered for each student with consideration given to individualized instructional needs. Simulated and predictive testing is included. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills

## ASE 071 - Classroom Anxiety Reduction

1-0-1
provides instruction that will help reduce the effect of performance-related classroom anxieties such as test anxiety. Class provides activities to reduce tension and improve classroom performance. Topics include study and test taking skills, coping and relaxation exercises, and stress management. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills ASE 079 - General Educational Development 4 (Variable Credit) 4-0-. 5 to 4
is designed to help individuals reading at or above the 9th grade level to prepare for the GED test through a review of reading, writing, and mathematics skills. A placement test is required for enrollment in the course. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills

## English as a Second Language Courses

ESL 081 — Pre-Beginning (Variable Credit) 1-2-. 5 to 4
is for students who function minimally in English. The course content covers beginning structure, pronunciation, vocabulary building, and limited reading and writing skills. The primary objective of the course is to help the students develop a basic comprehension of the English language. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ESL 082 - Beginning (Variable Credit)
1-2-. 5 to 4
is for students who have minimal experience and/or instruction in English. The course content covers beginning structure, pronunciation, vocabulary building, and reading and writing skills. The primary objectives of the course is to provide repetitive practice toward a meaningful and communicative use of the English language. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ESL 083 - Intermediate (Variable Credit)
1-2-. 5 to 4
is for students who have some experience and/or instruction in English. The course content reviews basic structure and pronunciation skills, continues vocabulary building, and devotes equal time to reading, speaking, and writing skills. The primary objectives of the course are to review and refine basic skills and to promote purposeful communication both in and out of the classroom. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies
except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills
ESL 084 - Advanced (Variable Credit)
1-2-. 5 to 4
is for students who have considerable experience and/or instruction in English. The course content includes review, advanced refinement, and expansion of listening, reading, speaking, and writing skills. The primary objective of the course is to provide opportunities for the student to develop confidence to use English proficiency in his/her everyday life, specifically to succeed in personal, work, and education-related experiences. This course is offered tuition free.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Basic Certificates in General Studies except Personal Development
Group Requirement - Not Applicable
Area of Concentration - Basic Certificate in Developmental, Preparatory, or Basic Skills

## Applied Learning Skills (ALS)

## ALS 090A - Diagnostic Module for Reading, Writing <br> 1-0-1

is designed to screen, test, and place students in the appropriate ALS module. Individualized instruction is based on student skill level and goals.

Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirements - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 090B - Diagnostic Module for Math/Technology/Science 1-0-1
is designed to screen, test, and place students in the appropriate math, technology, or science ALS module. Individualized instruction is based on student skill level and goals.

Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirements - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091A - Proportions, Ratios, Decimals, and Percents1-0-1
is a concentrated study designed for students who want to learn or improve skills in proportions, ratios, decimals, and percents. Instruction is individualized based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirements - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091B - Operations of Signed Numbers and Combining Like Terms
1-0-1
is designed for students who want to learn or improve their skills in operations of signed numbers and combining like terms. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirements - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091C - Solving Linear Equations and Inequalities
1-0-1
is designed for students who want to learn or improve their skills in solving linear equations and inequalities. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirements - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091D - Geometry of Plane Figures and Solids
1-0-1
is designed for students who want to learn or improve their skills necessary to solve geometric problems involving complex figures. This module is directly related to MATH 090 and MATH 091. The student is required to analyze figures, determine appropriate formulas of perimeter, area, volume, and surface area and then appropriately compute the volume or surface area of a figure. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091F - Operations of Fractions and Mixed Numbers
1-0-1
is designed for students who want to improve their skills in working with fractions. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091G - Operations of Decimals
1-0-1
is designed for students who want to improve their skills in working with decimals. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091H - Measurement Systems (English-Metric)
1-0-1
is designed for students who want to improve their skills in working with metric and English measurements. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies

## ALS 091I - Factoring

1-0-1
is designed for students who want to improve factoring skills to prepare for a math course.
Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091J - Solving Advanced Equations \& Inequalities ..... 1-0-1
is designed for students who want to improve their skills in the solving techniques for advanced equations. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091K - Coordinate Graphing 1-0-1
is designed for students who want to improve their skills in coordinate graphing. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091L — Solving Systems of Equations \& Inequalities 1-0-1
is designed for students who want to improve their skills in solving systems of equations with two or three variables by three different methods. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091M — Advanced Coordinate Graphing 1-0-1
is designed for students who want to improve their skills in graphing conic sections. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091N - Inequalities and Absolute Value
1-0-1
is designed for students who want to improve their skills in working with inequalities and absolute value. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 091P - Radicals and Rational Exponents 1-0-1
is designed for students who want to improve their skills in working with radicals and rational exponents. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 092A — Introduction to Word Processing for Composition Courses 1-0-1
is designed to introduce students to word processing skills necessary for composition courses at Richland. Students will review the keyboard and learn to set up, retrieve, save, and print a document as well as learn other skills such as running spell check, blocking and moving text, and other formatting skills. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 093A - ESL: Listening Preparation for the TOEFL: Short Conversation 1-0-1
is designed for advanced students of English as a second language who want to improve their listening skills in order to prepare for the short conversations, Part A, section of the Test of English as a Foreign Language (TOEFL). Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 093B - ESL: Listening Preparation for the TOEFL: Longer Conversation ..... 1-0-1
is designed for advanced students of English as a second language who want to improve their listening skills in order to prepare for the longer conversations, Part B, section of the Test of English as a Foreign Language (TOEFL). Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 093C - ESL: Preparation for the TOEFL: Idioms
1-0-1
is designed for advanced students of English as a second language who want to improve their skills in recognizing and understanding idioms in order to prepare for the listening and reading sections of the Test of English as a Foreign Language (TOEFL). Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 093D - ESL: Listening Preparation for the T0EFL: Lectures/Talks
1-0-1
is designed for advanced students of English as a second language who want to improve their listening skills in order to prepare for the lectures/talks, Part C, section of the Test of English as a Foreign Language (TOEFL). Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 093E - ESL: Preparation for the TOEFL: Tenses And Special Grammar 1-0-1
is designed for students who want to improve written verb forms. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies

## ALS 093F - ESL: Preparation for the TOEFL: Reading Comprehension-Content Areas1-0-1

is designed for students who want to improve reading comprehension in the content areas. Individualized instruction is based on student skill level and goals.

Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 093G - ESL: Preparation for the TOEFL: Adjectives and Adverbs
1-0-1
is designed for advanced students of English as a second language who want to improve their ability to recognize and understand situations which require adjectives and adverbs in order to prepare for the listening section and the structure and written expression section of the Test of English as a Foreign Language (TOEFL). Individualized instruction is based on student skill level and goals.

Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 093H — ESL: Preparation for the TOEFL: Inverted Word Order 1-0-1
is designed for advanced students of English as a second language who want to improve their ability to recognize and understand situations which require inverted word order in order to prepare for the listening section and the structure and written expression section of the Test of English as a Foreign Language (TOEFL). Individualized instruction is based on student skill level and goals.

Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 094A - Basic Comprehension I ..... 1-0-1
is designed for students who want to improve their reading comprehension and word attack skills in order to prepare for ENGL 088. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies

## ALS 094B — Study Skills I <br> 1-0-1

is designed for students who want to improve in their study skills and habits in order to prepare for ENGL 088. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 094D - Basic Comprehension II
1-0-1
is designed for students who want to extend their reading ability to cover necessary skills for college reading success. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 094E - Improving Vocabulary Skills
1-0-1
is designed for students who want to improve their vocabulary skills. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 095A - Sentence Structure I
1-0-1
is designed for students who want to improve skills in basic sentence structure. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies

## ALS 095B - Phrases and Clauses <br> 1-0-1

is designed for students who want to improve skills in phrases and clauses and sentence variety. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 095C - Standard Punctuation: The Comma
1-0-1
is designed for students who want to improve their use of the comma in order to write more clearly. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
ALS 095D - Basic Verb Review
1-0-1
is designed for students who want to improve the identification and use of various verb forms as well as understanding reasons for using particular tenses. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies

## 320 Course Descriptions

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ALS 097A - The Living World
                                    1-0-1
    is designed for students who want to improve their science vocabulary and analysis skills.
    Individualized instruction is based on student skill level and goals.
    Applicable toward graduation where program structure permits:
        Certificate or Degree - Basic Certificates
    Group Requirement - Preparatory to Other Studies
    Area of Concentration - Preparatory to Other Studies
ALS 097B - Basic Chemistry For Biology
1-0-1
is designed for students who want to improve chemistry skills needed for biological science classes.
Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
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## ALS 097C — Diffusion And Osmosis 1-0-1

```
is designed for students who want to improve their understanding of the process of diffusion and osmosis. Individualized instruction is based on student skill level and goals.
Applicable toward graduation where program structure permits:
Certificate or Degree - Basic Certificates
Group Requirement - Preparatory to Other Studies
Area of Concentration - Preparatory to Other Studies
```


# Richland Community College Correctional Education Programs Division 

## Decatur Correctional Center

Programs: Commercial Custodial
Computer Technology
Food Service
Youthful Offender Counseling
General Studies Courses
Job Preparedness

Jacksonville Correctional Center
Programs: Commercial Custodial
Computer Technology
Construction Occupations
Horticulture
Youthful Offender Counseling
General Studies Courses
Job Preparedness

## Lincoln Correctional Center

| Programs: | Business Management |
| :--- | :--- |
|  | Commercial Custodial |
|  | Computer Technology |
|  | Construction Occupations |
|  | Youthful Offender Counseling |
|  | General Studies Courses |
|  | Job Preparedness |

## Logan Correctional Center

Programs: Business Management Commercial Custodial Computer Technology Construction Occupations Food Service Horticulture Youthful Offender Counseling General Studies Courses Job Preparedness

Jacksonville Correctional Center - Pittsfield Work Camp

Programs: Commercial Custodial Job Preparedness

Pontiac Correctional Center
Programs: Job Preparedness

## Correctional Education Programs Division Occupational Certificate Programs

The following occupational certificate programs are available only to students enrolled in the College's Correctional Center Programs.

## Business Management

The Business Management Certificate is planned to provide educational experiences that will enable students to develop competencies needed for immediate employment as management trainees, business owners and operators, sales and customer services representatives, or related employment. Emphasis is placed on business communications, computer software, accounting, management, marketing and entrepreneurship.

Basic Certificate Requirements - ICCB Code 4003

| Business Management <br> COURSE | Credit <br> Hours | Basic <br> Cert. |
| :--- | :---: | :---: |
| DTMA 100:Vocational-Technical Math | 3 | X |
| DKEY 102: Keyboarding | 2 | X |
| DBUS 110: Introduction to Business | 3 | X |
| DBSI 111: Business Software Applications I | 3 | X |
| DBCOM 112:Business Communications | 3 | X |
| DBSII 113: Business Software Applications II | 3 | X |
| DACCT 114:Accounting | 3 | X |
| DMKT 115:Marketing | 3 | X |
| DMGMT 116: Management | 3 | X |
| DENTR 117:Entrepreneurship | 3 | X |
| DBSI 118: Business Software Applications III | 3 | X |
| Total |  | $\mathbf{3 2}$ |

X = Required

## 322 Course Descriptions

## Course Descriptions:

DKEY 102 - Keyboarding
.5-.5-2
is designed to familiarize the student with the computer keyboard. The student will touch type using the alphabetic keyboard and the numeric tabulator pad. Emphasis will be placed on proper keyboarding techniques as well as speed and accuracy.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DBUS 110 - Introduction to Business <br> 3-0-3

provides an introduction to basic business principles. Types of business organization and legal and financial guidelines are also presented.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DBSI 111 - Business Software Applications I

.5-5-3
is designed to prepare students to use computer word processing software to create business documents. Students also learn the basic skills needed to use and manipulate data to prepare technical reports, and to present business information in a professional manner and format.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DBCOM 112 - Business Communications

1-4-3
introduces students to the use of written, oral, and non-verbal communications in business. Various types and formats for business correspondence are presented. Business employability skills and career planning are stressed in this course and reinforced throughout the remainder of this program.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DBSII 113 - Business Software Applications II

.5-5-3
is designed to prepare students to use computer word processing software to create business documents. Students also learn the basic skills needed to use and manipulate data to prepare technical reports and to present information in a professional manner and format.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DACCT 114 - Accounting

1.5-3-3
introduces the accounting cycle and prepares students to use double-entry accounting systems for small businesses. Basic math skills are reviewed and used to solve business-related problems.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DMKT 115 - Marketing

2.5-1-3
teaches students how to develop and market goods and services. Customer bases, market segmentation, product development, and advertising and promotion, pricing, distribution and customer sales/service are all covered in this course.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DMGMT 116 - Management <br> 2.5-1-3

introduces students to principles of business management and develops skills needed to manage people and resources. Key principles for planning, leading, organizing, controlling and directing organizational members are covered.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DENTR 117 - Entrepreneurship 1-4-3
prepares students to identify various types of business ownership, recognize entrepreneurship opportunities and apply basic economic principles to the business setting. Business rules and regulations regarding banking, licensure, franchising, credit and insurance are also covered. Students develop a business plan as the culmination of this course.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DBSI 118 - Business Software Applications III
.5-5-3
introduces students to electronic database programs that can be used in business situations. Students build upon the skills they developed in Business Software Applications II to analyze and use data needed in business reports.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Commercial Custodial Services

The Commercial Custodial Services Certificate is planned to provide educational experiences that will enable students to develop the competencies needed for employment as light cleaners and/or floor care technicians in the custodial field. The course sequence begins with health and safety procedures and covers floor and carpet care as well as general cleaning practices.

## Basic Certificate Requirements - ICCB Code: 4002

| Business Management <br> COURSE | Credit <br> Hours | Basic <br> Cert. |
| :--- | :---: | :---: |
| DTMA 100: | Vocational-Technical Math | 3 |
| DCUST 120: | Introduction to Custodial Services | 3 |
| DCLEA 121: | X |  |
| DFLCeral Cleaning Practices | 3 | X |
| DCARP 122: | Hard Floor Care | Carpet and Upholstery Care |
| Total | 4 | X |

$\mathrm{X}=$ Required

## Course Descriptions:

DCUST 120 - Introduction to Custodial Services
covers machine and electrical safety, the detergency process, and chemical use, handling and mixing. Guidelines for working with blood borne pathogens and complying with OSHA and EPA regulations are stressed. Basic employability skills and career opportunities in this field are also covered.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates and ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## 324 Course Descriptions

## DCLEA 121 - General Cleaning Practices

covers the people, policies, and procedures involved in the cleaning industry. Selection of the proper equipment for each task, waste disposal, surface cleaning, vacuuming and dusting in a variety of commercial and public settings are emphasized.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DFLCA 122 - Hard Floor Care 1-6-4

covers the identification of various types of flooring and the routine and restorative methods of floor care including: dust mopping, buffing/burnishing, machine scrubbing, removing and applying finishes. The proper use, care and maintenance of floor care equipment are emphasized throughout the course.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DCARP 123 - Carpet and Upholstery Care
1-6-4
covers material and fiber identification for various types of carpets and upholstery fabrics along with the routine and restorative procedures to be used with each type. Students gain experience with various methods of carpet and upholstery care including shampooing, extraction, bonnet cleaning, dry absorbent compound cleaning, and spot/stain cleaning. Proper use, care and maintenance of carpet and upholstery equipment are also emphasized.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Computer Technology

The Computer Technology I Certificate is planned to provide educational experiences that will enable students to develop competencies needed for immediate employment as entry-level operators for data processing installations, data entry personnel, customer service representatives, or related employment. Emphasis is placed on utilization of existing industry software in such areas as word processing, spreadsheets, data base applications, and presentations.

The Computer Technology II Certificate is planned to provide educational experiences that will enable students to develop additional competencies needed for immediate employment as entry-level programmers. Emphasis is placed on system design, logic, networking, and Visual Basic.

Computer Technology I
Certificate Requirements - ICCB Code: 4005

| Computer Technology I <br> Courses | Credit <br> Hours | Basic <br> Cert. |
| :--- | :---: | :---: |
| DTMA 100: Vocational-Technical Math | 3 | X |
| DCOMP 100: Computers in the Workplace | 4 | X |
| DCTEC 101: Computer Occupations Skills | 3 | X |
| DKEY 102: Keyboarding | 2 | X |
| DOPSY 103: Introduction to Operating Systems | 3 | X |
| DWP 104: Word Processing Software Applications | 3 | X |
| DSSHT 105: Spreadsheet Software Applications | 3 | X |
| DDBAS 106: Data Base Software Applications | 3 | X |
| DIPS 107: Intro to Presentation Software Applications | 3 | X |
| Total |  | $\mathbf{2 7}$ |

## Computer Technology II Certificate Requirements - ICCB Code: 4014

| Computer Technology II <br> Courses | Credit <br> Hours | Basic <br> Cert. |
| :--- | :---: | :---: |
| In addition to the Computer Technology I requirements |  |  |
| DWPD 100: Introduction to Web Page Design | 3 | X |
| DCLPS 107: Computer Logic and Problem Solving | 4 | X |
| DVB 108: Introduction to Programming | 4 | X |
| DDPUB 109: Desktop Publishing | 3 | X |
| Subtotal |  | $\mathbf{1 4}$ |
| Total |  | $\mathbf{4 1}$ |

X = Required

## Course Descriptions:

## DCOMP 100 - Computers in the Workplace

.5-7-4
is designed to emphasize how computer technology is used to solve problems encountered in today's workplace. This course will emphasize individual student's career aspirations, with particular attention to workplace ethics.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DCTEC 101 - Computer Occupations Skills
.5-5-3
is designed to familiarize the student with computer terminology, fundamentals, hardware and software components, current issues, and employability skills.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DKEY 102 - Keyboarding
.5-3-2
is designed to familiarize the student with the computer keyboard. The student will touch type using the alphabetic keyboard and the numeric tabulator pad. Emphasis will be placed on proper keyboarding techniques as well as speed and accuracy.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DOPSY 103 - Introduction to Operating Systems

.5-5-3
gives the student an overview of different operating systems and the Windows environment. Hands-on experiences will be provided in a variety of operating environments.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DWP 104 - Word Processing Software Applications
.5-5-3
is designed so the student will become proficient in formatting, editing, printing, working with graphics, merging documents, using fonts, and other functions that are possible with word processing software.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DSSHT 105 - Spreadsheet Software Applications ..... 5-5-3allows students to setup a spreadsheet, enter data, modify a spreadsheet, edit, use a spreadsheetto manipulate data, create graphs, formulate reports, and write formulas.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DDBAS 106 - Database Software Applications

.5-5-3
gives students the ability to define and explain key terms to database software applications, concepts, packages, and versions. Students also create, edit, view, save, and print documents generated by database applications; generate reports; utilize data screen displays using function of database application packages; and identify career opportunities and business applications in database applications processing.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DIPS 107 - Introduction to Presentation Software Applications
.5-5-3
is designed to familiarize the student with presentation software. Students acquire the ability to create manual and automated presentations, add text, insert objects, manipulate objects, as well as customizing objects within presentations. Emphasis is placed on creativity, editing presentations, embedding hyperlinks, customizing presentations, generating meeting notes, navigation of slides, printing and exporting slides.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DWPD 100 - Introduction to Web Page Design
.5-5-3
teaches basic Webpage design and HTML concepts as well as screen design techniques and applications.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DCLPS 107 - Computer Logic and Problem Solving
.5-7-4
is a hands-on course designed to give the student a good background in computer logic and problem solving. The student will become proficient in creating flowcharts and Pseudocode to solve computer-programming problems involving analytical thinking.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DVB 108 - Introduction to Programming
.5-7-4
is a hands-on, object oriented programming course designed to give the student the fundamentals in writing, editing, running, and debugging programs using Visual Basic language. Students will use object-oriented and design concepts in event-driven programs.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DDPUB 109 - Desktop Publishing

.5-5-3
gives the student a good background in the desktop publishing applications. Topics include creating objects, using various input and output devices, object manipulation utilizing the Windows environment. Various page layouts and templates are also explored.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Construction Occupations

The Construction Occupations Certificate is planned to provide educational experiences that will enable students to develop the competencies needed for immediate entry-level employment in occupations such as painter, carpenter, laborer, drywall finisher, roofer, and remodeler, or as preparation for continued education in construction technology.

## Basic Certificate Requirements - ICCB Code: 4020

| Computer Technology I <br> Courses | Credit <br> Hours | Basic <br> Cert. |
| :--- | :---: | :---: |
| DTMA 100: | Vocational-Technical Math | 3 |
| DCON 100: | Intro to Construction Occupations | 4 |
| DCON 105: | Blueprint Reading | 4 |
| DCON 110: | Basic Masonry and Concrete Finishing | X |
| DCON 115: | Basic Carpentry I | 4 |
| DCON 120: | Basic Carpentry II | X |
| DCON 125: | Basic Plumbing | 4 |
| DCON 130: | Residential Wiring | X |
| DCON 135: | Painting and Finishing | 4 |
| Total | 3 | X |
| $X$ |  | $\mathbf{3 4}$ |

X = Required

## Course Descriptions:

## DCON 100 - Introduction to Construction Occupations

covers the basic safety principles fundamental to construction, including the correct and safe use of hand and power tools, emergency and first aid procedures, and avoiding hazardous conditions. It prepares students to identify, obtain, and keep jobs in the construction/maintenance field. Essential employability skills are introduced in this course and reinforced throughout the remainder of the program.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DCON 105 - Blueprint Reading 1-6-4
teaches students to read and interpret construction symbols and blueprints, and to read and interpret appropriate building codes. Students will learn how to sketch and dimension rough drawings.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DCON 110 - Basic Masonry and Concrete Finishing
.5-7-4
prepares students to identify masonry tools, materials, and procedures, to pour concrete, and to set brick and/or block.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DCON 115 - Basic Carpentry I
.5-7-4
is the first of two carpentry classes that prepares the student to be able to perform basic rough carpentry skills and techniques used in the construction and remodeling industries.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DCON 120 - Basic Carpentry II

.5-7-4
continues to build on the rough carpentry skills covered in Carpentry I and introduces basic finish carpentry knowledge and skills needed for entry-level employment in construction and remodeling.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## 328 Course Descriptions

DCON 125 - Basic Plumbing .5-7-4<br>introduces basic plumbing knowledge and skills utilized in the construction industry.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates, ALS Degree<br>Group Requirement - Not Applicable<br>Area of Concentration - Not Applicable<br>DCON 130 - Residential Wiring<br>introduces basic electrical knowledge and skills utilized in residential wiring applications.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates, ALS Degree<br>Group Requirement - Not Applicable<br>Area of Concentration - Not Applicable<br>DCON 135 - Painting and Finishing<br>1-4-3<br>introduces the student to various types of surfaces and surface preparation for finishing. Students learn to identify and apply different types of finishing materials and wall coverings.<br>Applicable toward graduation where program structure permits:<br>Certificate or Degree - All Certificates, ALS Degree<br>Group Requirement - Not Applicable<br>Area of Concentration - Not Applicable

## Food Service Technology

The Food Service Certificate is planned to provide educational experiences that will enable students to develop competencies needed for immediate employment in the food service industry. Emphasis is placed on public health sanitation and safety, food preparation, and presentation.

Basic Certificate Requirements - ICCB Code: 4001

| Basic Certificate <br> Courses | Credit <br> Hours | Basic <br> Cert. |
| :--- | :---: | :---: |
| DTMA 100: | Vocational-Technical Math | 3 |
| DFOOD 130: | Introduction to Food Service | 3 |
| DSANI 131: | Sanitation and Safety | 3 |
| DFPRE 132: | Food Preparation Methods | X |
| DBAKI 140: | Baking I | 3 |
| DBAKE 133: | Baking II | X |
| DPROD 134: Produce Preparation | 4 | X |
| DMEAT 135: | Meat, Poultry and Fish Preparation | 3 |
| DSSS 136: | Stock, Soup and Sauce Preparation | 4 |
| DFP 137: | Food Presentation | 3 |
| DCFS 138: | Careers in Food Service | 2 |
| Total |  | 1 |

$\mathrm{X}=$ Required

## Course Descriptions:

DFOOD 130 - Introduction to Food Service
3-0-3
covers the basic work attitudes, characteristics, and skills needed to work in the food service industry. Food service terminology, equipment identification and usage, information about types of foods and trends in the food service industry, and the development of interpersonal and communication skills are stressed. Work behaviors and concepts covered here will be reviewed and reinforced throughout the rest of the program.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DSANI 131 - Sanitation and Safety ..... 2-2-3
prepares students to take and pass the Illinois State Sanitation Exam. The development of safe andsanitary working habits needed by each food service worker is stressed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DFPRE 132 - Food Preparation Methods 1-4-3
(Prerequisite: DFOOD130) provides an introduction to food preparation and covers skillsinvolved in preparing breakfast foods, sandwiches, starch products, eggs and dairy items.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DBAKI 140 - Baking I
$\quad$ (Prerequisite: DFPRE132) covers fundamental principles of baking. Students learn to prepare biscuits, muffins, quick breads and a variety of types of pies.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DBAK 133 - Baking II
.5-7-4
(Prerequisite: DBAKII40) covers the advanced principles of baking and leavening agents. The production of yeast items is also covered.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DPROD 134 - Produce Preparation
1-4-3
(Prerequisite: DFPRE132) covers the preparation of vegetables and fruits for serving and storage. Salad and salad dressing preparation and cooking techniques for fruits and vegetables are also stressed.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DMEAT 135 - Meat, Poultry, and Fish Preparation
2-4-4
(Prerequisite: DFPRE132) teaches the student to identify wholesale and food service cuts of beef, pork, veal, and lamb, as well as principles of preparing meats, fish, and poultry.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DSSS 136 - Stock, Soup, and Sauce Preparation
1-4-3
(Prerequisite: DFPRE132) teaches the student to prepare and use stocks, soups, and sauces.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DFP 137 - Food Presentation
(Prerequisite: DFPRE132) covers principles and preparation of the presentation of food from plating and garnishing through waiting on guests. Various serving styles are covered.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DCFS 138 - Careers in Food Service
1-0-1
prepares students to seek job opportunities in the food service industry.
Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## Horticulture

The Horticulture Certificate is planned to provide educational experiences that will enable students to develop competencies needed for immediate employment as horticulture workers. Emphasis is placed on soils, pest control, green house and nursery management, and landscape design and installation.

## Basic Certificate Requirements - ICCB Code: 4000

| Basic Certificate <br> Courses | Credit <br> Hours | Basic <br> Cert. |
| :--- | :---: | :---: |
| DTMA 100: Vocational-Technical Math | 3 | X |
| DHRT 140: Introduction to Horticulture | 3 | X |
| DSOIL 141: Soils | 2 | X |
| DPEST 142: Pest Control | 3 | X |
| DGRHS 143: Green House Operations | 4 | X |
| DTURF 144: Turf Grass Management | 3 | X |
| DNURS 145: Nursery Operations | 3 | X |
| DLPI 146: Landscape Plant Identification | 4 | X |
| DLDI 147: | Landscape Design \& Installation | 4 |
| DLPM 148: Landscape Plant Maintenance | 3 | X |
| Total |  | $\mathbf{3 2}$ |

X = Required

## Course Descriptions:

DHRT 140 - Introduction to Horticulture
2-2-3
acquaints the student with a basic understanding of the form and function of plants. This course will cover employability opportunities and skills necessary for employment, which will be reinforced throughout the remainder of the program.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DSOIL 141 - Soils
1.5-1-2
gives the student an overview of soil structure, horizons textural classifications and chemical properties. It provides a basic knowledge of soil PH , nutrient requirements and water requirements. Concepts for soil analysis and recommendations for tilth improvement, fertility and conservation practices are also covered.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DPEST 142 - Pest Control 2-2-3
includes identification of major pests, their life cycles and the damage they cause. Feasibility and methods of horticultural pest control are covered, along with the proper identification and usage of pesticides. Proper safety procedures are emphasized throughout the course. At the conclusion of this course students will be able to pass the Illinois Commercial Pesticide Operator Core Test and the Private Pesticide Applicator Test.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DGRHS 143 - Greenhouse Operations

is an introductory course designed to give students a basic understanding of the maintenance and proper use of greenhouse structures and equipment. Proper safety procedures, growing techniques, and management practices used in producing greenhouse crops are covered.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
provides the basic knowledge and skills for a career in turfgrass management, with emphasis on the establishment, renovation, and maintenance of turfgrass. Students will identify and examine cultural requirements for major turfgrasses in Illinois. In addition, students will identify insects, weeds, diseases, and other pests common to the region.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## DNURS 145 - Nursery Operations

1.5-3-3
includes principles of woody plant production from planning to salable plants. Cultural procedures for field and container nursery production will be introduced. Approved practices of fertilization, pest control, planting, irrigation, over-wintering and harvesting are introduced.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DLPI 146 - Landscape Plant Identification
1-6-4
introduces students to woody and herbaceous perennials. Students will learn how to identify plants according to leaf, overall shape, size, and use. Plants will be grouped by deciduous or evergreen trees, shrubs, and ground covers.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DLDI 147 - Landscape Design and Installation
.5-7-4
covers basic principles of landscape design, sketching of the landscape, and techniques and materials used in the landscape. It includes basic structures and other non-plant materials used in the landscape and provides a basic knowledge of plant selection, planting procedures, and construction materials as presented in the landscape plan.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
DLPM 148 - Landscape Plant Maintenance
2-2-3
covers principles for maintaining landscapes through proper care, fertilization, irrigation, disease and pest control, pruning, and other techniques.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable

## College General Studies

DTMA 100 - Vocational-Technical Math 3-0-3
covers the use of the following math skills in solving occupational problems: whole numbers, fractions, and decimals; percent; measurement; formulas and equations; lines, angles and shapes; positive and negative numbers; and ratios and proportions.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, ALS Degree
Group Requirement - Not Applicable
Area of Concentration - Not Applicable
ETC 100 - Education-To-Careers Seminar
3-0-3
provides orientation for transitioning from education to careers including interview techniques, resume writing, personal growth, and finance.

Applicable toward graduation where program structure permits:
Certificate or Degree - All Certificates, AAS, AS, AA, ALS
Group Requirement - Not Applicable
Area of Concentration - Not Applicable


## Inspiration!




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## Dedication!



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## Professor Emeritus

The status of Professor Emeritus is granted to faculty who have demonstrated exemplary service over the course of their careers. This appointment recognizes the value that the College places on the experience, knowledge, and ability of its retiring/retired faculty. The following faculty met the criteria established by the College and were recommended by a committee of their peers.

## 2006 Professor Emeritus

Fred Ellis, Economics
Glen Freimuth, Earth Sciences
Dr. William Grieve, History
Dr. Madelyn Mihm, English and French
Dr. Jeanelle Norman, English
Lonn Pressnall, Speech and Drama

## 2007 Professor Emeritus

Karen Baird, Biology
Steven Dyer, Drafting, CAD, and Welding
Frank Weisenmeyer, Electronics
Jolene Wiegard, Office Technology


Contemplation...
Independence!

A
A cademic Advisement ..... 36
A cademic Competitive Grants ..... 29
Academic Dishonesty Policy ..... 50
A cademic Honors ..... 62
Academic Load, Full-Time ..... 60
A cademic Information \& Regulations. ..... 59
A cademic Standards ..... 60
Academic Progress Standards,
Financial Aid ..... 31
Accounting Concentration ..... 86
Accounting Courses ..... 176
Accounting Program ..... 95
A ccreditation ..... 10
Administrative Assistant Programs ..... 150
Administrative Drop ..... 63
Administration, Faculty, \& Staff ..... 333
Administrator's Creed ..... 12
Administrative Officers ..... 2
Admission of High School \& "Gifted" Students ..... 20
Admission to a Program or Course ..... 18
Admission to the College ..... 18
Admission to Program of Study ..... 18
Admission to Health Professions ..... 19
Admission to the Nursing Program ..... 145
Admissions ..... 17
Advanced Certificate, Occupational Program ..... 91
Advanced Course Proficiency ..... 22
Advanced Placement Program ..... 21
Advisement, A cademic ..... 36
Adult Education ..... 56
Adult Basic Education Courses ..... 310
Adult Literacy (Project READ) ..... 40
Adult Secondary Education Courses ..... 313
A frican-A merican Studies Concentration ..... 86
African-A merican Studies Courses ..... 177
A gribusiness Program ..... 96
A griculture Concentration ..... 86
A griculture Courses ..... 178
Alumni and Friends Association ..... 56
Alternative Delivery of Instruction ..... 62
A nthropology Concentration ..... 86
Anthropology Courses ..... 180
A ppealing Financial Aid Suspension ..... 33
A ppealing a Grade ..... 62
Applied Learning Skills (ALS) Prog. ..... 56
A pplied Learning Skills (ALS) Courses. 3 ..... 315
Applicability of Course to Programs. ..... 174
A rabic Courses ..... 180
A rea of Concentration Suggestions ..... 86
Armed Forces, Courses ..... 22
Art Concentration ..... 86
Art Courses ..... 181
Articulated $2+2$ Degree Programs ..... 89
Associate in Applied Science Program. ..... 91
Associate in Arts Program ..... 74
AA Academic Plan Worksheet ..... 75
A ssociate in Engineering Science Program ..... 82
AES A cademic Plan Worksheet ..... 83
A ssociate in Fine Arts Program ..... 78
AFA Academic Plan Worksheet ..... 79
Associate in Liberal Studies Program ..... 80
ALS A cademic Plan Worksheet ..... 81
A ssociate in Science Program ..... 76
AS Academic Plan Worksheet ..... 77
A ssociate of Arts in Teaching Program ..... 84
AAT Plan Worksheet ..... 85
A stronomy Courses ..... 186
A ttendance Requirements ..... 63
Auditing a Course ..... 62
Automotive Technology Courses. ..... 187
Automotive Technology Center ..... 14
Automotive Technology Program ..... 97
B
Baccalaureate/T ransfer Programs ..... 74
Banking Program (Business) ..... 99
Basic Certificate, Occupational Program 91
Basic Certificate Programs ..... 170
BioProcess Operator (NEW Specialty). 117Contact Student Services Center at217/875-7211, Ext. 267
Biology Concentration ..... 86
Biology Courses ..... 189
Blended Courses ..... 62
Board of Trustees ..... 2
Bookstore ..... 14
Building Construction Course ..... 191
Business Concentration ..... 86
Business Courses ..... 191
Business Programs ..... 99
C
Calendar, College ..... 6
Campus Facilities ..... 13
Campus Life ..... 43
Campus Map ..... Inside Back Cover
Campus Safety ..... 42
Capstone Options, Occupational Programs ..... 91
Career Services ..... 36
Career Development Courses ..... 195
Certified Programs ..... 73
CDL (Truck Driver Training) Courses. 306
CDL (Truck Driver Training, Transportation)Program165
CNC Program
(Engineering Technology) ..... 117
Changing Program of Study ..... 63
Changes in Program of Study, Effect on Graduation ..... 65
Charge-Back Authorization ..... 28
Charges, Tuition, Fees ..... 26
Cheating (A cademic Dishonesty) ..... 50
Chemistry Concentration ..... 86
Chemistry Courses ..... 196
Child Development Center ..... 41, 45
Chinese Courses ..... 197
Chronic Communicable Disease Policy ..... 51
Circuit Training ..... 57
CLEP and DANTES Exams ..... 21
Class Attendance ..... 63
Clinton Extension Center ..... 15, 39
Clubs, Student ..... 44
College Core Values ..... 11
College Mission ..... 11
College Vision ..... 11
College Staff ..... 333
Communicatur (College Newspaper) ..... 45
Computer Information Systems Courses ..... 198
Computer Science Concentration ..... 86
Computer Science Courses ..... 198
Confidentiality, Student Records ..... 46
Continuing and Professonal Education ..... 55
Constitution Requirement ..... 64
Cooperative A greements ..... 28
Cooperative Educational Programs ..... 71
Correctional Education Program ..... 320
Counseling Services ..... 36
Course Descriptions ..... 173
Course Placement \& Testing ..... 22, 23
Course Prerequisites ..... 92
Course Responsibilities by Division ..... 174
Course Sequences ..... 92
Course Titles, Hours, Credit ..... 174
Credit Evaluation Programs ..... 21
Credit for Experience Outside the Classroom ..... 21
Credit for Military Training ..... 22
Credit Transfer to Other Institutions ..... 67
Credit Transfer to Richland ..... 20
Criminal Justice Courses ..... 199
Criminal Justice Program ..... 103
Culinary Arts Courses ..... 202
Culinary Arts Program ..... 107
D
Dance Courses ..... 204
DANTES Exam ..... 21
Decatur A rea Technical A cademy ..... 14
Decatur Public Library ..... 14
Deferred Tuition Payment Plan ..... 27
Degree Requirements, Occupational Programs ..... 91
Dentistry Concentration ..... 86
Desktop Support Technician Program ..... 139
Disbursement of Financial Aid ..... 33
Disciplinary Proceedings Policy ..... 50
Disease Policy ..... 51
Dishonesty, A cademic Policy ..... 50
Dismissed, Health Professions ..... 61
Drafting \& Design Courses ..... 204
Drafting \& Design Engineering Program ..... 109
Drama (Speech) Concentration ..... 87
Drama Courses ..... 207
Dropping a Course ..... 63
Drug-Substance Abuse Policies ..... 51
Dual Credit ..... 20
E
E-M ail Address (RCC) ..... 1
Early A lert ..... 40
Early Childhood Education Concentration ..... 88
Early Childhood Education Courses ..... 208
Early Childhood Education Program ..... 110
Earth Science Concentration ..... 86
Earth Science Courses ..... 212
Economics Concentration ..... 86
Economics Courses ..... 212
Education Concentration ..... 87
Education Courses ..... 213
Effects of Changes in Program on Graduation ..... 65
Electrical Systems
(Engineering Technology Program) ..... 119
Electrician Program ..... 112
Electronics Courses ..... 215
Electronics Program ..... 113
Electronics/Biomedical Option ..... 114
Elementary Education Concentration ..... 88
Emergency Medical Services Program ..... 115
Emergency Medical Technology Courses ..... 219
Employment, Student ..... 31, 37
Energy Distribution Program ..... 116
Energy Distribution Courses ..... 221
Engineering Courses ..... 228
Engineering Technology Courses ..... 229
Engineering Technology Program ..... 117
English Concentration ..... 86
English Courses ..... 237
English/Second Language (ESL) Program ..... 57
ESL Courses ..... 315
English, Reading Placement ..... 23
Entrepreneur (Business) Program ..... 99
Ethics and Leadership ..... 12
Evaluation of Clinical Courses ..... 19
Evaluation of Specialized Courses ..... 19
Expulsion from Class or College ..... 51
Extension Center Programming ..... 57
F
Facilities ..... 13
Facilities Maintenance Program (Engineering Technology) ..... 120
FACTS (Tuition Payment Plan) ..... 27
Faculty, Staff, and Administration ..... 333
Federal Work-Study ..... 31
Fees, Tuition, Charges ..... 26
Financial Information ..... 25
A ppeals ..... 33
Disbursement ..... 33
Probation and Suspension ..... 32
Satisfactory A cademic Progress ..... 31
Transfer Students ..... 31
$\checkmark$ erification ..... 33
Fire Science Courses ..... 242
Fire Science Program ..... 128
Fitness Center ..... 57
Fluid Power Systems Program (Engineering Technology) ..... 121
Foreign Language Concentration ..... 86
Foreign Language Placement ..... 23
Foundation, RCC Scholarships ..... 30
Foundation, RCC ..... 57
French Courses ..... 245
Full-Time A cademic Load ..... 60
G
GED Placement Program ..... 18
General Educational Development (GED),
(Adult Education) Program ..... 56
General Science Concentration ..... 86
General Programs (Basic Certificates) ..... 170
German Courses ..... 245
G.I. Bill ..... 33
Gifted High School Students Admissions20
Governance ..... 10
Government, Student ..... 46
Grade Point Average Calculation ..... 61
Grading Policy ..... 61
Graduation ..... 64
A cademic Honors ..... 65
A cademic Standards ..... 60
A pplying for ..... 64
Constitution Requirement ..... 64
Effect of Changes in Programs ..... 65
Effect of Quarter System ..... 65
Transfer Students ..... 65
Two Certificates or Degrees ..... 64
Graduation Requirements, Health Programs ..... 65
Graduation Requirements, Occupational Programs ..... 91
Grants(Financial Aid) ..... 29
Graphic Arts Program ..... 130
Grievances, Student ..... 49
Group Requirements for Occupational Programs ..... 93
Guarantee for Technical Competency ..... 168
Guarantee of Transfer of Credit ..... 67
Guaranteed Transfer Agreement UIUC ..... 90

## H

Handicapped (Learning Accommodation) Services ..... 37
Health Courses ..... 246
Health Professions Fees ..... 26
Health Professions Information Sessions ..... 36
Health Prof. Graduation Requirements ..... 65
Heating, V entilation, Air-Conditioning, \& Refrigeration Courses ..... 250
Heating, V entilation, A ir-Conditioning,
\& Refrigeration Program ..... 132
High School Student Admissions ..... 20
History Concentration ..... 87
History Courses ..... 253
Honors, Semester Academic ..... 62
Honors, Graduation ..... 65
Honors Opportunities Program ..... 41
Hope A cademy Center ..... 14, 40
Horticulture Courses ..... 255
Horticulture Program ..... 134
Hospitality M anagement Courses ..... 257
Hospitality M anagement Program ..... 136
Humanities Courses ..... 258
Hybrid Courses ..... 62
I
IDs, Student ..... 42
Illinois Articulation Initiative (IAI) ..... 67
Illinois Incentive Grant ..... 29
In-District Students A ttending A nother
College (Charge-back Authorization) 28
Independent Study ..... 62
Information Technology Policy ..... 52
Information Technology Courses ..... 258
Information Technology Program ..... 138
Installment Payment Plan, Tuition ..... 27
Instructional Programs ..... 69
Instructional Programs-General ..... 169
nstrumentation Systems
(Engineering Technology Program)122
International Business Concentration ..... 86
International Studies ..... 41
Internet Address ..... 1
Internships ..... 37
Intoxicant Use ..... 51
Introduction to Richland ..... 10
ISTEP Program ..... 38
J-K
Job Placement ..... 37
Journalism Concentration ..... 87
Journalism Courses ..... 266
Kitty Lindsay
Learning Resources Center ..... 37
L
Law Concentration
(See Political Science/Pre-Law) ..... 87
Leadership Courses ..... 267
Learning Accommodation Services ..... 37
Library (Learning Resources Center) ..... 37
Liberal Studies Program ..... 80
Literacy (Project READ) ..... 40
Load, A cademic ..... 60
Loans ..... 31
M
Machine Repair Program (Engineering Technology) ..... 124
M ain Campus, Facilities ..... 13
$M$ ajors (A reas of Concentration) ..... 86
M anagement (Business) Program ..... 99
M anufacturing Engineering Program (Engineering Technology) ..... 125
M.A.P. (Financial Aid) ..... 29
$M$ arketing (Business) Program ..... 99
M athematics Placement ..... 23
M athematics Concentration ..... 87
M athematics Courses ..... 268
Mechanical Systems Program (Engineering Technology) ..... 126
Medical Office Specialist Programs ..... 153
M edicine Concentration ..... 87
Military Training Credit ..... 22, 33
Minimum Subject Admission ..... 19
Mission of College ..... 11
Music Courses ..... 273
N
Network Technology Program ..... 141
Newspaper, College (Communicatur) ..... 45
Non-Credit Classes (See Continuing \&
Professional Education Division) ...... 56
Nurse Assistant Program ..... 144
Nursing Courses ..... 275
Nursing Program ..... 145
Nursing Program Admission Requirements19, 36, 145
0
Occupational \& Technical Programs ..... 90
Degree Requirements ..... 94
Off-campus Facilities ..... 14, 39, 40
Office Technology Courses ..... 278
Office Technology Program ..... 149
Online Learning Support ..... 38
Organizations, Student ..... 45
Orientation ..... 36
Out-of-District Students Attending RCC
(Chargeback Authorization) ..... 28
P-Q
Paraprofessional Education Program ..... 111
Paraprofessional Education Concentration ..... 88
Parking ..... 42
Partnership for College \& Career Success.. 90
Payment Information ..... 26
PELL Grant ..... 29
Perkins Program ..... 40
Personal Development Courses ..... 283
Personnel Relations Courses ..... 284
Pharmacy Technician Program ..... 156
Philosophy Concentration ..... 87
Philosophy Courses ..... 284
Physical Education Courses ..... 286
Physical Science Courses ..... 288
Physics Concentration ..... 87
Physics Courses ..... 289
Placement, Course ..... 22
Placement Testing ..... 23
Placement GED ..... 18
Political Science Concentration ..... 87
Political Science Courses ..... 290
Possession of Weapons Policy ..... 53
Practical Nursing Courses ..... 291
Practical Nursing Program ..... 157
Pre-Dentistry Concentration ..... 87
Pre-Forestry Concentration ..... 87
Pre-M edicine Concentration ..... 87
Pre-V eterinary Concentration ..... 87
Prerequisites, Occupational/Technical ..... 92
Probation, A cademic ..... 60
Probation, Financial Aid ..... 32
Proficiency by Advanced Course ..... 22
Proficiency Examination ..... 21, 27
Program Board ..... 46
Programmer/Analyst Program ..... 143
Programs of Study ..... 70
Project READ ..... 14,40
Psychology Concentration ..... 87
Psychology Courses ..... 292
Quarter System, Effects on Graduation ..... 65
R
Radiography Courses ..... 294
Radiography Program ..... 160
Recognition, College ..... 11
Records, Student ..... 46
Refund (Tuition and Fees) Policy ..... 27
Refunds, Financial Aid Recipients ..... 33
Registered Nursing Program ..... 145
Registration ..... 20
Removal from College, Class ..... 51
Repeating a Course ..... 63
Residency ..... 27
Responsible Use of Information Technology Policy ..... 52
S
Safety, Campus ..... 42
Scholarships ..... 29
Secondary Education Concentration ..... 88
Selective Admission to
Health Professions Programs ..... 19
Self-Advisement ..... 36
Senior Citizens Tuition Discount ..... 27
SEOG Grant ..... 29
Sequence of Courses
for Certificates, AAS ..... 92
Service Learning Courses ..... 299
Sexual Harassment Policy ..... 52
Shilling Center ..... 13, 56
Smoking/Nonsmoking Policy ..... 51
Social Science Courses ..... 300
Sociology Concentration ..... 87
Sociology Courses ..... 300
Spanish Courses ..... 302
Special Education Concentration ..... 88
Speech Courses ..... 304
Speech and Drama Concentration ..... 87
Staff, Faculty, \& Administration ..... 333
Standards of Academic Progress,
Financial Aid ..... 31
State Minimum Subject Requirements, Transfer Programs ..... 19
Statement of Purpose and Mission ..... 11
Student Activities (See Campus Life) ..... 44
Student Ambassador Mentor Program ..... 46
Student \& Academic Support Services ..... 35
Student Classification ..... 60
Student Clubs ..... 44
Student Conduct Policy ..... 49
Student Employment ..... 31, 37
Student Grievance Policy ..... 49
Student IDs ..... 42
Student Learning Center ..... 38
Student Loans ..... 31
Student Organizations ..... 45
Student Records, Confidential Information ..... 46
Student Resolution Process ..... 50
Student Rights \& Responsibilities ..... 47
Student Senate ..... 46
Student Status (Classification) ..... 60
Student Support ..... 38
Student Support Services/TRIO ..... 40
Student Trustee ..... 46
Study Abroad Program ..... 41
Study Time Required ..... 60
Substance Abuse Policies ..... 51
Surgical Technology Admission Requirements ..... 19, 163
Surgical Technology Courses ..... 305
Surgical Technology Program ..... 163
Suspension, Academic ..... 61
Suspension, Financial Aid ..... 32
Suspension, Health Professions ..... 61
T
$2+2$ Degree Programs (Articulated) ..... 89
Table of Contents ..... 3
Teacher Assistant Program ..... 111
Teacher Education Concentration ..... 84, 87
Technology, Responsible Use Policy ..... 52
Tenets of Trusteeship ..... 12
Testing Center ..... 38
Testing, Placement ..... 23
Theatre (Drama) Courses ..... 207
Tobacco Policy ..... 51
Transcripts (Fee) ..... 27
Transfer Center ..... 36
Transfer Credit by Licensure ..... 19
Transfer of College Credit, Guarantee ..... 67
Transfer of College Credit to RCC ..... 20
Transfer of College Credit to Other Colleges ..... 66
Transfer Programs ..... 74
Transfer Programs, Minimum Subject Requirements ..... 19
Transfer Student, Financial Aid ..... 31
Transfer Student
Graduation Requirements ..... 65
Transportation Courses (CDL, Truck Driver Training) ..... 306
Transportation Program ..... 165
TRiO Program ..... 40
Truck Driver Training Program ..... 165
Tuition, Fees, and Charges ..... 26
Tuition Discount for Senior Citizens ..... 27
Tutorial Assistance, Veterans ..... 34
Tutorial Assistance ..... 38
U-V
Verification, Financial Aid ..... 33
Veterans’ Affairs ..... 33
Credit for Military Training ..... 22
Veterinary Concentration ..... 87
Virtual Courses ..... 62
W-Z
Weapons Possession Policy ..... 53
Web Page Address ..... 1
Welcome to Richland ..... 9
Welding Technology Courses ..... 307
Welding Technology Program ..... 166
Withdrawing from Course or College ..... 63
WISE-1 ..... 53
Withholding Student Information ..... 47

NOTES

NOTES

## NOTES

352

NOTES


[^0]:    Parkland College, Champaign:
    Building \& Construction Repair-Certificate
    Construction: Bricklayer-Certificate
    Construction: Carpentry-Certificate
    Construction: Floor Cover-Certificate
    Construction: Glazier-Certificate
    Construction: Iron Workers - Certificate
    Construction:Laborer-Certificate
    Construction: Millwright-Certificate
    Construction: Painting \& Decorating-Certificate
    Construction: Plumbers \& Pipefitters - Certificate
    Construction: Sheet Metal-Certificate
    Construction Trade Technology - AAS
    Construction Design \& Management - AAS
    Construction Design \& Management (Building \& Materials) - AAS
    Construction Design \& Management (Surveying Technology) - AAS
    Diesel Power Equipment Technology - AAS
    Equine Management - AAS
    Mass Communications: Radio-TV/Video - AAS
    Occupational Therapy Assistant - AAS
    Respiratory Care - AAS
    Prairie State College, Chicago Heights:
    All Occupational/Technical Certificates and Degrees not offered by RCC.

    ## Rock Valley College, Rockford:

    All Occupational/Technical Certificates and Degrees not offered by RCC.
    Sauk Valley College, Dixon:
    All Occupational/Technical Certificates and Degrees not offered by RCC.
    South Suburban College, South Holland:
    All Occupational/Technical Certificates and Degrees not offered by RCC.
    Spoon River College, Canton:
    All Occupational/Technical Certificates and Degrees not offered by RCC.
    Waubonsee Community College, Sugar Grove:
    All Occupational/Technical Certificates and Degrees not offered by RCC.

    ## Programs offered at Richland for residents of another District:

    Black Hawk District residents at Richland:
    All Occupational/Technical Certificates and Degrees not offered by BHC.
    Carl Sandburg District residents at Richland:
    All Occupational/Technical Certificates and Degrees not offered by CSC.

    ## Danville District residents at Richland:

    All Occupational/Technical Certificates and Degrees not offered by DACC.

    ## Elgin District residents at Richland:

    All Occupational/Technical Certificates and Degrees not offered by ECC.
    Heartland District residents at Richland:
    All Occupational/Technical Certificates and Degrees not offered by HCC.
    Highland District residents at Richland:
    All Occupational/Technical Certificates and Degrees not offered by HCC.
    Illinois Central District residents at Richland:
    All Occupational/Technical Certificates and Degrees not offered by ICC.
    Illinois Valley District residents at Richland:
    All Occupational/Technical Certificates and Degrees not offered by IVCC.
    John Wood District residents at Richland:
    All Occupational/Technical Certificates and Degrees not offered by JWCC.
    Joliet District residents at Richland:
    All Occupational/Technical Certificates and Degrees not offered by JJC.

[^1]:    X = Required

[^2]:    *Students who are considering transfer options should take this course. A grade of "C" or better in ENGL 101 is required for AAS degree.

[^3]:    X = Required
    *Students who are considering transfer options should take this course.
    A grade of "C" or better in ENGL 101 is required for AAS degree.

[^4]:    For those interested in pursuing this specialty, the following options are available:
    -Associate in Applied Science - Engineering Technology - CNC Technology Specialty
    (68 Credit Hours) (ICCB Code: AAS 3000)

    - Basic Certificate - CNC Operator (27 Credit Hours) (ICCB Code: C300A)
    - Basic Certificate - CNC Technology (49 Credit Hours) (ICCB Code C300C)

[^5]:    $\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ as needed

[^6]:    F=fall $\quad S=$ spring $S u=s u m m e r \quad A N=$ as needed

[^7]:    *Verify transferability of this course with a specific school. Courses in major may or may not be transferable.
    A grade of "C" or better in ENGL 101 is required for the AAS degree.

[^8]:    ED 105 - Using Technology in the Classroom I 3-0-3
    is an introduction to the basic skills and resources necessary to develop and improve the knowledge and skills of current and future P-12 educators. This course will focus upon the use of a selection of basic technology tools and methods for integrating those tools into the instructional process in a P-12 classroom. Students will be provided with hands-on activities utilizing technology both professionally and personally to demonstrate proficiency. Topics include word processing, spreadsheets, databases, multimedia, Internet, web page design, and portfolio development. This course requires two hours of formal classroom field experiences to be arranged with the instructor. Offered in Fall, Spring, and Summer.

    Applicable toward graduation where structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Social Science (AAS, ALS only)
    Area of Concentration - Teacher Education: Elementary-Secondary
    -Special-Early Childhood
    ED 107 - Art for Elementary School Teachers
    3-0-3
    (Prerequisite: successful completion of ENGL 101) provides the student an opportunity to become involved in the study of child-level art and examination of practices in teaching art and art appreciation in the elementary school. This course may require formal classroom field experiences to be arranged with the instructor. Offered as needed.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Social Science (AAS, ALS only)
    Area of Concentration - Teacher Education: Elementary-Secondary
    ED 108 - The Multicultural Classroom
    3-0-3
    (Prerequisite: successful completion of ENGL 101) provides the student an opportunity to explore and reflect on the importance of recognizing different cultures in the classroom. The course requires no prior knowledge, but students are expected to participate in comprehensive discussion of topics dealing with the contemporary issue of multiculturalism in education. Offered in Summer.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Social Science (AAS, ALS only)
    Area of Concentration - Teacher Education: Elementary-Secondary

    ## ED 109 - Principles of Reading

    3-0-3
    (Prerequisite: successful completion of ENGL 101) is designed for students considering a career in teaching and for those working with children in grades P-12 to develop reading skills. The course discusses various methods of teaching reading, including whole language, interpretation and analysis of test results, development of language, reading disabilities, remediation plans, and methods of evaluation. Students will be required to complete a minimum of 10 hours of clinical experience in the public school district. Criminal background check may be required for clinical experiences. This course may require formal classroom field experiences to be arranged with the instructor. Offered as needed.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Social Science (AAS, ALS only)
    Area of Concentration - Teacher Education: Elementary-Secondary
    ED 199 - Topics in Education (Variable Credit and Repeatable)
    1-0-1 to 3-0-3
    (Prerequisite: successful completion of ENGL 101) provides the student an opportunity to participate in a comprehensive discussion of a topic dealing with contemporary issues in education. The course requires no prior knowledge, but students should have some interest in the seminar topic. This course may be repeated twice with a different topic. Offered as needed.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Social Science (AAS, ALS only)
    Area of Concentration - Teacher Education: Elementary-Secondary-Special
    -Early Childhood

[^9]:    MATH 121 - Calculus \& Analytic Geometry 1 (IAI: M1 900, EGR 901, MTH 901) 5-0-5
    (Prerequisite: successful completion of both MATH 116 with a "C" or better grade and MATH 117 with a " $C$ " or better grade or satisfactory score on the mathematics placement exam) begins with a review of algebra and trigonometry; then the idea of limits and continuity is introduced. With the knowledge of limits and continuity the student develops the concept of the derivative and its applications. At the end, the student studies the antiderivative of elementary functions and the applications of the definite integral in geometry, science, and engineering. Offered in Fall, Spring, and Summer as needed.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Mathematics
    Area of Concentration - Mathematics, Engineering
    MATH 122 - Calculus \& Analytic Geometry 2 (IAI: M1 900, EGR 902, MTH 902) 4-0-4
    (Prerequisite: MATH 121 with a "C" or better grade or equivalent competencies) includes the different methods of integration. Students study transcendental functions, L'Hôpital's Rule, sequences and series, infinite series, power series, Taylor series, conic sections, polar coordinates, parametric equations, and mathematical modeling with differential equations. Offered in Fall and Spring.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Mathematics
    Area of Concentration - Mathematics, Engineering
    MATH 160 - Finite Mathematics (IAI: M1 906) 4-0-4
    (Prerequisite: MATH 116 with a "C" or better grade or equivalent competencies) is an introductory-level course covering mathematical ideas needed by students of business management, social science, or biology. The topics include sets and counting, functions, introduction to probability and statistics, interest and annuities, matrix theory, linear systems, and linear programming. A graphing calculator is required. Offered in Fall, Spring, and Summer as needed.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Mathematics
    Area of Concentration - Not Applicable
    MATH 170 - Introduction to Statistics (IAI: M1 902, BUS 901)
    4-0-4
    (Prerequisite: MATH 160 with a "C" or better grade) is a beginning-level course for students in the business, social, or behavioral sciences or for anyone who can use a working knowledge of statistics. The course includes descriptive statistics, probability, probability distributions, hypotheses with testing on different parameters of a population, comparison of two populations on a single parameter, regression analysis, goodness of fit, contingency table, ANOVA, and sampling and simulation. A graphing calculator is required. Offered in Fall, Spring, and Summer as needed.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Mathematics
    Area of Concentration - Not Applicable
    MATH 171 - Concepts of Statistics (IAI: M1 902, BUS 901)
    4-0-4
    (Prerequisite: MATH 116 with a "C" or better grade) presents descriptive statistics, probability, probability distributions, hypotheses with testing on different parameters of a population, comparison of two populations on a single parameter, regression analysis, goodness of fit, contingency table, ANOVA, and sampling and simulation. Students from various areas - business, education, engineering, and social science - can effectively benefit from this course. A graphing calculator is required. Offered in Fall, Spring, and Summer as needed.

    Applicable toward graduation where program structure permits:
    Certificate or Degree - All Certificates and All Degrees
    Group Requirement - Mathematics
    Area of Concentration - Not Applicable

