# Richland Community College Community College District 537 



## 2006-2007 Catalog

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## Richland Community College

Established 1972

## Accreditation

Richland Community College is accredited by the Higher Learning Commission and a member of the North Central Association.

## Recognition

- Illinois Board of Higher Education
- Illinois Community College Board under the provision of the Community College Act
- Illinois State Board of Education
- Universities 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


## Disclaimer

This Catalog should not be considered a contract. The College reserves the right to change at any time, without notice, tuition, fees, courses, programs, graduation requirements, policies, procedures, and other such matters as may be within its control.

## Nondiscrimination Policy

Richland Community College subscribes to the principles and laws of the State of Illinois and the Federal Government pertaining to civil rights and equal opportunity, including applicable Executive Orders.

Richland Community College policy prohibits discrimination on the basis of race, color, religion, sex, marital or parental status, national origin or ancestry, age, mental or physical disability (except where it is a bonafide occupational qualification), sexual orientation, military status, or status as a disabled or Vietnam-era veteran.

The College's non-discrimination policy applies to the admission and retention of students; recruitment, employment, and retention of faculty and staff; and access to and treatment in the College's programs and activities. Complaints of discrimination prohibited by the College are to be resolved within the College grievance resolution process.

## District served by <br> Richland Community College

City of Decatur


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TBA
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## College Calendar

(Subject to change)

| Spring 2006 |  |  |
| :---: | :---: | :---: |
| January |  |  |
| Jan. 9-13 | M-F | Registration |
| Jan. 16 | M | Martin Luther King, Jr's Birthday (College Closed) |
| Jan. 17 | T | Classes Begin |
| Jan. 21 | S | Saturday Classes Begin |
| February |  |  |
| March |  |  |
| Mar. 10 | F | Midterm |
| Mar. 13-18 | M-S | Spring Break |
| April |  |  |
| Apr. 3-7 | M -F | Official Students First Registration Week begins |
| Apr. 10 | M | Registration opens for all students. New Student Orientation, Advisement, and Registration resumes |
| April 14-15 | F-S | Spring Holiday (College Closed) |
| May |  |  |
| May 12 | F | Last Day for Withdrawal with "W" |
| May 15-20 |  | Finals Week |
| May 19 | F | Graduation |
| May 20 | S | Saturday Finals |
| May 22 | M | Grades Due by 11:00 a.m. |
| May 29 | M | Memorial Day (College Closed) |
| Summer 2006 |  |  |
| June |  |  |
| June 5 | M | Classes Begin |
| June 5 | M | Drop-Add (Schedule Changes) |
| July |  |  |
| July 4 | T | Independence Day (College Closed) |
| July 25 | T | Last Day for Withdrawal with "W" |
| July 26-27 | W-Th | Final Exams |
| July 31 | M | Grades Due by 11 a.m. |
| Fall 2006 |  |  |
| August |  |  |
| Aug. 21 | M | Classes Begin |
| Aug. 26 | S | Saturday Classes Begin |
| September |  |  |
| Sept. 4 | M | Labor Day - (College Closed) |


| October |  |  |
| :---: | :---: | :---: |
| Oct. 9 | M | Columbus Day Observance - (College Closed) |
| Oct. 13 | F | Midterm |
| Oct. 16 | M | Second 8-week Classes Begin |
| November |  |  |
| Nov. 10 | F | Veteran's Day Observance - (College Closed) |
| Nov. 22-25 | Th-S | Thanksgiving (College Closed) |
| December |  |  |
| Dec. 8 | F | Last Day for Withdrawal with "W" |
| Dec. 11-16 | M-S | Finals Week |
| Dec. 19 | M | Final Grades Due by 11:00 a.m. |
| Dec. 25-30 | M-F | Holiday Break (College Closed) |
| Spring 2007 |  |  |
| January |  |  |
| Jan. 1 | M | New Year's Day (College Closed) |
| Jan. 2-12 | M-F | Registration |
| Jan. 15 | M | Martin Luther King Jr.'s Birthday (College Closed) |
| Jan. 16 | T | Classes Begin |
| Jan. 20 | S | Saturday Classes Begin |
| February |  |  |
| Feb. 12 | M | Lincoln's Birthday (College Closed) |
| March |  |  |
| Mar. 9 | F | Midterm |
| Mar. 12-18 | M-S | Spring Break (No Classes) |
| Mar. 19 | M | Second 8-Week Classes Begin |
| April |  |  |
| Apr. 6-7 | F-S | Holiday Break (College Closed) |
| May |  |  |
| May 11 | F | Last Day for Withdrawal with "W" |
| May 14-19 | M-S | Finals Week |
| May 18 | F | Graduation |
| May 22 | M | Final Grades Due by 11:00 a.m. |
| May 28 | M | Memorial Day (College Closed) |
| Summer 2007 |  |  |
| June |  |  |
| June 4 | M | Classes Begin |
| July |  |  |
| July 4 | W | Independence Day (College Closed) |
| July 24 | T | Last Day for Withdrawal with "W" |
| July 25-26 | W-Th | Final Exams |
| July 30 | M | Final Grades Due by 11:00 a.m. |

We are pleased that you have chosen Richland and hope your time here is rewarding, both in and out of the classroom. Richland faculty and staff are committed to student success.

Richland serves students in many ways. You may be here to earn an Associate's Degree to transfer on as you complete a baccalaureate
 degree. Perhaps you're here to earn a degree or certificate from one of our many occupational programs, or perhaps you're taking courses for specific skills needed for your job. Whatever the reason, we're glad you're here and hope you will take advantage of the student services, cultural programs, and mentoring opportunities that Richland offers.

Learning doesn't stop when you leave the classroom. Richland encourages you to learn more about your community and develop your leadership skills. Numerous clubs and organizations are available for your participation. If you're interested in a leadership role on campus, consider serving as a Student Mentor, a Student Senator, or a Student Trustee on the Board of Trustees. Phi Theta Kappa, the honorary society for community colleges, offers many opportunities to serve the College and the community.

Every student is important at Richland. You will soon discover that the Richland faculty and staff are dedicated to providing the best educational experience through teaching excellence and student support.

We're glad you've chosen Richland Community College and hope you will find Richland to be even more than you expected!

Sincerely,


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 30 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 activity and the manner in which it occurs. The world is not the same as it was in the 1970s. The 21st Century places demands on Richland that are far different than they were in 1972. The world has moved away from the mass production economy of the past to a new economy that 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 must commit to improving standards of quality. It must commit to providing education, programs, and services in a multitude 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 21st Century.

## Governance

The College is governed by an eight-member 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.

## Statement of Purpose and Mission

## 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 to engage in college-level study;
4. Continuing and community education courses and programs designed to provide and encourage opportunities for lifelong learning;
5. 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;
6. Academic programs and services that provide supplemental support to both teaching and learning;
7. 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
8. 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.

## Ethics and Leadership

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

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

## Core Values Mission

To engage 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/Inclusiveness -

We believe that our similarities and differences are opportunities for establishing a common bond and strengthening the College.

## The Tenets of Community College Trusteeship

The community college is an egalitarian institution committed to the principle that higher education 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 but one 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 commit ment requires the devotion of time, thought, energy, effort, and ability whenever needed.

## 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 but also extends far beyond it. 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 engages--teaching, serving, and guiding--must be evaluated by their effect 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 a consequence, 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 encour-aged--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 demonstrate faith 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--straightforward, candid, and simple.

## Facilities

Richland Community 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 117 acres.

A $12,000-\mathrm{sq}$. ft. Horticulture/Agriculture/HVAC and 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 First National Bank of Decatur. Construction on the $44,607-\mathrm{sq} . \mathrm{ft}$. 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 217/875-7211, 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.

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 College Bookstores of America, 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 wing, 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.

A variety of fast foods, drinks, and daily specials may be purchased from the Food Service facility 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 on Saturday. 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 Student Services 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. Area schools also provide classrooms for off-campus courses.

The Automotive Technology Center, located at the corner of Cerro Gordo and Jackson Streets (just east of the Decatur Area Technical Academy), is used in the evening 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 adult students. 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 955 North Illinois Street (at the intersection of Jasper and Sangamon Streets) The Richland Community College Hope Academy Center offers admissions advising, registration, placement testing, financial aid information, and many other services. Credit classes and non-credit workshops are scheduled at the RCC Hope Academy Center. The Center houses a free public access computer lab. Free workshops on job skills, resumé writing, and introduction to basic computer skills are offered periodically. General Education Diploma (GED) classes are also offered. Call 217/4216565 for more information.

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 Richland's district. General Educational Development (GED) and English as a Second Language (ESL) classes are also provided. The Clinton Extension Center is located in Clinton at Clinton High School (northeast entrance), 1200 Highway 54 West. Call 217/935-6791 for additional information.



## 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. Be a high school junior or senior and have principal approval to enroll, or
5. Be a gifted student below the age of 16 and have principal approval to enroll (see page 11).
6. Students enrolling at Richland Community College are expected to submit all transcripts. High School and College transcripts must be sent directly to Richland's Office of Admissions and Records from the appropriate schools.

## 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 receipt of the High School Equivalency 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, Electronics, Horticulture, Associate in Arts or 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" beginning on page 42 for a 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 not enroll at Richland will be kept on file for two years after receipt.
2. Test scores. Richland generally uses the American College Testing (ACT). Other comparable test results may be submitted if approved by a Richland counselor.
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 a reduced load, complete further testing, and/or receive career counseling.

Similar procedures may also be applied 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, advance 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 Assistant - cooperative agreement with Parkland Community College
- AAS Physical Therapy Assistant - cooperative agreement with Lakeland College
- AAS Radiologic Technology/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 request evaluation of specialized course work from another college must obtain a Request for Evaluation of Specialty Credit Form from the Health Professions Office, submit a weekly outline, 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 eight credit hours is eligible to apply and receive transfer credit without examination, 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, 875-7211, Ext. 284.

## Transfer of College Credit to RCC

Students who wish to transfer credit earned 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 the Admissions and Records Office at Richland. The student requesting a transfer of credit must pay any 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 at the request of the student.

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

High school students may also attend classes at Richland for credit toward either a high school diploma and/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.
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/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 placement tests in the Testing Center, Room W124, prior to attending a Student Orientation, Advising and Orientation session.

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 the student is eligible.

Students must have their class schedules and fee forms approved and signed by a counselor or academic advisor before registering. 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

Richland participates in the College Level Examination Program (CLEP) and the DANTES Examination Program, which allow students to obtain college credit based on their learning outside the classroom.

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

Students should check with the Registrar, Ext. 284, to verify how CLEP will be applied.

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 below, along with the minimum grade required in the advanced course to earn credit for the lower course:

| Advanced <br> Course | Proficiency Credit | Required <br> Grade |
| :--- | :--- | :---: |
| FREN 202 | FREN 101, 102, 201 | B |
| FREN 201 | FREN 101 and 102 | B |
| FREN 102 | FREN 101 | B |
| GERM 202 | GERM 101, 102, 201 | B |
| GERM 201 | GERM 101 and 102 | B |
| GERM 102 | GERM 101 | B |
| IT 261 | IT 161 | B |
| MATH 221 | MATH 116, 117, 121, 122 | B |
| MATH 122 | MATH 116, 117, 121 | B |
| MATH 121 | MATH 116 and 117 | B |
| NURS 203 | NURS 101, 102, 151, 202 | C |
| OT 211 | OT 112 and OTK 100 | B |
| OT 112 | OTK 100 | B |
| OTK 101 | OTK 100 | B |
| SPAN 202 | SPAN 101, 102, 201 | B |
| SPAN 201 | SPAN 101 and 102 | B |
| SPAN 102 | SPAN 101 | B |
| WELD 102 | WELD 100 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. 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 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. Photo identification is required for all testing. Review materials are available online at www.richland.edu/services/assmntsrvs.php. 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. Once a student begins a sequence of courses based on the test results, the student may not retake the placement test in that area.

English-Reading - Each student will receive an English placement report based on his/her transcripts and/or ACT test scores. The report advises in which English class (ENGL 088, 090, 095, 097, ENGL101, or OT119) 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 college-level 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, Education, Humanities and Fine Arts.

Foreign Language - Students who have not studied a specific foreign language are to begin their college study with the course numbered 101. All persons whose most recent prior study of the language was 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 $2=3.50$ ).

| Earned Quality Points | Start With Course |
| :---: | :---: |
| 0 to 4 | 101 |
| 5 to 11 | 102 |
| 12 to 14 | 201 |
| 15 or more | 202 |

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 (Room C162), Ext. 386, regarding appropriate placement.

Mathematics Placement - 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.




## 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 <br> Tuition Academic/Technology Fee Total $\$ 59.50^{*}$ \$ 4.50* \$64.00**

## Out-of-District Students of Richland Community College (Without Charge-Back Authorization)

Tuition Out-of-District<br>Academic Technology Fee Total

Per Credit Hour
\$192.70* \$ 4.50* \$197.20**

Out-of-State and International students pay \$385.49** 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
\$ 10.00
payable with tuition \& fees)
Graduation Fee (per application)
\$ 25.00

Courses Fees (not applicable to all courses).
These fees generally range from $\$ 10.00$ to $\$ 85.00$ 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.
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 - estimates subject to change
Background Check - $\$ 75.00$
Application to Test - (Continental Testing Service) - \$76.00
Examination Fee (NCLEX Testing - National Council of State Boards of Nursing) - \$250.00
PSB Exam (Prerequisite for Surgical Technology) - \$15.00

## Payment Information

Full payment ( $100 \%$ ) of tuition and fees is due approximately two 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 two 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. NON-attendance 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 Admissions \& Records and must be initiated by the student.

## Deferred Tuition Payment Plan

For students desiring additional time for payment, the College offers FACTS, the online tuition payment plan through FACTS Management Company. 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 available online at www.factsmgmt.com. 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 12 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 who register 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:

$$
\begin{array}{lr}
\text { Prior to beginning of semester } & 100 \% \\
\text { First week of classes } & 100 \% \\
\text { After the first week of classes } & 0 \%
\end{array}
$$

## Summer Session:

Prior to beginning of semester 100\%
First three days of session 100\%
After third day of session
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. Charge-backs will not be approved for individual courses.

Applications for charge-back must be completed and submitted to the Student Services Center (C129) no later than 30 days prior to the beginning of any term to which the charge-back is to be applied. Charge-back 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 with which Richland has the agreement, the student will be responsible to pay that college's full out-of-district tuition.

Students are encouraged to contact the Student Services Center (C129) for further information.

## 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-of-district 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-of-district 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 the student is 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 59. 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 42. 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.

## Grants

## Pell Grant

The Pell Grant is awarded to help degree-seeking undergraduates pay for their college-related 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 designated 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 to register 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.

## Illinois Incentive for Access Grant (IIA)

The IIA Award 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 determines eligibility.

## 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 the community college level are allowed up to 75 credit hours of eligibility.

## 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/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 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 Veterans 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 vet-
eran 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 Financial Aid, Student Services Center, and at www.collegezone.com. Veterans must inform 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 allows students in the top ten percent of their high school graduating class to get their first two years of college FREE at Richland. 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 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 part-time employment for eligible students who are enrolled at least half-time (6 semester hours or more) and in good standing as defined by the Financial Aid Academic Standard Policy. 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

Employment Services, 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 part time. See the Job Placement listings on bulletin boards or on Richland's web page, or visit the Career and Transfer Services Office in the Student Services Center.

## Veterans Affairs Work-Study

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

## Loans

Richland participates in the Federal Family Education Loan Program, which includes the Subsidized Stafford Loan and the Unsubsidized Stafford Loan. These are low-interest loans to students made by lending institutions and guaranteed by the government. In order to receive a loan, students must apply for financial aid by filling out the Free Application for Federal Student Aid and complete 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 probation or 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 their financial aid from another school 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 order to receive 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 attempted
GPA required

| $1-15$ hours | 1.70 |
| :--- | :--- |
| $16-30$ hours | 1.85 |
| $31+$ hours | 2.00 |

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 can not 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 I do 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 F, 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 who are on financial aid probation or suspension will be notified.

## Financial Aid Probation

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

A student may continue to receive state and federal grants, 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. The following must be accomplished during one semester in order to be reinstated:

1. Complete at least six credit hours, 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 I.
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

Students should submit a Request for Consideration of Special Circumstances explaining unusual circumstances accompanied by appropriate documents to the Director of Financial Aid. 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. If the student is not satisfied with the resolution, then a request for a formal hearing can be filed. A form to request a formal hearing can be obtained in the Financial Aid Office. The Vice President, Student and Academic Services, will hear the appeal.

Students should submit a Special Circumstances Form for an adjustment to 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 post-secondary education. This test is offered free at Richland.

A student must be attending classes on a regular basis. Any student reported as not attending 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 a 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 $60 \%$ 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 Pell 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 government-selected Financial Aid applicants are required to complete 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, or associate's degree. Information is available in the Financial Aid Office, at www.richland.edu/finaid 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 $\mathbf{3 1}$ - Disabled Veterans - Vocational Rehabilitation
Chapter $\mathbf{3 2}$ - Veterans' Educational Assistance Program (VEAP)
Chapter $\mathbf{3 5}$ - Survivors and Dependents' Educational Assistance
Program
Chapter $\mathbf{1 6 0 6}$ - Montgomery GI Bill - Selected Reserve
Educational Assistance Program
Chapter 1607 - Reserve Educational Assistance Program (REAP)
Illinois Veterans Grant
Illinois National Guard Scholarship
MIA/POW Scholarship
Veterans requesting benefits from the US Department of Veterans' Affairs are expected to inform the 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 need for the educational program will be certified. Veterans receiving benefits from the VA are expected to complete all credit hours he or she was certified for 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 Student Learning Center, Room S117, 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.


## 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 875-7211, Ext. 267.

## Nursing, Radiography, and Surgical Technology Program Orientation

Nursing, Radiography, and Surgical Technology Program Orientations are held once a month, and attendance is required before receiving an application to the programs. Contact student services 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/services/.

## 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 discuss the inventory results and also recommend other resources for further exploration. Career Services is located in C129 within the Student Services Center. The Center has many resources for students to use when planning a career or when looking for a job. Visit RCC's Career Services online at http://www.richland.edu/services/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 8757211, Ext. 267. Appointments or walk-in assistance is available. Information about Academic Advisement is available at http://www.richland.edu/services/.

## 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 Transfer Center website at www.richland.edu/transfer.

## Employment Services

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

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

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

Students desiring to work on campus must fill out a Student Employment Application form available in the Student Services Center and submit it to Career Services. Students are also encouraged to register with the Illinois Skills Match.

Visit RCC Career Services online at www.richland.edu/services/ 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 Counseling and Career Services. The following programs include internships as part of the curricula:

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

## 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.

## 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 Center. 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/services /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/learning process through the use of electronic technology. We are committed to working with all members of the College community while harnessing technology to better fulfill the charge of preparing intellectual and technically competent students for success.

We provide technical support through e-mail, telephone, and walk-in inquires. We help students with a variety of technical queries such as WebCT login questions, e-mail account sign-in and troubleshooting, navigating in a WebCT course, WISE-1 access and navigation, and technical questions regarding personal computer system requirements, etc.

Online Learning Support is available in Room C152-located in the Learning Resources Center:

For assistance, call (217) 875-7211, Ext. 372, or send an e-mail to the Online Learning Help Desk at ochelp@richland.edu.

## Testing Center

The Testing Center, located in Room W124, Ext. 238, provides testing services for placement in 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 to pay an additional fee. Visit the RCC Testing Center online at www.richland. edu/services/ assmntsrvs.

## ISTEP Program

The Illinois Support, Training \& Employment Program (ISTEP), located in the Student Services Center on campus, assists homemakers who are divorced, widowed, separated, or who have a disabled spouse at home. Services may include tuition, books, childcare assistance, transportation, and some supplies. Call 8757211, Ext. 572, for more information on the ISTEP Program.

## 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 Richland's district. General Educational Development (GED) and English as a Second Language (ESL) classes are also provided. Certain courses are guaranteed to be held at these off-campus sites, regardless of the number of students enrolled. The Clinton Extension Center is located in Clinton at Clinton High School (northeast entrance), 1200 Highway 54 West. Call 935-6791 for information.

## RCC Hope Academy Technology Center

The RCC Hope Academy Technology Center is located off campus at the RCC Hope Academy Center at 955 North Illinois Street. 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, academic advising, placement testing, registration, training, job readiness workshops, and career planning are available. Call 4216565 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 the Student Learning Center. 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. 309 or stop by the office in the Student Learning Center, Room S117.

## Student Support Services/TRIO

In Student Support Services/TRIO, participants receive intensive advising, tutoring, and mentoring in addition to academic improvement services, transfer trips, cultural trips, orientation to college, 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 ( $\$ 1,296,890$ over 5 years) that provides educational support to low-income, 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

The Perkins Program is 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 at Ext. 223 or 202 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 off campus at the Decatur Public Library, 130 N . Franklin, Decatur, IL. Prospective students and volunteers may call for appointments or further information at 423-7323.

## 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 parttime students who plan to complete any associate's degree at Richland. Seventy-five 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 27 with no individual score lower than 22 (or equivalent scores on any national testing program).
2. Presently enrolled students or transfer students must have a cumulative grade point average of 3.5 or better on a 4.0 scale for 12 or more semester hours in courses equivalent to 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 Student Services Center or from Division offices.
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 3.5 GPA or if they have a 3.5 in the field of the course and 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" added to the grades on their transcripts, but their tuition will not be waived. Call the Director of the Honors Program 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. In addition, the College sponsors several opportunities for international travel throughout the year. 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.

## Child Care Services

Licensed child care services are provided for the children of Richland students (credit and non-credit), staff, and faculty in addition to children from our community. The center is open during all days whenever the college is open except for weekends. Evening care is provided only when classes are in session.

The program accepts children ages 2 (toilet trained) through 12. Both day and evening hours are available. Contact the Child Care Learning Center at 875-7211, Ext. 319, for cost of Child Care Services.

Children may attend for both 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 Child Care Learning 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.

The Center is open from 7:30 a.m. to 10:00 p.m., Monday through Thursday, and 7:30 a.m. to 5:00 p.m. on Fridays during regular semesters. The Center is open from 7:30 a.m. to 5:00 p.m. Monday through Friday during the summer. Center hours are subject to change.

## Student IDs

Photo student identification 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, first-served 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.

## Security Services

Richland has around-the-clock security officers. Evening escort service is available. Richland's security works with local law enforcement officers with campus interventions.


CAMPUS LIFE

## 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.

We invite you to become involved in Campus Life campus activities, organizations, and clubs to enrich your college life. For more information contact the Director of Campus Life in Room C133, Ext. 305, or visit www.richland.edu/sas/retention/studentlife/.

## 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 AfricanAmerican students by promoting political, social, and economic awareness in African-American students at Richland and within the African-American community.

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 purpose of the Earth Club is to promote environmental awareness at RCC and the local community.

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

The mission of the History Club is to encourage and facilitate a greater understanding of history among students and our community by hosting speakers, films and taking field trips to historical sites.

The purpose of the Hope Club is to provide a forum to discuss social, educational and developmental needs of people around the global community. Students will work on projects and volunteer work to help make and 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 the Performing Arts Workshop (PAW) is to promote the appreciation and support of the performing arts among the student body of Richland Community College. Each semester the club plans to produce an all student production.

The Practical Nursing Club goals are to perform community services and to provide educational opportunities for the Richland community and for others who may benefit or have an interest in
nursing as a career. Meetings are scheduled after class time at the convenience of the members.

Richland's chapter of Phi Theta Kappa, a national two-year college honor society, initiates new members each fall and spring. Students with a 3.5 grade point average in at least twelve hours of 100-level courses of transferable credit during a specific semester are invited to join.

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 providing support for victims, survivors, and significant others of sexual assault/abuse.

The Registered Nursing Club was formed to promote interest in and to provide information about nursing and other health careers. Meetings are scheduled monthly throughout fall and spring semesters at a time 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 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, Room C133, or the club's current advisor for more information.

## Organizations

Licensed Child Care Services are provided for the children of Richland students, staff, and faculty whenever regular classes are in session (except weekends). Pre-school activities are available to combine play with learning. These activities include art, music, science, math, motor development skills, and language skills. Children ages 2 (toilet trained) to 12 years of age are accepted. School-age children may attend on days when public schools are not in session if space is available.

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 College-wide 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 relation-ship-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, six 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 twelve-member Student Senate.

## Student 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.

See the Student Handbook for details of policies and procedures.

## 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 record except for information from a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional. Student education 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; most recent educational institution or agency attended.
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 request to the Student Services Center or 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 federallysupported 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 student or 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.

## Student Grievances

When a student believes that a condition exists which is in violation of his or her rights, College policies, rules, standards, or procedures, he or she has the right to file a grievance.

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 (accommodations)
3. Discrimination (age, disability, gender, race)
4. Financial Aid Suspension
5. Family Educational Rights and Privacy Act (confidentiality)
6. Sexual Harassment (by student, staff, or faculty)
7. Student Conduct
8. Student Employment
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 for filing a grievance are available in the Student and Academic Services Office and in the Student Handbook.

## Disciplinary Proceedings Policy

If a student, faculty, or staff member feels that a condition exists in which a student's behavior is unsatisfactory or is in violation of College policies, rules, standards, or procedures, he or she may file a grievance against a student.

## Initiation of Grievance or Disciplinary Proceedings

Every attempt will be made to resolve grievances or problems at the point of origin.

## 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 and indicating 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

A formal hearing before the Judicial Board or Special Committee appointed by the President may occur at the request of a student, faculty, or staff member.

Formal hearings must be coordinated through a Vice President or the Director of Human Resources. The Executive Assistant to the President will convene the Judicial Board or Special Committee.

## Academic Dishonesty

Each student is expected to be honest in his/her class work or in the submission of information to the College. Richland regards dishonesty in classroom and laboratories, 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.

## Tobacco Policy

The policy of Richland Community College is to respect the rights of both the non-smoker and the smoker in Richland buildings and facilities. When these rights conflict, Richland administrators, faculty, staff, and students should endeavor to find a rea-
sonable accommodation. When such an accommodation is not possible, the rights of the non-smoker 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 to enforce 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 her 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 College 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 for psychological 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
4. Any sexual advance by a student toward an employee.
5. Any request by a student to an employee for sexual favors from the employee.
6. Any conduct of a sexual nature by a student directed toward an employee when such conduct has the purpose or effect on an employee of reasonable sensibilities of creating an intimidating, hostile, or offensive school environment for the employee, or of influencing either the student's grade or participation in any school-sponsored activity.
7. 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 a program on the Internet that allows students access to their own 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. Grades are posted on WISE-1 only. Grades will not be mailed to students unless requested. Visit www.richland.edu/WISE1.



## Adult Education

Adult Education 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 to higher-level 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. 209.

## 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 supplement existing 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 Student Learning Center. For more information, contact the Director of the Student Learning Center, Ext. 309.

## Continuing and Professional Education

Continuing and Professional Education provides personal and professional training. The Division offers a variety of training options, from full-day 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. This includes 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. Call (217)875-7211, Ext. 265.

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 to keep them on the road to fitness. This class is designed for 1 -on-1 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 in enrolling 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 Clinton and other communities throughout Richland's District, including Argenta, Assumption, Blue Mound, Cerro Gordo, 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 (southwest entrance), 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.

## 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. 209.


## Student Status and Classification

## First-time enrollee -

one who has never attended a college or university.
Transfer student -
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 must reapply by completing an admission information form 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 at least 2.00 , or a " C " average, is required to receive an associate's degree or certificate.

## 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 attempted
1-15 hours
16-30 hours
GPA required
$31+$ hours
1.70
1.85
2.00

A student on academic probation is encouraged to meet with a counselor in Student Services to discuss career and educational 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 Student Resolution Process Chart in the Student Handbook.

## Health Professions Dismissal

Students in radiography, surgical technology, and all nursing programs are required to have a " C " 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 having all the course work complete. 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 A, B, C, D, or F will be calculated by term and by cumulative total.

Each grade listed above is assigned a quality point value ( $\mathrm{A}=4$, $\mathrm{B}=3, \mathrm{C}=2, \mathrm{D}=1$, 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 student received 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:

$$
\begin{aligned}
& \mathrm{A}=4 \text { quality points and } 4 \times 3 \mathrm{hrs.}=12 \\
& \mathrm{~B}=3 \text { quality points and } 3 \times 3 \mathrm{hrs} .=\frac{9}{21} \text { total points }
\end{aligned}
$$

$\frac{21 \text { total points }}{6 \text { attempted credit hrs. }}=3.5$ 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 current term.

## 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 Methods of Instruction

## Virtual Courses (on-line learning)

Virtual courses are delivered via the Internet. Students are able to participate in a wide range of courses offered by Richland. These courses are designed to be accessed from any location where the Internet is available to students. Visit the Virtual Campus webpage at www.richland.edu/vcampus/. (Students must have a Richland email address to register for a virtual course.) Hybrid and blended courses are structured with both online and in-person instruction. These courses are described in the Class Schedule.

## 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 particular class difficult.

To request an independent study, the following conditions must be met: the course must be required for graduation or pro-
fessional certification, and the requested term for independent study and the term of graduation must be the same. After completing the form, the student should discuss the request with the appropriate Dean. If the request is granted, weekly meetings during the arranged term of the course are held between student and instructor. Only those courses included in the Catalog are available for Independent Study. "Request for Independent Study" forms are available in the appropriate division office.

## Auditing a Course

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 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. 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.

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.

Students are not to 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 cautioned 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 Admission and Records Office. Students with unsatisfactory attendance will be sent a "stopped attending" letter. See Dropping a Course, page 37.

## Removal from the College or Class by Richland

The College reserves the right to remove any student from the College who is interfering with or disrupting the normal activities of the institution or the rights of others. Students removed from the College must apply for readmission through the Vice President of Student and Academic Services.

Students may also be required to withdraw from a course or the College if they cannot make satisfactory academic progress despite special assistance, advising, and counseling.

## 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 Student Services 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 previous fall semester or will complete 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 requirements 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 a Student Services counselor, his/her academic advisor, or the Dean of Enrollment and Retention 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 and Retention Services can answer questions regarding the application for graduation process.

## Constitution Requirement

Richland Community College requires having met the Constitution Requirement in order to receive the Basic or Advanced Certificate for any occupational-oriented 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 an Illinois 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 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 for which they have completed the requirements. Only the highest award will be announced at the commencement ceremony.

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

1. Complete a second area of concentration;
2. Complete all group requirements for the second degree; and
3. Earn at least 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.

## 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, the following requirements must be met by transfer students in order to be given a degree or certificate:

At least 15 semester hours of an associate's degree or certificate program must be completed at Richland.

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.

## 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 one-half or 15 hours, whichever is greater, of the credits needed for a degree or certificate in order to be considered for such honors.

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 four preceding years during the time the student was enrolled.

If a student wishes to graduate under program provisions more than four years 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 and Retention Services for an evaluation of the quarter hours earned.

## Health Professions Graduation Requirements

## 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 NLN outcome test with a $65 \%$ or greater.

Level I - Semester I (NA for LPN Bridge).
Level I - Semester 2 (NA for LPN Bridge).
Passing of the Mosby Assess Test with a $65 \%$ or greater.
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 2.5. Program GPA includes 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 fo the NLN code of Ethics and the Professional Integrity Policy.

## Radiologic Technology (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 2.5 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/ASRT Code 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 2.5, including all prerequisites and program courses required for the certificate/degree.

Completion of all surgical technology skills in the lab/clinical and $100 \%$ 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 lowerdivision (freshman-sophomore) general education 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.

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 Illinois General Education Core Curriculum between 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), IAI F (Fine Arts), IAI H (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 109) 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 have been approved for the Illinois Articulation Initiative.

## IAI GECC

C - Communication
M - Mathematics
P, LP - Physical Sciences
L, LP - Life Sciences
H, HF - Humanities
F, HF - Fine Arts
S - Social and Behavioral Sciences

## 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 must have 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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## Programs of Study

Richland Community College's "Open Door" policy allows anyone who believes he/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 student enrolling in a program of study would have several options:

The Associate in Arts (AA) (see page 46), Associate in Science (AS) (see page 47), Associate in Fine Arts (AFA) (see page 48), Associate in Engineering Science (AES) (see page 49), and Associate of Arts in Teaching (AAT) (see page ??) 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 or AAT (Education majors) 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 53).

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 or the Associate in Liberal Studies (ALS) Degree (see page ???).

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 Community College 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 Danville

 Community College, Danville:- Substance Abuse Counselor - AAS
- All Occupational/Technical Certificates and Degrees not offered by RCC.
Programs offered for Danville District residents at Richland:
- Computer Integrated Manufacturing - AAS, Basic Certificate
- All Occupational/Technical Certificates and Degrees not offered by DACC.
Programs offered for Richland District residents at Heartland


## Community College, Bloomington:

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


## Programs offered for Heartland District residents at Richland:

- All Occupational/Technical Certificates and Degrees not offered by HCC.
- Surgical Technology - AAS, Certificate

Programs offered for Richland District residents at Illinois Valley Community College, Oglesby:

- All Occupational/Technical Certificates and Degrees not offered by RCC.
Programs offered for Illinois Valley District residents at Richland:
- All Occupational/Technical Certificates and Degrees not offered by IVCC.
Programs offered for Richland District residents at Joliet Junior College, Joliet:
- All Occupational/Technical Certificates and Degrees not offered by RCC.
Programs offered for Joliet Junior College residents at Richland:
- All Occupational/Technical Certificates and Degrees not offered by JJC.
Programs offered for Richland District residents at Kankakee Community College, Kankakee:
- All Occupational/Technical Certificates and Degrees not offered by RCC.


## Programs offered for Kankakee District residents at Richland:

- All Occupational/Technical Certificates and Degrees not offered by KCC.
Programs offered for Richland District residents at Kishwaukee College:
- All Occupational/Technical Certificates and Degrees not offered by RCC.
Programs offered for Kishwaukee College residents at Richland:
- All Occupational/Technical Certificates and Degrees not offered by KC.

Programs offered for Richland District residents at Lake Land College, Mattoon:

- Agriculture Power Technology - AS, Certificate
- Agriculture Production and Management - AAS
- Cosmetology - Certificate
- Cosmetology Teacher - Certificate
- Crop Production - Certificate
- Dental Hygiene - AAS
- John Deere Ag Sales - AAS
- John Deere Ag Technology - AAS
- Livestock Production - Certificate
- Nanny Child Care Provider - Certificate
- Physical Therapist Assistant - AAS
- Radio/TV Broadcasting - AAS

Programs offered for Lake Land District residents at Richland:

- Electronics Biomedical - AAS
- Fire Science - AAS, Certificate
- Heating, Ventilation, Air Conditioning, \& Refrigeration - AAS
- Surgical Technology - AAS, Certificate
- Welding - Certificate

Programs offered for Richland District residents at Lincoln Land Community College, Springfield:

- Air Frame \& Power Plant Mechanics - AAS
- Aviation Management/Airway Science - AAS
- Occupational Therapy Assistant - AAS

Programs offered for Lincoln Land District residents at Richland:

- Surgical Technology - AAS, Certificate

Programs offered for Richland District residents at McHenry County College:

- All Occupational/Technical Certificates and Degrees not offered at RCC.

Programs offered for McHenry County College residents at Richland:

- All Occupational/Technical Certificates and Degrees not offered at McCC.
Programs offered for Richland District residents at Moraine Valley Community College, Palos Hills:
- All Occupational/Technical Certificates and Degrees not offered by RCC.
Programs offered for Moraine Valley District residents at Richland:
- All Occupational/Technical Certificates and Degrees not offered by MVCC.
Programs offered for Richland District residents at Morton College, Cicero:
- All Occupational/Technical Certificates and Degrees not offered by RCC.
Programs offered for Morton District residents at Richland:
- All Occupational/Technical Certificates and Degrees not offered by MC.

Programs offered for Richland District residents at Parkland College, Champaign:

- Building \& Construction Repair - Certificate
- 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

Programs offered for Parkland District residents at Richland:

- Heating, Ventilation, Air Conditioning, and Refrigeration AAS and Certificate
Programs offered for Richland District residents at Prairie State College, Chicago Heights:
- All Occupational/Technical Certificates and Degrees not offered by RCC.

Programs offered for Prairie State District residents at Richland:

- All Occupational/Technical Certificates and Degrees not offered by PSC.
Programs offered for Richland District residents at South Suburban College, South Holland:
- All Occupational/Technical Certificates and Degrees not offered by RCC.
Programs offered for South Suburban District residents at Richland:
- All Occupational/Technical Certificates and Degrees not offered by SSC.


## Programs offered for Richland District residents at Waubonsee

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


## Programs offered for Waubonsee Community College residents at

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


## 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.):
$\begin{array}{lr}\text { a. Communications } & 9 \text { semester hours } \\ \text { b. Fine Arts/Humanities } & 11-12 \text { semester hours }\end{array}$ (at least one course selected from each area)
c. Social Science
(selected from 2 or more disciplines)
d. Life/Physical Science 7-8 semester hours (at least one course selected from each area)
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 38.)
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 36.)

## Associate in Arts (AA) Transfer Academic Plan

Area of Concentration
Designed to provide two academic years of college study for transfer toward a Bachelor of Science degree at

| General Education Requirements - 39-43 Hrs.* |  | Course and Number | RCC | Semester <br> \& Year |
| :--- | :--- | :--- | :--- | :--- |
| Transfer | Total |  |  |  |
| Communications: 3 courses (9 Hrs.) <br> ENGL 101, 102; <br> SPCH 101 (Required) <br> ("C" or better required for both ENGL101 and 102 <br> effective Summer 1999) |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Social \& Behavioral Sciences: 3 or 4 courses (9-10 Hrs.) <br> (Selected from two or more disciplines.) <br> ANTHRO 110, 120, 130; ECON231, 232; <br> HIST 101, 102; POLS100, 110, 120; <br> PSYCH 110, 145, 150, 210; <br> SOCIO 110, 150, 200, 225 |  |  |  |  |

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

* All General Education Group Requirement courses must be approved IAI courses.


## 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 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 9-10 semester hours (at least one course selected from each area)
c. Social Science

9-10 semester hours (selected from 2 or more disciplines)
d. Life/Physical Science

7-8 semester hours (at least one course selected from each area)
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 38.)
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 36.)

## Associate in Science (AS) Transfer Academic Plan

Area of Concentration
Designed to provide two academic years of college study for transfer toward a Bachelor of Science degree at

| General Education Requirements - 41-45 Hrs.* | Course and Number | RCC | Semester \& Year | Transfer | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Communications: 3 courses ( 9 Hrs.) |  |  |  |  |  |
| ENGL 101, 102; <br> SPCH 101 (Required) |  |  |  |  |  |
| effective Summer 1999) |  |  |  |  |  |
| Social \& Behavioral Sciences: 3 or 4 courses ( $9-10 \mathrm{Hrs}$.) |  |  |  |  |  |
| (Selected from two or more disciplines.) <br> ANTHRO 110, 120, 130; ECON 231, 232; |  |  |  |  |  |
| HIST 101, 102; POL S 100, 110, 120; <br> PSYCH 110, 145, 150, 210; <br> SOCIO110, 150, 200, 225 |  |  |  |  |  |
|  |  |  |  |  |  |
| Humanities/Fine Arts: 3 or 4 courses (9-10 Hrs.) <br> (One course from humanities and one course from fine arts.) |  |  |  |  |  |
| Humanities - AF AM 101, 103, 104; ENGL 115, 124, 126, 128, 160, 201, 202, 231, 232, $240^{*}$, 251, 252; FREN 202; GERM 202; |  |  |  |  |  |
| HIST 111, 112, 201, 202, 270; HUMAN 100, 201; PHIL 100, 110, 120, 210, 215, 230; SPAN 202 |  |  |  |  |  |
| Fine Arts - AF AM 101, 103; ART 100, 210, 220, 230; DRAMA 150; ENGL 140; HUMAN 100, 201; MUSIC 100, 190 |  |  |  |  |  |
| Life/Physical Science: 2 courses (7-8 Hrs.) <br> (Select one course from life science and one course from physical science including at least one laboratory course.) |  |  |  |  |  |
| Life Science - BIOL 101, 106, 120, 210 - Physical Science - ASTRO 105; CHEM100, 131; EASCI 210, 220, 230; PHYS 105; PHYS 100, 101, 151 |  |  |  |  |  |
| Mathematics: 2 courses (7-8 Hrs.) |  |  |  |  |  |
| MATH 110, 112, 113, 121, 122, 160, 170, 171, 190, 221 |  |  |  |  |  |
| Area of Concentration (See page 50 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

* All General Education Group Requirement courses must be IAI approved courses.


## 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
(selected from 2 or more disciplines)
c. Social Science (selected from 2 or more disciplines)
d. Life/Physical Science

7-8 semester hours
e. Mathematics

3-4 semester hours

## 2. Required Art Courses

ART101, 102, 111, 112, 113, 210, 220, 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 38.)
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 36.)

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

Area of Concentration
Designed to provide two academic years of college study
for transfer toward a Bachelor of Science degree at

| General Education Requirements - 40-42 Hrs.* | Course and Number | RCC | Semester \& Year | Transfer | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Communications: 3 courses ( 9 Hrs .) <br> ENGL 101, 102; <br> SPCH 101 <br> ("C" or better required for both ENGL 101 and 102 effective Summer 1999) |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Social \& Behavioral Sciences: (6 Hrs.) <br> (Selected from two or more disciplines.) <br> ANTHRO 110, 120, 130; ECON 231, 232; HIST 101, 102; POL S 100, <br> 110,120 ; PSYCH 110, 145, 150, 210; SOCIO 110, 150, 200, 225 |  |  |  |  |  |
|  |  |  |  |  |  |
| Humanities/Fine Arts: ( 6 Hrs.) <br> AF AM 101, 103, 104; ENGL 115, 124, 126, 128, 160, 201, 202, 231, 232, 240, 251, 252; FREN 202; GERM 202; HIST 111, 112, 201, 202, 270; <br> HUMAN 100, 201; PHIL 100, 110, 120, 210, 215, 230; <br> SPAN 202 |  |  |  |  |  |
|  |  |  |  |  |  |
| Life/Physical Science: 2 courses (7-8 Hrs.) <br> (Select one course from life science and one course from physical science including at least one laboratory course.) <br> Life Science - BIOL 101, 106, 120, 210 • Physical Science - ASTRO 105; CHEM100, 131; EASCI 210, 220, 230; PHYS 105; PHYS 100, 101, 151 |  |  |  |  |  |
|  |  |  |  |  |  |
| Mathematics: 1 courses (3-4 Hrs.) <br> MATH 110, 112, 113, 121, 122, 160, 170, 171, 190, 221 |  |  |  |  |  |
| Required Art Courses: <br> ART 101, 102, 111, 112, 113, 210, 220, 230 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Art Electives: (9 Hrs.) <br> Select from the following: <br> ART $105,114,115,116,117,118,119,120,121,122,123,124,125,126$, <br> 127, 151, 152, 160, 240, 251, 252 |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Hours - (64-66 Required - Minimum of 15 hrs . at Richland) 2.0 GPA required for all Richland degrees. |  |  |  |  |  |

[^0]
## 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 to subsequently 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.

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

## 1. Group Requirements:

a. Communication Skills
9 semester hours
b. Humanities 10 semester hours
c. Social Science 10 semester hours
d. Natural Science and Mathematics
2. General Electives 10 semester hours may include occupational-oriented courses
3. Constitution Requirement (See Page 38.)
4. Total Credits Required 60 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 pursued at the College.

## Associate in Liberal Studies (ALS)

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

| General Education Requirements - 39 Hrs.* | Course and Number | RCC | Semester \& Year | Transfer | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Communications: (9 Hrs.) |  |  |  |  |  |
| ("C" or better required for both ENGL 101 and 102 effective Summer 1999) |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| AGRIC 130 ASTRO 105 BIOL 101, 102, 120, 130, 201, 202, 210, 220 <br> CHEM 100, 110, 131, 132, 201, 202 |  |  |  |  |  |
| EASCI 210, 220, 230 ELTRN 110 HORT 100 PHY S 105 PHYS 100, 101, 102, 151, 152, 153 |  |  |  |  |  |
| MATH $104,106,110,111,112,113,116,117,121,122,160,170,171$, $190,210,221,230,240$ |  |  |  |  |  |
| Social Science: (10 Hrs.) |  |  |  |  |  |
| ANTHR 110, 120, $130 \quad$ ECON 225, 231, 232 ED $100,101,102,105,107,108,199,200$ |  |  |  |  |  |
| PSYCH 100, 110, 130, 145, 150, 200, 210, 220, 250, 260, 280 <br> SOCIO 100, 105, 110, 125, 130, 135, 141, 150, 200, 210, 225 |  |  |  |  |  |
| SOC S 199 |  |  |  |  |  |
| Humanities/Fine Arts: ( 10 Hrs.) |  |  |  |  |  |
| $\begin{aligned} & \text { AF AM 101, 102, 103, 104, } 105 \\ & \text { ART } 100,210,220,230,240 \end{aligned} \quad \text { DRAMA } 150$ |  |  |  |  |  |
| ENGL 115, 124, 126, 128, 140, 150, 160, 201, 202, 231, 232, 251, 252 FREN 101, 102, 201, 202 GERM 101, 102, 201, 202 HIST 111, 112, 201, 202, 270 HUMAN 100, 201, 280 |  |  |  |  |  |
| MUSIC 100, 190 PHIL 100, 106, 110, 120, 200, 210, 215, 230 SPAN 101, 102, 201, 202 |  |  |  |  |  |
|  |  |  |  |  |  |
| Electives: (21 Hrs.) <br> May include any course numbered 100 or above |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Total Hours - (60 Required - Minimum of 15 hrs. at Richland) |  |  |  |  |  |

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 junior. While the general education requirements listed will satisfy the requirements of most senior institutions, it is your responsibility, as a college transfer student, to identify as early as possible the institutions to which you will be applying for transfer to determine the specific requirements of those institutions for the freshman and sophomore years. Your 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 A.E.S. 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 your major field, but you may need to complete additional general education requirements to officially achieve junior status at the senior institution of your choice.

| Associate in Engineering Science (AES) Transfer Academic Plan |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Area of Concentration |  |  |  |  |  |
| Designed to provide two academic years of college study for transfer toward a Bachelor of Science degree at |  |  |  |  |  |
|  | Course and Number | RCC | Semester \& Year | Transfer | Total |
| Communications: 2 courses (6 Hrs.) <br> ENGL 101, 102; <br> ("C" or better required for both ENGL 101 and 102 <br> effective Summer 1999) |  |  |  |  |  |
|  |  |  |  |  |  |
| Social \& Behavioral Sciences: 2 courses ( 6 Hrs.) ECON 231, 232; |  |  |  |  |  |
|  |  |  |  |  |  |
| Humanities/Fine Arts: (3 Hrs.) <br> AF AM 101, 103, 104; ENGL 115, 124, 126, 128, 160, 201, 202, 231, 232, <br> 240, 251, 252; FREN 202; GERM 202; HIST 1111, 112, 201, 202, 270 ; <br> HUMAN 100, 201; PHIL 100, 106, 110, 120, 210, 215, 230; SPAN 202 |  |  |  |  |  |
|  |  |  |  |  |  |
| Physical Science: 5 courses (21 Hrs.) CHEM 131, 132; PHYS 151, 152, 153; |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Mathematics: $\mathbf{4}$ courses ( $\mathbf{1 7}$ Hrs.) MATH 121, 122, 221, 230 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Engineering: 3 courses ( 11 Hrs .) ENGR 110, 211, 212 |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Computer Science: 1 course (4 Hrs.) <br> CS 251 or CS 281 |  |  |  |  |  |
| Total Hours - (68 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

## 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 and Modern Physics | 4 | X |
| Computer Science Electives (CS 251 or CS 281) | 4 | X |  |
| Humanities |  | 3 | X |

## $\mathrm{X}=$ 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 |  |
| :---: | :--- | :--- | :--- |
| CHEM 131 | F, S | CHEM 132 | S |
| ENGL 101 | F, S, Su | ENGL 102 | F, S, Su |
| MATH 121 | F, S, Su | MATH 122 | F, S |
| ENGR 110 | F | PHYS 151 | S |
| 3rd Semester |  | 4th Semester |  |
| ECON 231 | F, S, Su | ECON 232 | F, S, Su |
| ENGR 211 | F | ENGR 212 | S |
| MATH 221 | F | MATH 230 | S |
| PHYS 152 | F | PHYS 153 | S |
| Humanities Elc | F, S, Su | Comp Science Elec | F, S, Su |
| F=fall $\quad$ S=spring | Su=summer | AN=as needed |  |

## Associate of Arts in Teaching Program (AAT)

The Associate of Arts in Teaching (AAT) program is designed to attract students into high need discipline areas for preparation to transfer to a four-year college/universityeducation 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 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 will 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 must submit 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 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 graduation application, students must submit a portfolio that includes a reflection of educational experience, 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, and Core Technology Standards, as well as by the College's core values (Commitment, Respect, Excellence, Accountability and Diversity). (See AAT Degree Program description for 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 9 semester hours
b. Fine Arts/Humanities 8-9 semester hours
c. Social Science
d. Life/Physical Science

9 semester hours
(at least one course selected from each area)
e. Mathematics 4 semester hours
(see AAT-Math curriculum plan)
2. Professsional Education Core ED 100, 105, 200; PSYCH 145
3. Constitution Requirement (See Page 38.)
4. Total Credits Required

64 semester hours
7. Cumulative Grade Point Average
2.5 or better for all work applicable toward the degree that was completed at Richland. See page 55


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

## Area 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: ACCT101, 102; ECON231, 232
- Other suggested courses: MATH160, 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; HORT100

Anthropology (AA or AS)

- Area of Concentration: ANTHR110, 120, 130


## Art (AA)

- Area of Concentration: ART101, 102, 111, 112, and at least two courses from those listed below
- Other suggested courses: ART 113, 114, 115, 116, 117, 118, $119,120,121,122,123,124,125,126,127,131,140,145$, 151, 152, 210, 220, 230, 240, 251, 252
Biology (AS)
- Area of Concentration: BIOL101, 102, 201, 202, 210, 220
- Other suggested courses: CHEM131, 132

Business (AA or AS)

- Area of Concentration: ACCT101, 102; BUS231; ECON231, 232
- Other suggested courses: IT 105 or CIS110; MATH116, 160, 170, 190, and above; psychology
Business - International (AA or AS)
- Area of Concentration: ACCT101, 102; ECON225, 231, 232; HIST112, 202; CIS110
- Other suggested courses: MATH160, 170, 190


## Chemistry (AS)

- Area of Concentration: CHEM131, 132, 201, 202
- Other suggested courses: MATH121, 122


## Computer Science (AS)

- Area of Concentration: BIOL101 or 210; CS 251, 230, 281; MATH121, 122, 210, 221; PHYS151, 152, 153


## Dentistry

- See Pre-Dentistry.


## Drama

- See Speech and Drama.


## Earth Science (AS)

- Area of Concentration: EASCI 210, 220, 230


## Economics (AA or AS)

- Area of Concentration: ECON231, 232
- Other suggested courses: ECON225; MATH160, 170, 190, plus courses in sociology and political science


## Education

- See Teacher Education.


## Engineering (AES)

- See Associate in Engineering Science (Page 49)


## English (AA)

- Area of Concentration: (a selection of four of the following) ENGL115, 124, 126, 128, 140, 150, 160, 201, 202, 231, 232, 251, 252
- Other suggested courses: courses in economics, foreign language, history, literature, or political science


## Foreign Language (AA)

- Area of Concentration: two years of study in chosen language
- Other suggested courses: one sequence in United States or ancient or European history and literature courses


## General Science (AS)

- Area of Concentration: BIOL101, 102 or CHEM131, 132 or PHYS101, 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: HIST101, 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: JOURN101, 102, 110


## Mathematics (AS)

- Area of Concentration: MATH121, 122, 221, plus one additional mathematics course
- Other suggested courses: CHEM131, 132; PHYS151, 152, 153


## Medicine

- See Pre-Medicine.


## Philosophy (AA)

- Area of Concentration: PHIL100, 110, 120, 200, 210, 215, 220, 230
- Other suggested courses: humanities and/or history courses


## Physics (AS)

- Area of Concentration: PHYS151, 152, 153
- Other suggested courses: CHEM131, 132; MATH121, 122, 221, 230
Political Science/Pre-Law (AA or AS)
- Area of Concentration: POL S100, 110, 120
- Other suggested courses: ECON231, 232; HIST101, 102; PHIL110, 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 BIOL101, 102, 210; CHEM131, 132
- Other suggested courses: MATH117; PHYS101; 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: CHEM131, 132


## Psychology (AA or AS)

- Area of Concentration: PSYCH 110, plus two or more from the following: PSYCH 130, 150, 200, 210, 250, 260, 280
- Other suggested courses: MATH160, 170, or 190 and other social science
Sociology (AA or AS)
- Area of Concentration: SOCIO110, plus three or more from the following: SOCIO125, 130, 135, 141, 150, 200
- Other suggested courses: MATH170

Speech and Drama (AA)

- Area of Concentration: Three or more courses from DRAMA150, 160, 170; SPCH 110, 210, 230
Teacher Education (AA, AS, AAS or AAT)
- 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 elementary, secondary, or special education, students must complete a minimum of 60 semester credits (up to a maximum of 64 semester credits). Com-
munity college students are strongly encouraged to complete an Associate in Arts, Associate in Science, or Associate of Arts in Teaching 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.
Early Childhood Education (AA, AS, AAS, AAT)
- Area of Concentration: ENGL101, SPCH101, PSYCH110, PSYCH150, SOCIO200, plus fine art and math electives.
- Other suggested courses: ECE101, ECE103, ECE110, ECE111, ECE203, ED105, ED220


## Paraprofessional Educator (AAS)

- Area of Concentration: ED100, ED200, ED220, ENGL101, SPCH101, PSYCH110, PSYCH150, SOCIO200, plus fine art, math, physical science, and U.S. History electives.
- Other suggested courses: ECE110, ECE111, ED105, ED107, ED108, ED109
Elementary Education (AA or AS)
- Area of Concentration: ED100, ED200, ED220, ENGL101, ENGL102, 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, ECE111, ED102, ED105, ED107, ED108, ED109, 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, ED200, ED220, ENGL101, ENGL102, SPCH101, POL S110, PSYCH145, SOCIO200, plus fine art, life science, math, physical science, U.S. History, Non-U.S. History, and literature electives.
- Other suggested courses: ECE110, ECE111, ED102, ED105, ED107, ED108, ED109, 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 Mathematics (AAT)
- Area of Concentration: ED100, ED105, ED200, ED220, ENGL101, ENGL102, MATH113, MATH121, MATH122, MATH221, POL S110, PSYCH110, PSYCH145, SOCIO110, or SOCIO200, SPCH101.
- Required General Education Electives: Fine Arts Elective, Humanities Elective, Additional Fine Arts or Humanities Elective, Life Science Elective, Physical Science Elective
- Students must pass the Illinois Basic Skills Test and submit a digital portfolio to graduate from the program.
- Other suggested courses: MATH 240. Some schools may require a foreign language course.
- Additional AAT Program Areas:

Bilingual Education (Pending Approval)
Early Childhood Education
Secondary Science
Special Education

Special Education (AA or AS)

- Area of Concentration: ED100, ED200, ED 220, ENGL101, ENGL102, 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, ECE111, ED102, ED105, ED107, ED108, ED109, 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 fouryear 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
- Surgical Technology

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

- Early Childhood Education
- Nursing

Southern Illinois University, Carbondale

- Automotive Technology
- Electronics Management
- Information Systems Technology

University of Illinois Springfield

- Accounting
- Management

University of Illinois, Urbana-Champaign

- Agriculture
- AgriBusiness Major
- Animal Science Major
- Communication and Education Major
- Crop Science Major
- Food Science Major
- Forest Science Major
- Horticulture Major
- Human Development Major
- Natural Resource and Environmental Sciences Major
- Technical Systems Management Major
- Engineering


## College Tech Prep

College Tech Prep at Richland Community College includes the Associate in Applied Science (AAS) degree programs of study that lead to high skill/high wage careers in occupational and technical fields. College Tech Prep programs of study are developed through strong partnerships between business/industry and the educational system. By working through designated sequences of academic and technical courses, students 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.

A prescribed sequence of courses in any program designated as College Tech Prep is designed to build student competence in mathematics, science, communications, and technology. College Tech Prep programs use applied academics to ensure that students understand how to apply what they learn in the world beyond the classroom, including the world of work. College Tech Prep programs also offer students opportunities for job shadowing, internships, and apprenticeships. Ultimately, the combined College Tech Prep educational experience is designed to support placement of students in relevant careers upon program completion.

Students can enter College Tech Prep programs as early as their junior year in high school and can complete their program of study at the community college level. Some programs also lead to fouryear degree programs offered at various colleges and universities. Most College Tech Prep programs of study include courses that provide college credit earned while in high school. College Tech Prep is designed to smooth the transition from high school 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 Richland's College Tech Prep AAS degree programs. College Tech Prep programs at Richland are offered in five career cluster areas that have been identified by local area business and industry representatives.

Allied Health and Human Services

- Dental Hygiene (Cooperative Agreement with Lake Land)
- Emergency Medical Technician
- Fire Science
- Criminal Justice
- Nursing RN
- Occupational Therapy (Cooperative Agreement with Parkland)
- Physical Therapy Assistant (Cooperative Agreement with Lake Land)
- Respiratory Care (Cooperative Agreement with Parkland)
- Surgical Technologist
- Radiologic Technology

Business and Information Technology

- Accounting
- Business
- Hospitality Management
- Information Technology-Desktop Support Technician
- Information Technology-Network Technology
- Information Technology-Programming
- Management
- Marketing
- Office Technology
- Administrative Assistant
- Medical Office Specialist

Industrial and Engineering-Related Technology

- Automotive Technology
- Drafting \& Design
- Electronics
- Electronics-Biomedical Option
- Engineering Technology

CNC Technology
Electrical Systems
Instrumentation Systems
Facilities Management
Fluid Power Systems
Mechanical Systems
Machine Repair
Manufacturing Engineering
Agriculture Business/Management and Horticulture

- Horticulture
- Ornamental
- Floriculture

Arts \& Communication

- Graphic Arts

The Director of Workforce Program Development oversees the College Tech Prep programs of study at Richland and is available at (217)875-7211, Ext. 223, to assist students with Tech Prep supportive services and information, including articulation of courses and transition to further education and/or the work place. Faculty advisors from the various College Tech Prep 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 beyond the year 2005. 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 student objectives, 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 for employment 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 52) 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 offers, for example, 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 consult a 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 11.)
2. Constitution Requirement (See Page 38.)
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 36.)

## 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 11.) Transfer of college credit to Richland is explained under Admissions, page 11.

If any student pursuing an occupational-oriented program has a background that makes 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 parttime 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

 CommunicationsENGL101, 102, 110, 114, 220, 222
SPCH 101, 110, 120, 140, 210, 230

## Humanities

AF AM101, 102, 103, 104, 105
ENGL115, 124, 126, 128, 150, 160, 201, 202, 231, 232, 251, 252
FREN101, 102, 201, 202
GERM101, 102, 201, 202
HIST111, 112, 201, 202, 270
HUMAN 100, 201, 280
PHIL100, 106, 110, 120, 200, 210, 215, 220, 230
SPAN101, 102, 198, 201, 202

## Fine Arts

AF AM101, 102, 103
ART100, 210, 220, 230, 240
DRAMA150
ENGL140
HUMAN100, 201
MUSIC100, 190

## Mathematics

MATH104, 106, 110, 111, 112, 113, 116, 117, 121, 122, 160, 170, 171, 190, 210, 221, 230, 240
Natural/Life/Physical Science
AGRIC130
ASTRO105
BIOL101, 102, 201, 202, 210, 220
CHEM100, 110, 131, 132, 201, 202
EASCI210, 220, 230
ELTRN110
ECE110 (ECE only)
HORT100
PHY S 105
PHYS100, 101, 102, 151, 152, 153
Social Science
ANTHR110, 120, 130
ECON225, 231, 232
ED100, 101, 102, 105, 107, 108, 199, 200
HIST101, 102, 105
P REL100, 110
POL S100, 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
Bold print indicates approved general education classes.

## Occupational Program Degree Requirements

Accounting.
Page 56
AgriBusiness (AAS)
Page 57
Automotive Technology (Cert., AAS) . . . . . . . . . . . . . . . . . . Page 58
Business (Cert., AAS) Page 59
Entrepreneur
Management
Marketing
CDL Truck Driver Training (Cert.) (See Transportation). Page 106
Criminal Justice (Basic Cert., Adv. Cert., AAS) . . . . . . . . . Page 61
Drafting \& Design Engineering
(Basic Cert., Adv. Cert., AAS). . . . . . . . . . . . . . . . . . . . . . Page 64
Early Childhood Education (AAS) . . . . . . . . . . . . . . . . . . . . Page 65
Electronics (Basic Cert., Adv. Cert., AAS) . . . . . . . . . . . . . . Page 67
Biomedical Option (AAS)......................................... 68
Emergency Medical Technology
(Basic Cert., Adv. Cert., AAS) . . . . . . . . . . . . . . . . . . . . Page 69
Energy Distribution . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Page 70
Engineering Technology (Cert., AAS) . . . . . . . . . . . . . . . . Page 71
CNC Technology
Electrical Systems
Facilities Management
Fluid Power Systems
Instrumentation Systems
Machine Repair
Manufacturing Engineering Technology
Mechanical Systems
Fire Science (Basic Cert., Adv. Cert., AAS) .............. . Page 79
Graphic Arts (Cert., AAS) . . . . . . . . . . . . . . . . . . . . . . . . . . Page 80
Heating, Ventilation, Air-Conditioning, \&
Refrigeration (Cert., AAS). . . . . . . . . . . . . . . . . . . . . . . Page 82
Horticulture (Cert., AAS) . . . . . . . . . . . . . . . . . . . . . . . . . . . Page 83
Hospitality Management (Cert., AAS) . . . . . . . . . . . . . . . . Page 84
Information Technology (Cert., AAS)
(formerly Computer Information Systems) .......... Page 86
Desktop Support Technician
Network Technology
Programmer/Analyst
Nurse Assistant (Cert.) . . . . . . . . . . . . . . . . . . . . . . . . . . . . Page 90
Nursing (ADN, AAS) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Page 90
Office Technology (Cert., AAS) . . . . . . . . . . . . . . . . . . . . . . Page 93
Admin. Asst.
Gen.
Legal Office
Med. Off. Specialist
Paraprofessional Educator (Teacher Assistant) (AAS) . . . . Page 66
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Practical Nursing (Cert., State Licensure). . . . . . . . . . . . . Page 101
Radiography (AAS) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Page 102
Surgical Technology (Cert., AAS) . . . . . . . . . . . . . . . . . . . . Page 104
Teacher Assistant (See Paraprofessional Educator) . . . . . . Page 66
Transportation (Basic Cert.) . . . . . . . . . . . . . . . . . . . . . . . . Page 106
Welding (Basic Cert.) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Page 106
These are occupational training programs. Some of the courses may not transfer to four-year institutions.


## Accounting (Pending ICCB Approval)

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 very 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.

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)

| COURSES | Credit Hours | Associate Applied Science Accounting | Accounting Specialist Certificate | $\begin{gathered} \text { Advanced } \\ \text { Accounting } \\ \text { Certificate } \end{gathered}$ | $\underset{\substack{\text { Basic } \\ \text { Certificate }}}{\text { Centing }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ACCT 101: Financial Accounting | 4 | X | X | X | X |
| ACCT 201: Intermediate Accounting 1 | 4 | X | X | X |  |
| ACCT 202: Intermediate Accounting 2 | 4 | X | X |  |  |
| ACCT 205: Small Business Accounting | 3 | X | X | X | X |
| ACCT 210: Tax Accounting (formerly Acct 130) | 3 | X | X | X |  |
| ACCT 211: Managerial Cost Accounting | 4 | X | X | X | X |
| BUS 100: Business Fundamentals | 3 | X | X | X |  |
| BUS 110: Business Mathematics (or Math 104) | 3 | X | X |  |  |
| BUS 200: Customer Service Fundamentals | 3 | X | X |  |  |
| BUS 231: Business Law Principles | 3 | X | X | X |  |
| BUS 232: Business Law \& Ethics | 3 | X | X |  |  |
| BUS 290: Work Experience Practicum \& Seminar (or Bus 295) | 3 | X |  |  |  |
| CIS 110: Business Applications | 3 | X | X | X | X |
| ECON 231: Macroeconomics | 3 | X |  |  |  |
| ECON 232: Microeconomics | 3 | X |  |  |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 3 | X |  |  |  |
| IT 120: Spreadsheet Applications | 3 | X | X | X |  |
| P REL 100: Human Relations | 3 | X | X |  |  |
| P REL 110: Supervision | 3 | X | X |  |  |
| SPCH 120: Business and Professional Speaking (or Spch 101*) | 3 | X |  |  |  |
| Total |  | 64 | 49 | 30 | 14 |

X = Required

* = Take this course if you plan to attend university.


## 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.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCT 101 | F, S, Su | ACCT 211 | S | ACCT 201 | F | ACCT 202 | S |
| BUS 100 | F, S, Su | IT 120 | S | ACCT 210 | F | ACCT 205 | S |
| BUS 110 | F, S, Su | P REL 100 | F, S | BUS 200 | F | BUS 232 | S |
| CIS 110 | F, S, Su | P REL 110 | S | BUS 231 | F, S | BUS 290 | F, S, Su |
| ENGL 110 | F, S, Su | SPCH 120 | F, S, Su | ECON 231 | F, S, Su | ECON 232 | F, S |
| fall | ring | summer | =as need |  |  |  |  |

## 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 Agriculture 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 not only in high demand not only locally but globally as well. New specialties are under development right now.

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)

| COURSES | Credit Hours | Associate Applied Science AgriBusiness |
| :---: | :---: | :---: |
| 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 110: 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 |  | 61 |

$\mathrm{X}=$ Required
Agric 295 may only be taken one time to satisfy degree requirement.
*Students who are considering transfer options should take this course.

## 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.

| 1st Semester |  | 2nd Semester |  |
| :--- | :--- | :--- | :--- |
| ACCT 100 | F, S, Su | AGRIC 195 | S |
| BUS 100 | F, S, Su | BUS 220 | S |
| BUS 110 | F, S, Su | P REL 100 | F, S |
| CIS 110 | F, S, Su | P REL 110 | S |
| ENGL 101 | F, S, Su | SPCH 120 | F, S, Su |


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


| 4th Semester |  |
| :--- | :--- |
| AGRIC 232 | S |
| AGRIC 290 | F, S, Su |
| BUS 225 | S |
| BUS 232 | S |
| ECON 232 | F,S |

$\mathrm{F}=$ fall $\quad \mathrm{S}=$ spring $\quad \mathrm{Su}=$ summer $\quad \mathrm{AN}=$ 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 that include expanded use of electronics and computerized controls for improving engine performance, fuel efficiency, onboard 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 expected to have many job openings each year. Education and experience are essential to succeed because of rapidly changing technology.

|  | Credit Hours | $\begin{gathered} \text { Automotive } \\ \text { Technology } \\ \text { AAS } \\ \hline \end{gathered}$ | Senior <br> $\xrightarrow{\text { Repair }}$ <br> Certificate |  | Auto Performance Specialist Certificate | Brake Steering Suspension Certificate |  |  | Transmission Driveline Specialist Certificate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 To be selected from areas of Communications, Humanities, Fine Arts, Mathematics, Natural/ Life/Physical Science, and/or Social Science. | 3 | X | X |  |  |  |  |  |  |
| Total |  | 64 | 45 | 7 | 19 | 15 | 10 | 11 | 15 |

$\mathrm{X}=$ Required
*Students who are considering transfer options should take courses in parentheses.
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 | F | AUTO 205 | S |
| AUTO 102 | F | AUTO 202 | Su | AUTO 204 | F | AUTO 206 | S |
| ENGL 110 | F, S, Su | AUTO 207 | S | AUTO 208 | F | AUTO 209 | S |
| MATH 104 | F, S, Su | CIS 110 | F, S, Su | P REL 100 | F, S | AUTO 290 | F, S, Su |
| Gen Ed Elec | F, S, Su | SPCH 120 | F, S, Su |  |  |  |  |
| $\mathrm{F}=$ fall | S=spring | $\mathrm{Su}=$ summer | $\mathrm{AN}=$ as need |  |  |  |  |

## Business

General Description: The Business Instructional Area consists of an AAS degree in Business with a specialization in either 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: 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.

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

Associate in Applied Science - Business (62/63 credit hours) with three specialty options
(ICCB Code: AAS 038C)
Certificate - Management Specialist (48 credit hours)
(ICCB Code: C 038G)
Certificate - Marketing Specialist (47 credit hours)
(ICCB Code: C 038F)
Certificate - Entrepreneur
(31 credit hours)
Pending ICCB Approval (ICCB Code: C 038H)
$\left.\begin{array}{lllllll}\hline \text { courses } & & \begin{array}{c}\text { Management } \\ \text { Credit } \\ \text { Hours }\end{array} & \begin{array}{c}\text { Marketing } \\ \text { Applied Science }\end{array} & \begin{array}{c}\text { Management } \\ \text { Aspociate in } \\ \text { Apecialist } \\ \text { Certificate }\end{array} & \begin{array}{c}\text { Marketing } \\ \text { Specialist } \\ \text { Certificate }\end{array} \\ \hline \text { Entrepreneur } \\ \text { Certificate }\end{array}\right]$

[^1]
## Business (continued)

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.

| 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 | IT 181 | 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 110 | F, S, Su | SPCH 120 | F, S, Su | ECON 231 | F, S, Su | ECON 232 | F, S |

## 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 110 | F, S, Su | SPCH 120 | F, S, Su | ECON 231 | F, S, Su | ECON 232 | F, S |

Child Care and Education (See Early Childhood Education)
Computer Integrated Manufacturing (See Engineering Technology)


## 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.

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

For those interested in pursuing this concentration, the following options are available:
Associate in Applied Science -
(60 Credit Hours)
Criminal Justice (ICCB Code: 0020)
Associate in Applied Science - Criminal
(60 Credit Hours)
Justice Corrections (ICCB Code: 0028)
Advanced Certificate - Criminal Justice
(45 Credit Hours)
Emergency Telecommunications Specialist
(ICCB Code: 019A)
Advanced Certificate - Criminal Justice
Correctional Officer (ICCB Code: 019B)
Advanced Certificate - Criminal Justice-
Patrol Officer (ICCB Code:0019)
Certificate - Criminal Justice-Emergency
(21 Credit Hours)
Telecommunications Specialist (ICCB 019C)
Certificate - Criminal Justice Correctional
(21 Credit Hours)
Officer (ICCB Code 019D)
Certificate - Criminal Justice Probation
and Parole Officer (ICCB Code 019E)
Certificate - Criminal Justice Patrol Officer
(ICCB Code 019F)

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

| COURSES |  | Criminal <br> Credit <br> Hours | Justice.s. |
| :--- | :--- | :---: | :---: |
|  | 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, and Police Intervention | 3 | X |
| CRJ 210 | Law Enforcement and Community |  |  |
|  | Relations | 3 | X |
| CRJ 290 | Work Experience Practicum and |  |  |
|  | Seminar (or CRJ 295) | 3 | X |
| ENG 101 | Composition 1 | 3 | X |
| HLTH 120 | Wellness and Healthful Living | 3 | X |
| POL S 120 | Politics in States and Communities | 3 | X |
| PSYCH 110 Introduction to Psychology | 3 | X |  |
| SOCIO 110 Introduction to Sociology | 3 | X |  |
| SOCIO 130 Criminology | 3 | X |  |
| SPCH 120 | Business and Professional Speaking | 3 | X |
| Subtotal |  |  |  |

Direct Electives
Choose 9 credit hours from the options below:
Communications Group Requirement Y

Humanities 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
Y = Directed Electives, select as desired


## 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.

| 1st Semester |  |
| :--- | :--- |
| CRJ 110 | F, S |
| CIS 110 | F, S, Su |
| ENGL 101 | F, S, Su |
| SOCIO 110 | F, S, Su |
| ELEC |  |


| 2nd Semseter |  |
| :--- | :--- |
| CRJ 112 | AN |
| *CRJ 125 | S |
| PSYCH 110 | F, S, Su |
| SPCH 120 | S |
| ELEC |  |


| 3rd Semester |  | 4th Semester |  |
| :--- | :--- | :--- | :--- |
| CRJ 114 | AN | CRJ 113 | S |
| CRJ 200 | F | CRJ 116 | S |
| CRJ 210 | F | HLTH 120 | F, S |
| POL S 120 | F, S | SOCIO 130 | F, S |
| ELEC |  | CRJ 290 | AN |

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

## Criminal Justice (continued)

Associate in Applied Science - Criminal Justice: Corrections
Advanced Certificate - Correctional Officer
Certificate - Correctional Officer
(60 Credit Hours)
(45 Credit Hours)
(21 Credit Hours)

| COURSES |  | Credit <br> Hours | CRJ Corrections A.A.S. | CRJ Correctional Officer Advance Certificate | CRJ Correctional Officer Certificate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 and Treatment | 3 | X |  |  |
| CRJ 200 | Youth, the Law, and Police Intervention | 3 |  | X |  |
| CRJ 210 | Law Enforcement and Community Relations | 3 |  | X |  |
| CRJ 290 | Work Experience Practicum and Seminar (or CRJ 295) | 3 | X |  |  |
| ENG 101 | Composition 1 | 3 | X | X |  |
| HLTH 120 | Wellness and Healthful Living | 3 |  | X | X |
| POL S 120 | Politics in States and Communities | 3 |  | X |  |
| PSYCH 110 | Introduction to Psychology | 3 | X | X |  |
| PSYCH 145 | Human Growth and 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 and Professional Speaking | 3 |  | X |  |
|  | Subtotal |  | 54 | 45 | 21 |


| Direct Electives (Choose 6 credit hours from the options below): |  |  |
| :--- | :---: | :--- |
| Communications Group Requirement | Y |  |
| Humanities Group Requirement | Y |  |
| Mathematics Group Requirement | Y |  |
| Natural/Life/Physical Science Group Requirement | Y |  |
| Subtotal | 6 |  |
| Total | 60 | 45 |

$\mathrm{X}=$ Required
$\mathrm{Y}=$ Directed Electives, select as desired

## 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 |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CRJ 110 | F, S | CIS 110 | F, S, Su | CRJ 114 | AN | CRJ 116 | S |
| CRJ 128 | F, S | CRJ 130 | S | CRJ 132 | F | CRJ 134 | S |
| ENGL 101 | F, S, Su | PSYCH 210 | F, S | PSYCH 145 | F, S, Su | CRJ 290 | AN |
| PSYCH 110 | F, S, Su | SOCIO 130 | F, S | SOCIO 135 | F, S | PSYCH 280 | F, S, Su |
| SOCIO 110 | F, S, Su | SPCH 101 | F, S, Su |  |  |  |  |
| $\mathrm{F}=$ fall | S=spring | summer | =as need |  |  |  |  |

## Criminal Justice (continued)

## Advanced Certificate - Criminal Justice: Emergency Telecommunications Specialist Certificate - Criminal Justice: Emergency Telecommunications Specialist

(45 Credit Hours)
(21 Credit Hours)
$\left.\begin{array}{llccc}\hline & & \begin{array}{c}\text { CRJ Emergency } \\ \text { Telecommunications } \\ \text { Cpecialist Advanced } \\ \text { Certificate }\end{array} & \begin{array}{c}\text { CRJ Emergency } \\ \text { Telecommuncations } \\ \text { Specialist } \\ \text { Certificate }\end{array} \\ \hline \text { COURSES } & \text { Hours }\end{array}\right]$
$\mathrm{X}=$ Required

| Advanced Certificate - Criminal Justice Patrol Officer | (45 Credit Hours) |
| :--- | :--- |
| Certificate - Criminal Justice Patrol Officer | (21 Credit Hours) |
| Certificate - Criminal Justice Probation and Parole Officer | (21 Credit Hours) |


|  |  | CRJ <br> Patrol <br> Officer <br> Advanced <br> Certificate | CRJ <br> Patrol Officer <br> Certificate | CRJ <br>  <br> Parole Officer <br> Certificate |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| COURSES |  | 3 | X | X | X |
| 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 |
| CRJ 116 | Probation/Parole | 3 | X | X |  |
| CRJ 125 | Patrol Procedures | 3 | X |  |  |
| CRJ 200 | Youth, the Law, and Police Intervention | 3 | X |  |  |
| CRJ 210 | Law Enforcement and Community Relations | 3 | X |  |  |
| ENGL 101 | Composition 1 | 3 | X | X | X |
| HLTH 120 | Wellness and Healthful Living | 3 | X |  |  |
| POL S 120 | Politics in States and Communities | 3 | X |  |  |
| PSYCH 110 | Introduction to Psychology | 3 | X |  |  |
| SOCIO 110 | Introduction to Sociology | 3 | X |  |  |
| SOCIO 130 | Criminology | 3 | X |  |  |
| SPCH 120 | Business and Professional Speaking |  | 45 | 21 | 21 |

$\mathrm{X}=$ Required

## 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 \& (63 Credit Hours) Design Engineering (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)

| COURSES | Cr. Hrs. Hours | Drafting \& Design Engineering A.A.S. | Drafting \& Design Certificate | AutoCAD Certificate |
| :---: | :---: | :---: | :---: | :---: |
| 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 | Y | X |
| DRAFT 290: Work Experience 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 Systems | 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 |  | 54 | 28 | 13 |

Drafting Electives:
(Select a minimum of 6 credit hours)
DRAFT 235: Solid Modeling (3-D) $\quad 3 \quad$ Y
DRAFT 236: Pro-Engineer $\quad 3 \quad \mathrm{Y} \quad \mathrm{Y}$
DRAFT 242: Commercial Architecture $\quad 3 \quad$ Y
DRAFT 243: Structural Steel Detailing $\quad 3 \quad$ Y $\quad$ Y
DRAFT 244: Concrete Detailing $\quad 3 \quad$ Y

| DRAFT 245: Residential Architecture | 3 | $Y$ | $Y$ |
| :--- | :--- | :--- | :--- |

AAS Group Requirements/ Electives 3
To be selected from areas of Communications,
Humanities, Fine Arts, Mathematics, Natural/Lifel
Physical Science, and/or Social Science. (See page 81)
Subtotal 3
$\begin{array}{llll}\text { Total } & 63 & 34 & 13\end{array}$
$\mathrm{X}=$ Required
$\mathrm{Y}=$ Drafting Electives; select as desired

## 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.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| DRAFT 101 | F, S | DRAFT 102 | S | DRAFT 120 | F | DRAFT 230 | F, S, Su |
| ENGL 101 | F, S, Su | DRAFT 110 | S | DRAFT 215 | F, S, Su | DRAFT 290 | F, S, Su |
| MATH 117 | F, S, Su | DRAFT 130 | S | DRAFT 220 | F, S, Su | ENGT 252 | S |
| SPCH 101 | F, S, Su | DRAFT 210 | F, S, Su | ENGR 110 | F | PHYS 100 | F, S |
| Gen Ed Elec | F, S, Su | IT 105 | F, S | Drafting Elec | F, S, Su | Drafting Elec | F, S, Su |
| F=fall | S=spring | Su=summer | AN=as needed |  |  |  |  |

## 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, elementary school teaching (like all teaching) requires a variety of skills and aptitudes, including a talent for working with children; organiza-
tional, 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 of the courses may not transfer to four-year institutions.


## Other Graduation Requirements:

1. 2.00 (C) Grade Point Average for all courses at RCC.
2. Constitutional Exam, if not completed in Illinois high school.
3. Portfolio Development Met.
4. 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 102 | AN | ECE 111 | AN | ECE 113 | AN |
| ECE 115 | AN | ECE 110 | F, S | ECE 112 | AN | ECE 290 | F, S, Su |
| ED 105 | F, S, Su | ECE 114 | AN | ECE 203 | AN | ED 220 | F, S, Su |
| ENGL 101 | F, S, Su | PSYCH 150 | F, S, Su | ECE 210 | F | SPCH 101 | F, S, Su |
| PSYCH 110 | F, S, Su | SOCIO 200 | F, S, Su | ECE 220 | AN | ECE 235 | AN |
| F=fall |  |  |  |  | ECE 230 | AN |  |

## 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 of the courses may not transfer to four-year institutions.
$\left.\begin{array}{lllc}\hline & & \begin{array}{c}\text { Carapro. Ed. } \\ \text { Credir } \\ \text { Hours }\end{array} \\ \text { COURSES } & & \\ \text { ICCB Cogree } \\ \text { PENDING }\end{array}\right]$

| Directed Electives: |  |  |
| :--- | :--- | :--- |
| Fine Arts (ART or MUSIC 100 recommended) | 3 |  |
| MATH (MATH 113 or 113 recommended) | 4 |  |
| Physical Science (Earth Science recommended) | 4 |  |
| U.S. History | 4 |  |
| Subtotal |  | 15 |
| Total |  | 62 |

## Other Graduation Requirements:

1. 2.00 (C) Grade Point Average for all courses at RCC.
2. Constitutional Exam, if not completed in Illinois high school.
3. Portfolio Development Met.
4. 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 |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ECE 113 | AN | ED 105 | F, S, Su | ECE 111 | AN | ECE 110 | F, S |
| ED 100 | F, S, Su | ED 109 | S | ED 102 | AN | ED 107 | AN |
| ENGL 101 | F, S, Su | PSYCH 150 | F, S, Su | ED 108 | Su | ED 200 | F, S, Su |
| PSYCH 110 | F, S, Su | SOCIO 200 | F, S, Su | ED 220 | F, S, Su | Fine Arts Elect. |  |
| SPCH 101 | F, S, Su | MATH Elect. |  | U.S. Hist. Elect. | Physical Sci Elect. |  |  |
| F=fall | S=spring | Su=summer | 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 only. For further information, contact Steve Wrigley at (217)877-4604.

## Electronics

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 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 - 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)

|  | Credit <br> Hours | A A S | Advanced <br> Certificate | Basic <br> Certicate |
| :--- | :---: | :---: | :---: | :---: |
| ELTRN 110: Introduction to Electricity and Electronics | 2 | X | X | X |
| ELTRN 111: Circuit Analysis | 3 | X | X | X |
| ELTRN 112: 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 | 25 | X |  |  |
| $\quad$ To be selected from areas of Communications, Math |  |  |  |  |
| and/or Natural Science, or Social Science and/or |  |  |  |  |
| Humanities/Fine Arts |  | 25 |  |  |
| $\quad$ Subtotal |  | 67 | 42 | 20 |

X = Required

## 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.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ELTRN 110 | F | ELTRN 112 | S | ELTRN 210 | F | ELTRN 212 | S |
| ELTRN 111 | F | ELTRN 120 | S | ELTRN 211 | F | ELTRN 240 | S |
| ENGL 110 | F, S, Su | ELTRN 160 | S | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su |
| MATH 104 | F, S, Su | MATH 117 | F, S, Su | (6 cr.) |  | (3 cr.) |  |
| Gen Ed Elec ( 8 cr .) | F, S, Su | Gen Ed Elec ( 8 cr .) | F, S, Su |  |  |  |  |
| $\mathrm{F}=$ fall | S=spring | $\mathrm{Su}=$ summer | =as needed |  |  |  |  |

## Electronics - Biomedical Option

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 -
(67 Credit Hours)
Electronics Biomedical (ICCB Code: AAS 0015)

| courses | Credit <br> Hours | AAS |
| :--- | :--- | :---: | :---: |

## 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 110 | F | ELTRN 112 | S | ELTRN 210 | F | ELTRN 240 | S |
| ELTRN 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, S, Su | Gen Ed Elec | F, S, Su |
| MATH 116 | F, S, Su | MATH 117 | F, S, Su | (5 cr.) |  |  |  |
| F=fall | S=spring | Su=summer | AN=as needed |  |  |  |  |

## Electronics Systems (See Engineering Technology Section)

## Emergency Medical Services

General Description: 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. Successful completion of the National Registry Certification Examination for Emergency Medical Technicians is required to be issued an EMT-B license in the State of Illinois. 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 perform competently 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 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 - Paramedic (64 Credit Hours)
(ICCB Code: AAS 2071)
Advanced Certificate - Emergency Medical (22 Credit Hours) Technology - Intermediate (ICCB Code: AC 2072)
Basic Certificate - Emergency Medical
(11 Credit Hours) Technology - Basic (ICCB Code: BC 2073)

Program Prerequiste: Hlth 110 Cardio Pulmonary Resuscitation or Current BLS Healthcare Provider CPR Certification.

|  |  | Credit <br> Hours | Emergency Medical Services Paramedic AAS | Emergency Medical Technology Intermediate Certificate | Emergency Medical Technology Basic 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: | Communicating in the Workplace | 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 | 0 | 0 |
| AAS Group To be se | Requirements/ Electives lected from area of Humanities | 3 |  |  |  |
|  | Subtotal |  | 3 | 0 | 0 |
|  | Total |  | 64 | 22 | 11 |
| * Must have | been completed in the last five (5) years $\quad \mathrm{X}=\mathrm{Re}$ | uired | $\mathrm{Y}=$ Direct | ted Electives; select | as desired. |

## SUGGESTED FULL-TIME EMERGENCY MEDICAL SERVICES - AAS SEQUENCE

| Fall Semester | Spring Semester | Summer Semester | Fall Semester | Spring Semester | Summer Semester |
| :---: | :---: | :--- | :--- | :--- | :---: |
| EMT 120 | EMT 200 | EMT 220 | EMT 240 | EMT 260 | EMT 290 |
| HLTH 140 | PSYCH 110 |  | ENGL 101 or 110 | SOCIO 110 |  |
| MATH 106 | BIOL 101 |  | Directed Elect. | Human. Elect. |  |

## 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 CNC Technology, Electrical Systems, Facilities Management, Fluid Power Systems, Instrumentation Systems, Machine Repair, Manufacturing Engineering Technology, and Mechanical Systems. Each career path shares a common core of general education and technical courses. 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 experiencing a shortage of skilled technicians - especially in the CNC, instrumentation, and maintenance technician areas.


## 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 computercontrolled (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, 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.

For those interested in pursuing this specialty, the following options are available:
Associate in Applied Science - Engineering (65 Credit Hours) Technology - CNC Technology Specialty (ICCB Code: AAS 3000)
Basic Certificate - CNC Operator (27 Credit Hours) (ICCB Code: C 300A)
Basic Certificate - CNC Technology (49 Credit Hours) (ICCB Code: C 300C)

| COURSES | Credit <br> Hours | CNC Tech <br> AAS | CNC Operator <br> Certificate | CNC Tech <br> Certificate |
| :--- | :---: | :---: | :---: | :---: |
| DRAFT 236 Pro-Engineer (or Draft 215) | 3 | X |  | X |
| ENGT 100 | Industrial Processes (formerly MFG 120) | 3 | X |  |
| ENGT 101 | Motor Control Fundamentals (formerly ELTRN 109) | 4 | X |  |
| ENGT 102 | Blueprint Reading (formerly MFG 100) (or Draft 101) | 3 | X | X |
| ENGT 103 | Fluid Power Fundamentals (formerly MEC S 112) | 3 | X |  |
| ENGT 104 | CNC Fundamentals (formerly CIM 102) | 3 | X | X |
| ENGT 105 | Occupational Safety (formerfy IND S 100) | 3 | X | X |
| ENGT 150 | Machining Fundamentals (formerly MACH 101) | 2 | X | X |
| ENGT 151 | Cutting \& Workholding (formerly MACH 102) | 2 | X | X |
| ENGT 160 | Metrology | 2 | X | X |
| ENGT 200 | Industrial Materials (formerly MFG 110) | 3 | X | X |
| ENGT 213 | Robotic Fundamentals (formerly ROBOT 101) | 3 | X |  |
| ENGT 250 | CNC Turning (formerly Mach 201) | X | X | X |
| ENGT 251 | CNC Milling (formerly Mach 202) | 3 | X | X |
| ENGT 252 | CAM Applications (formerly CIM 101) | 3 | 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 | X |
| MATH 104 | Technical Mathematics (or MATH 110*) | 3 | X |  |
| SPCH 120 | Business \& Professional Speaking (or SPCH 101*) | 4 | 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 |  | X |
| Total | 3 | X |  |  |

$\mathrm{X}=$ Required
*Take this course if you plan to transfer to a university.

## 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 |  | 3rd Semester | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGT 100 | F | DRAFT 215 | F, S, Su | ENGT 200 F | ENGT 252 | S |
| ENGT 101 | F | ENGL 110 | F, S, Su | ENGT 213 F | ENGT 299 | S |
| ENGT 103 | F | ENGT 102 | F, S | ENGT 250 F | SPCH 120 | F,S,Su |
| ENGT 104 | F | ENGT 105 | S | ENGT 251 F | WELD 195 | F, S, Su |
| MATH 104 | F, S, Su | ENGT 150 | S | Social Science F, S, Su | Gen Ed Elec. | F, S, Su |
|  |  | ENGT 151 | S | Elec. |  |  |
|  |  | ENGT 160 | S |  |  |  |
| $\mathrm{F}=$ fall | S=spring | summer | =as need |  |  |  |

## 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 (ICCB Code: AAS 3000)
Basic Certificate - Industrial Maintenance (27 Credit Hours) (ICCB Code: C 300B)
Basic Certificate - Electrical Systems (52 Credit Hours) (ICCB Code: C 300D)
(68 Credit Hours)

| COURSES | Credit | Elec. <br> Systems <br> AAS | Industrial <br> Maintenance <br> Certificate | Elec. <br> Systems <br> 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 130: Power Transmission Fundamentals (formerly MEC 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 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 (formerly ELTRN 232) | 3 | X |  | X |
| ENGT 232: Rigging \& Cranes (formerly MEC S 230) | 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 Elective (PHYS 100 recommended) | 3 | X |  |  |
| Total |  | 68 | 27 | 52 |

$\mathrm{X}=$ Required
*Take this course if you plan to transfer to a university

## 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.


## Engineering Technology - Facilities Maintenance Specialty

PENDING ICCB APPROVAL

General Description: This comprehensive A.A.S 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 (66 Credit Hours) Technology - Facilities Maintenance Specialty (ICCB Code: AAS 3000)
Basic Certificate - Building Maintenance (26 Credit Hours) (ICCB Code: C 300J)
Certificate - Facilities Maintenance (50 Credit Hours) Technician (ICCB Code: C 300K)

| COURSES | Credit Hours | $\qquad$ | Facilities Maintenance Tech Certificate | Building Maintenance Certificate |
| :---: | :---: | :---: | :---: | :---: |
| DRAFT 215: AutoCAD (or ENGT 102)(formerly MFG 100) | 3 | 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 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 212: Motor Control Systems (formerly ELTRN 151) | 4 | X | X |  |
| ENGT 232: Rigging \& Cranes (formerly Mec S 230) | 2 | X | X |  |
| ENGT 290: Work Experience Practicum \& Seminar (or ENGT 295) | 3 | X | X |  |
| ENGL 110: Communicating in the Workplace (or ENGL 101*) | 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 (or SPCH 101*) | 3 | X |  |  |
| Social Science Elective (ECON 231 recommended) | 3 | X |  |  |
| General Education Elective (PHYS 100 recommended) | 3 | X |  |  |
| Total |  | 66 | 50 | 26 |

$\mathrm{X}=$ Required
*Take this course if you plan to transfer to a university.

## SUGGESTED FULL-TIME ENGINEERING TECHNOLOGY - FACILITIES MAINTENACE 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 | 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 |  | Soc. Sci. Elec. | HVAC 252 | S |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  | Gen Ed. Elec. |  |  |

## Engineering Technology - Fluid Power Systems Specialty

General Description: This concentration prepares the student 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 (68 Credit Hours)
Technology - Fluid Power Systems Specialty
(ICCB Code: AAS 3000)
Basic Certificate - Industrial Maintenance (27Credit Hours) (ICCB Code: C 300B)
Basic Certificate - Fluid Power Systems (52 Credit Hours)
(ICCB Code: C 300E)

| COURSES |  | Credit Hours | Fluid Power Systems AAS | Industrial Maintenance Certificate | Fluid <br> Power <br> 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 (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 212: | Motor Control Systems (formerly ELTRN 151) | 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: | Hydraulic Applications (formerly MEC S 110) | 3 | X |  | X |
| ENGT 241: | Pneumatic Applications (formerly MEC S 111) | 3 | X |  | X |
| ENGT 242: | Fluid Power Systems (formerly MEC S 250) | 3 | 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 Scienc | ce Elective (ECON 231 recommended) | 3 | X |  |  |
| General Edu | cation Elective (PHYS 100 recommended) | 3 | X |  |  |
|  | Total |  | 68 | 27 | 52 |

$\mathrm{X}=$ Required
*Take this course if you plan to transfer to a university.

## 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 | F, S, Su | ENGL 110 | F, S, Su | ENGT 120 | S |
| ENGT 101 | F | ENGT 105 | S | ENGT 212 | F | ENGT 231 | S |
| ENGT 103 | F | ENGT 111 | F, S | ENGT 233 | F | SPCH 120 | F, S, Su |
| ENGT 104 | F | ENGT 130 | S | ENGT 234 | F | ENGT 242 | S |
| MATH 104 | F, S, Su | ENGT 240 | S | ENGT 241 | F | ENGT 299 | S |
|  |  |  |  | Social Science Elec. | F, S, Su | Gen Ed. Elec. | F, S, Su |
| $\mathrm{F}=$ fall | S=spring | summer | =as need |  |  |  |  |

## 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 (68 Credit Hours) Technology - Instrumentation Systems Specialty (ICCB Code: AAS 3000)
Basic Certificate - Industrial Maintenance
(27 Credit Hours) (ICCB Code: C 300B)
Basic Certificate - Instrumentation (52 Credit Hours) (ICCB Code: C 300 F )

|  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| courses | Credit <br> Hours | Instrumentation <br> Systems <br> AAS | Industrial <br> Maintenance <br> Certificate | Instrumentation <br> 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 29: 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 Elective (PHYS 100 recommended) | 3 | X |  |  |

$\mathrm{X}=$ Required
*Take this course if you plan to transfer to a university.

## 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.


## Engineering Technology - Machine Repair Specialty

General Description: This program 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, 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 (69 Credit Hours) Technology - Machine Repair Specialty (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)

|  |  | Credit <br> Hours | Machine <br> Repair <br> AAS | Industrial <br> Maintenance <br> Certificate |
| :--- | :--- | :---: | :---: | :---: |
| COURSES | Machine <br> Repair <br> Certificate |  |  |  |
| 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 DRAFT 215) | 3 | X | X |
| ENGT 103: | Fluid Power Fundamentals (formerly MEC S 112) | 3 | X | X |
| ENGT 104: | CNC Fundamentals (formerly CIM 102) | 3 | X | X |
| ENGT 105: | Occupational Safety (formerly IND S 100) | 3 |  | X |
| ENGT 111: | Motor Control Applications (formerly ELTRN 113) | 4 | X | X |
| ENGT 130: | Power Transmission Fundamentals (formerly MEC S 101) | 4 | X | X |
| ENGT 214: | Motion Control Applications (formerly ELTRN 231) | 3 | X | X |
| ENGT 215: | Motion Control Systems (formerly ELTRN 232) | 3 | X | X |
| ENGT 230: | Power Transmission Applications (formerly MEC S 102) | 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 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 (or ENGT 290 or ENGT 295) | 3 | X | X |
| ENGL 110: | Communicating in the Workplace (or ENGL 101*) | 3 | X | X |
| SPCH 120: | Business \& Professional Speaking (or SPCH 101*) | 3 | X | X |
| MATH 104: | Technical Mathematics (or MATH 110*) | 4 | X | X |
| WELD 195: | Industrial Welding Fundamentals | X |  |  |
| Social Science Elective (ECON 231 recommended) | 3 | X |  | X |
| General Education Elective (PHYS 100 recommended) | 3 | X |  |  |

## 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 | F | 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 | F,S,Su | ENGT 130 | S | WELD 195 | F, S, Su | ENGT 242 | S |
|  |  |  |  | Soc. Sci. Elec. | ENGT 299 | S |  |
|  |  |  |  | Gen Ed. Elec. |  |  |  |

## Engineering Technology - Manufacturing Engineering Technology Specialty

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 com-puter-aided design equipment (CAD/CAM). Further, they may conduct time studies, complete costs 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 (66 Credit Hours) Technology - Manufacturing Engineering Technology Specialty (ICCB Code: AAS 3000)
Basic Certificate - Industrial Maintenance (27 Credit Hours) (ICCB Code: C 300B)
Basic Certificate - Manufacturing
(50 Credit Hours)

| COURSES | Credit Hours | Manufacturing Engineering Technology AAS | Industrial Maintenance Certificate | Manufacturing Engineering Technology Certificate |
| :---: | :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X |  | X |
| DRAFT 215: Auto CAD | 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 102: Blueprint Reading (formerly MFG 100) or Draft 101) | 3 | 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 111: Motor Control Applications (formerly ELTRN 113) | 4 | X | X | X |
| ENGT 105: Occupational Safety (formerly IND S 100) | 3 | X | X | X |
| ENGT 130: Power Transmission Fundamentals (formerly MEC S 101) | 4 | X | X | X |
| ENGT 160: Metrology | 2 | X |  | X |
| ENGT 200: Industrial Materials (formerly MFG 110) | 3 | X |  | X |
| ENGT 213: Robotic Fundamentals (formerly ROBOT 101) | 3 | X |  | X |
| ENGT 252: CAM Applications (formerly CIM 101) | 3 | X |  | X |
| ENGT 260: Quality Fundamentals (formerly PROD C 130) | 3 | 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 Elective (PHYS 100 recommended) | 3 | X |  |  |
| Total |  | 66 | 27 | 50 |

X = Required
*Take this course if you plan to transfer to a university.

## 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 | F, S | DRAFT 215 | F, S, Su | CIS 110 | F, S, Su |
| ENGT 101 | F | ENGT 105 | S | ENGL 110 | F,S,Su | ENGT 252 | S |
| ENGT 103 | F | ENGT 111 | S | ENGT 200 | F | ENGT 299 | S |
| ENGT 104 | F | ENGT 130 | S | ENGT 213 | F | SPCH 120 | F,S,Su |
| MATH 104 | F,S,Su | ENGT 160 | S | ENGT 260 | F | Gen Ed. Elec. |  |
|  |  |  |  |  |  |  |  |
| F=fall |  |  |  |  | Soc. Sci. Elec. |  |  |

## 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 (67 Credit Hours) Technology - Mechanical Systems Specialty (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)

|  |  | Credit <br> Hours | Mechanical <br> Systems <br> AAS | Industrial <br> Maintenance <br> Certificate |
| :--- | :--- | :---: | :---: | :---: |
| courses | Mechanical <br> Systems <br> Certificate |  |  |  |
|  |  |  | X | X |
| DRAFT 215: | AutoCAD (or ENGT 102) (formerly MFG 100) | 3 | X | X |
| ENGT 100: | Industrial Processes (formerly MFG 120) | 3 | X | X |
| ENGT 101: | Motor Control Fundamentals (formerly ELTRN 109) | 4 | X | X |
| ENGT 103: | Fluid Power Fundamentals (formerly MEC S 112) | 3 | X | X |
| ENGT 104: | CNC Fundamentals (formerly CIM 102) | 3 | X | X |
| ENGT 105: | Occupational Safety (formerly IND S 100) | 3 | X | X |
| ENGT 111: | Motor Control Applications (formerly ELTRN 113) | 4 | X | X |
| ENGT 130: | Power Transmission Fundamentals (formerly MEC S 101) | 4 | X | X |
| ENGT 150: | Machining Fundamentals (formerly MACH 101) | 2 | X | X |
| ENGT 230: | Power Transmission Applications (formerly MEC S 102) | 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 |  |
| 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 | X |
| SPCH 120: | Business \& Professional Speaking (or SPCH 101*) | 3 | X | 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 |  | X |

$\mathrm{X}=$ Required
*Take this course if you plan to transfer to a university.

## 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 |  |
| :--- | :---: |
| ENGT 100 | F |
| ENGT 101 | F |
| ENGT 103 | F |
| ENGT 104 | F |
| MATH 104 | F, S, Su |


| 2nd Semester |  |
| :--- | :---: |
| DRAFT 215 | F, S, Su |
| ENGT 105 | S |
| ENGT 111 | S |
| ENGT 130 | S |
| ENGT 150 | S |


| 3rd Semester |  |
| :--- | :--- |
| ENGL 110 | F, S, Su |
| ENGT 230 | F |
| ENGT 233 | F |
| ENGT 234 | F |
| WELD 195 | F, S, Su |
| Soc. Sci. Elec. |  |


| 4th Semester |  |
| :--- | ---: |
| ENGT 231 | S |
| ENGT 232 | S |
| ENGT 235 | S |
| ENGT 242 | S |
| ENGT 299 | S |
| SPCH 120 | $\mathrm{F}, \mathrm{S}, \mathrm{Su}$ |
| Gen Ed. Elec. |  |

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.

These are occupational training programs. Some of the 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 (42 Credit Hours) Technology-Specialist (ICCB Code: AC 017A)
Basic Certificates:
Fire Technician (ICCB Code: BC 017C) (15 Credit Hours)
Fire Company Officer
(15 Credit Hours)
(ICCB Code: BC 017B)
Fireground Commander (9 Credit Hours)
(ICCB Code: BC 017E)
Fire Inspector (ICCB Code: BC 017D) (9 Credit Hours)

| COURSES |  | Credit <br> Hours | Fire Science AAS | Technology Specialist Advanced Certificate |  | Fire Technician Certificate | Fireground Commander Certificate | Fire Inspector Certificate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL110: | Communicating in the Workplace | 3 | X |  |  |  |  |  |
| CIS 110: | Business Applications | 3 | X |  |  |  |  |  |
| FIRE 110: | Introduction to Fire Science (Mod A) | 4 | X | X |  | X |  |  |
| FIRE 111: | Techniques of Firefighting 1 (Mod B) | 4 | X | X |  | X |  |  |
| FIRE 112: | Techniques of Firefighting 2 (Mod 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 |  |  |  | X |
| FIRE 140: | Fire Science Instructor 1 | 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 2 | 3 |  | X |  |  | X |  |
| FIRE 230: | Fire Service Hydraulics | 4 | X | X |  |  |  |  |
| FIRE 250: | Hazardous Materials Operations | 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 | 42 | 15 | 15 | 9 | 9 |



[^2]
## Fire Science (continued)

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.

| 1st |  |
| :--- | :--- |
| Femester |  |
| FIRE 110 | F |
| FIRE 111 | F |
| ENGL 110 | F,S,Su |
| PSYCH 100 | F,S |
| CIS 110 | F,S,Su |

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

| 3rd Semester |  | 4th Semester |  |
| :--- | :--- | :--- | :--- |
| FIRE 130 | F | FIRE 230 | S |
| FIRE 170 | F | FIRE 250 | S |
| FIRE 200 | F | FIRE 280 | S |
| FIRE 270 | F | SPCH 101 | F,S,Su |
| SOCIO 110 | F,S,Su | FIRE ELEC |  |



## 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. (Occupational Outlook Handbook, 2004-2005)

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 selfdiscipline 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. (Excerpts taken from Occupational Outlook Handbook, 2004-2005)

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 Web-based information and expansion of the video entertainment market, including television, movies, video, and made-forInternet outlets. (Occupational Outlook Handbook, 2004-2005)

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

| COURSES |  | Credit Hours | Graphic Arts AAS ICCB Code: AAS 0122 | Graphic Arts Certificate ICCB Code: C 2122 | Graphic Arts Desktop Publishing Specialty ICCB Code: C 2123 | Graphic Arts Multimedia Specialty ICCB Code: C 2124 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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: 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 to 57 | 15 | 27 | 27 |

Directed Electives:
Choose at least one business course and two
additional courses from the following:
ART 102: Introduction to Drawing 2 3
ART 112: Design 2 3
ART 113: Figure Drawing $1 \quad 3$
ART 126: Photography 2: Black and White 3
ART 261: Illustration 3
BUS 100: Introduction to Business 3
BUS 225: $\quad$ Small Business Management (formerly BUS 125) 3
BUS 240: Marketing Fundamentals (formerly BUS 124) 3
BUS 245: Integrated Marketing Communications 3
DRAFT 215: AutoCad 3

| Subtotal | 9 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: |
| Total | 63 to 66 | 15 | 27 | 27 |

AAS Group Requirements/Electives
To be selected from areas of Communications, Humanities,
Fine Arts, Mathematics, Natural/Life/Physical Science, and/or
Social Science.
Other Graduation Requirements:

1. 2.00 (C) Grade Point Average for all courses at RCC.
2. Constitutional Exam, if not completed in Illinois high school.

## 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 |  | 4th Semester |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ART 101 | F, S | ART 125 | F, S, Su | ART 127 | F, S | ART 251 | AN |
| ART 111 | F, S | ART 140 | AN | ART 152 | AN | ART 252 | AN |
| ART 240 | AN | ART 145 | AN | ART 160 | AN | ART 290 | AN |
| ENGL 110 | F, S, Su | ART 151 | AN | P REL 100 | F, S | SPCH 120 | S |
| Dir. Elective |  | ART 230 | F, S | 2 Dir. Electives | Group Elective |  |  |
|  |  | MATH 110 | F, S, Su |  |  |  |  |
| F=fall |  |  |  |  |  |  |  |

## 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. Mid-range salary for the State of 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, (64 Credit Hours) Ventilation, Air-Conditioning, \& Refrigeration (ICCB Code: AAS 058A)
Basic Certificate - Commercial Heating, (27 Credit Hours) Ventilation, Air Conditioning
(ICCB Code: C 058B)
Basic Certificate - Residential Heating, (27 Credit Hours)
Ventilation, Air Conditioning
(ICCB Code: C 058C)
Basic Certificate - Refrigeration (30 Credit Hours)
(ICCB Code: C 058D)

| COURSES | $\begin{aligned} & \text { Credit } \\ & \text { Hours } \end{aligned}$ | AAS | Commercial Certificate | Residential Certificate | Refrigeration Certificate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | 6 | X |  |  |  |
| To be selected from areas of Communications, Fine Arts/ Humanities, Math, Science, or Social Science |  |  |  |  |  |
| Total |  | 64 | 27 | 27 | 30 |

$\mathrm{X}=$ Required
*Students transferring to university should take this course.

## 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 |  |
| :--- | :---: | :--- | :---: |
| CIS 110 | F, S, Su | ENGL 110 | F,S,Su |
| HVAC 100 | F | HVAC 106 | S |
| HVAC 102 | F | HVAC 132 | S |
| HVAC 130 | F | HVAC 140 | S |
| MATH 104 | F,S,Su | Gen Ed Elec $(6 \mathrm{cr})$ |  |
| F=fall | S=spring | Su=summer | AN=as needed |


| 3rd Semester |  |
| :--- | :--- |
| HVAC 202 | F |
| HVAC 230 | F |
| HVAC 240 | F |
| HVAC 242 | F |
| SPCH 120 | F,S,Su |


| 4th Semester |  |
| :--- | ---: |
| HVAC 204 | S |
| HVAC 206 | S |
| HVAC 250 | S |
| HVAC 252 | S |
| HVAC 290 | AN |

## 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 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 - 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)

| Courses | Credit Hours | Floriculture AAS | Ornamental AAS | Floral Design Certificate | Greenhouse Certificate | Landscape Turf Certificate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 (formerly HORT 101) | 3 |  | X |  |  | X |
| HORT 111: Turf Production (formerly HORT 104) | 3 |  | X |  |  | X |
| HORT 120: Landscape Plant Identification (formerly HORT 102) | 3 | X | X |  |  | X |
| HORT 121: Landscape Design Principles (formerly HORT 103) | 3 | X | X |  |  | X |
| HORT 145: Floral Design Fundamentals | 3 | X |  | X |  |  |
| HORT 146: Silk \& Dry Arrangements | 3 | X |  | X |  |  |
| HORT 150: Garden Center Management (formerly HORT 110) | 3 | X | X | X | X |  |
| HORT 200: Herbaceous 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 Production | 3 | X | X |  | X |  |
| HORT 245: Funeral Flowers | 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 |
| HORT 291: Advanced Work Experience Practicum \& Seminar (or HORT 295*) | ) 3 | X | X |  |  |  |
| MATH 104: Technical Mathematics | 4 | X | X |  |  |  |
| SPCH 120: Business and Professional Speaking (or SPCH 101**) | 3 | X | X |  |  |  |
| AAS Group Requirements/Electives | 6 | X | X |  |  |  |
| To be selected from areas of Communications, Math and/or Natural Science, or Social Science and/or Humanities/Fine Arts |  |  |  |  |  |  |
| Total |  | 62 | 62 | 18 | 18 | 21 |

## $\mathrm{X}=$ Required

*HORT 295 may be taken only once for program credit.
**Students transferring to university should take this course.

## 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.

| 1st Semester |  | 2nd Semester |  |
| :--- | :--- | :--- | :--- |
| CIS 110 | F, S, Su | HORT 121 | S |
| ENGL 110 | F, S, Su | HORT 146 | S |
| HORT 100 | F | HORT 150 | S |
| HORT 120 | F | MATH 104 | F, S, Su |
| HORT 145 | F | Gen Ed Elec |  |
| HORT 290 |  |  |  |


| 3rd Semester |  | 4th Semester |  |
| :--- | :--- | :--- | :--- |
| HORT 200 | F | HORT 201 | S |
| HORT 230 | F | HORT 231 | S |
| HORT 245 | F | HORT 246 | S |
| SPCH 120 | F, S, Su | HORT 291 | AN |
| Gen Ed Elec |  |  |  | HORT $290 \& 295$-Offered during the summer as needed

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

## Horticulture (continued from previous page)

## 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 |  |
| :---: | :---: | :---: | :---: |
| CIS 110 | F, S, Su | HORT 111 | S |
| ENGL 110 | F, S, Su | HORT 121 | S |
| HORT 100 | F | HORT 150 | S |
| HORT 110 | F | MATH 104 | F, S, Su |
| HORT 120 | F | Gen Ed Elec | F, S, Su |
| HORT 290 | Offered | g the summer | eeded |


| 3rd Semester |  |
| :--- | :--- |
| HORT 200 | F |
| HORT 221 | F |
| HORT 230 | F |
| SPCH 120 | F, S, Su |
| Gen Ed Elec | F, S, Su |


| 4th Semester |  |
| :--- | :---: |
| HORT 201 | S |
| HORT 211 | S |
| HORT 231 | S |
| HORT 291 | AN |

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


## Hospitality Management

General Description: This degree program offers an AAS degree with two areas of concentration: Food Service or Lodging Management. Both pathways offer core courses in hospitality management. The Restaurant Management strand 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. The Lodging Management strand prepares students for career-track position in the hotel, motel, and resort field. Students receive specialized education in front office operations, housekeeping, computer systems, and security and loss prevention.

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 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 - Hospitality (62 Credit Hours) Management/Food Service
(ICCB Code: AAS 0121)
Associate in Applied Science - Hospitality (62 Credit Hours)
Management/Lodging Management
(ICCB Code: AAS 0121)
Basic Certificate - Hospitality Management (18 Credit Hours)
Fundamentals (ICCB Code: C 012A)
Basic Certificate - Hospitality Operations (17 Credit Hours)
Management (ICCB Code: C 012B)
Basic Certificate - Food Service Management (22 Credit Hours) (ICCB Code: C 012C)
Basic Certificate - Lodging Management (22 Credit Hours) (ICCB Code: C 012D)

|  |  | Credit <br> Hours | Food <br> Service <br> AAS | Lodging AAS | Management Fundamentals Certificate | Operations <br> Management Certificate | Food Service Management Certificate | Lodging Management Certificate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACCT 100: | Accounting Fundamentals (or ACCT 101*) | 3 | X | X | X |  |  |  |
| BUS 100: | Business Fundamentals | 3 | X | X | X |  |  |  |
| BUS 101: | Hospitality \& Tourism (formerly HOSP 100) | 3 | X | X | X |  |  |  |
| BUS 110: | Business Mathematics (or MATH 104) | 3 | X | X | X |  |  |  |
| BUS 121: | Purchasing (formerly HOSP 104) | 3 | X | X |  | X |  |  |
| BUS 200: | Customer Service Fundamentals | 3 | X | X |  |  | X | X |
| BUS 220: | Cost Management (formerly HOSP 102) | 4 | X | X |  | X | X | X |
| BUS 221: | Security \& Loss Preventin (formerly HOSP 213) | 3 |  | X |  |  |  | X |
| BUS 231: | Business Law Principles | 3 | X | X |  | X |  |  |
| BUS 240: | Marketing Fundamentals (formerly BUS 124) | 3 | X | X |  | X |  |  |
| BUS 260: | Hospitality Nutrition (formerly HOSP 202) | 3 | X |  |  |  | X |  |
| BUS 261: | Bar \& Beverage Management (formerly HOSP 203) | 3 | X |  |  |  | X |  |
| BUS 262: | Food Service Presentation (formerly HOSP 204) | 3 | X |  |  |  | X |  |
| BUS 263: | Catering \& Banquet Management | 3 | X |  |  |  | X |  |
| BUS 270: | Front Office Operations (formerly HOSP 211) | 3 |  | X |  |  |  | X |
| BUS 271: | Housekeeping Operations (formerly HOSP 210) | 3 |  | X |  |  |  | X |
| BUS 272: | Facilities Management (formerly HOSP 214) | 3 |  | X |  |  |  | X |
| BUS 290: | Work Experience Practicum (or BUS 295) | 3 | X | X |  |  | X | X |
| CIS 110: | Business Applications | 3 | X | X | X |  |  |  |
| ECON 231: | Macroeconomics | 3 | X | X |  |  |  |  |
| ENGL 110: | Communicating in the Workplace (or ENGL 101*) | 3 | X | X |  |  |  |  |
| HOSP 110: | Food Service Sanitation | 1 | X | X |  | X |  |  |
| P REL 100: | Human Relations | 3 | X | X |  | X |  |  |
| P REL 110: | Supervision | 3 | X | X | X |  |  |  |
| SPCH 120: | Business \& Professional Speaking (or SPCH 101*) | 3 | X | X |  |  |  |  |
|  | Total |  | 62 | 62 | 18 | 17 | 22 | 22 |

X = Required

* Students transferring to university should take this course.


## 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 |  |  |  |  |

## SUGGESTED FULL-TIME HOSPITALITY MANAGEMENT - LODGING 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 100 | F, S | BUS 101 | S | BUS 200 | F | BUS 220 | S |
| BUS 100 | F, S, Su | BUS 121 | S | BUS 231 | F, S | BUS 221 | S |
| BUS 110 | F, S, Su | HOSP 110 | F, S, Su | BUS 240 | F | BUS 271 | S |
| CIS 110 | F, S, Su | P REL 100 | F, S | BUS 270 | F | BUS 272 | S |
| ENGL 110 | F, S, Su | PREL 110 | S | ECON 231 | F, S, Su | BUS 290 | F, S, Su |
|  |  | SPCH 120 | F, S, Su |  |  |  |  |
| F=fall | S=spring | Su=Summer | AN=as needed |  |  |  |  |

## Industrial Engineering Technology (See Engineering Technology Program)

## Industrial Maintenance (See Engineering Technology Program)

## 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 three-tiered 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; 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, note that 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, web/eBusiness/ eCommerce applications developers, and Internet \& Intranet technicians and administrators.

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


## Desktop Support Technician

General Description: The AAS in IT-Microcomputer Applications 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 (66 Credit Hours)
Support Technician (ICCB Code: AAS 0111)
Certificate - Desktop Support Specialist (50 Credit Hours)
(ICCB Code: 011H)
Certificate - Microsoft Office Specialist (15 Credit Hours)
Prep (MOS) (ICCB Code: 011F)
Certificate - COMPTIA A+ Prep (10 Credit Hours)
(ICCB Code: 011A)
Certificate - COMPTIA Project+ Prep (10 credit hours)
Pending ICCB Approval (ICCB Code: C 011P)
Certificate - Computer Literacy
(9 Credit Hours)

Pending ICCB Approval (ICCB Code: C 011M)

|  | Credit Hours | Desktop <br> Support Technician AAS | Desktop <br> Support Specialist Certificat | Microsoft Office Specialist Prep Certificate | COMPTIA A+ | COMPTIA <br> Project+ <br> COMPTIA | Computer Literacy Certificate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CIS 110: Business Applications | 3 | X | X |  |  |  |  |
| ENGL 110: 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 | 3 | X |  |  |  |  |  |
| To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Sciences |  |  |  |  |  |  |  |
| Total |  | 66 | 50 | 15 | 10 | 10 | 9 |

$\mathrm{X}=$ Required
*If you wish to transfer to a 4-year institution, take this course.

## 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.


## Network Technology

General Description: The AAS in I.T.-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 (66 Credit Hours) Technology (ICCB Code: AAS 2076)
Certificate - Network Specialist (50 Credit Hours)
(ICCB Code: 011K)
Certificate - Cisco Network Administrator (16 Credit Hours)
(CCNA) Prep (ICCB Code: 011B)
Certificate - COMPTIA Net+ Prep (25 Credit Hours)
(ICCB Code: 011C)
Certificate - COMPTIA Security+ Prep (18 Credit Hours)
Pending ICCB Approval (ICCB Code: C 011N)
Certificate - COMPTIA Linux + Prep
(13 Credit Hours)
Pending ICCB Approval (ICCB Code: C 011Q)
Certificate - Microsoft Certified Systems
(16 Credit Hours)
Administrator (MCSA) Prep
Pending ICCB Approval (ICCB Code: C 011T)

| COURSES |  | Credit <br> Hours | Technology Network Technology AAS | Network Specialist Certificate | COMPTIA <br> Net+ Prep <br> Certificate |  |  | $\begin{gathered} \text { MCSA } \\ \text { Certificate } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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: | Networking Switching Technologies (formerly IT 143) | 3) 4 | X | X | X | X | X |  |  |
| IT 244: | Wide Area Networks (formerly IT 144) | 3 |  |  |  |  | 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 | 3 | X |  |  |  |  |  |  |
| To be selected from areas of Communications, Math and/or Natural Science or Social Science and/or Humanities/Fine Arts. |  |  |  |  |  |  |  |  |  |
| Total |  |  | 66 | 50 | 25 | 18 | 16 | 16 | 13 |

$\mathrm{X}=$ Required
*If you wish to transfer to a 4-year institution, take this course.

## SUGGESTED FULL-TIME INFORMATION TECHNOLOGY - NETWORK 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 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 | MATH 104 | F, S, Su | IT 273 | F | IT 285 | S |
| SPCH 120 | F, S, Su | P REL 100 | F, S | Gen Ed Elec | F, S, Su | IT 290 | F, S, Su |
| F=fall | S=spring | Su=Summer | AN=as needed |  |  |  |  |

## Programmer/Analyst

General Description: The AAS in I.T.-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 needed.

For those interested in pursuing a certificate or degree, the following options are available:
Associate in Applied Science - Programmer/ (66 Credit Hours) Analyst (ICCB Code: AAS 0098)
Certificate - Programming Specialist (50 Credit Hours)
(ICCB Code: 011G)
Certificate - Object-Oriented Programming (26 Credit Hours)
Pending ICCB Approval (ICCB Code: C 011R)
Certificate - Systems Programming
(26 Credit Hours)
Pending ICCB Approval (ICCB Code: C 011U)
Certificate - Web Programming
(24 Credit Hours)

Pending ICCB Approval (ICCB Code: C 011S)

| COURSES |  | Credit <br> Hours | $\begin{gathered} \text { Programmer/ } \\ \text { Analyst } \\ \text { AAS } \end{gathered}$ | Programming Specialist Certificate | Obj.-Oriented Programming Certificate Certificate | Systems Programming Certificate | $\begin{gathered} \text { Web } \\ \text { Programming } \\ \text { Certificate } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 Systems | 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 | 3 | X |  |  |  |  |
| To be selected from areas of Communications, Math and/or Natural Science or Social Science and/or Humanities/Fine Arts. |  |  |  |  |  |  |  |
|  | Total |  | 66 | 50 | 26 | 26 | 24 |

$\mathrm{X}=$ Required
*If you wish to transfer to a 4-year institution, take this course.

## 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 |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CS 105 | F | CS 161 | S | CS 230 | F | IT 280 | S |
| ENGL 110 | F, S, Su | CS 251 | S | CS 281 | F | IT 284 | S |
| IT 116 | F | IT 153 | S | IT 222 | F | IT 285 | S |
| IT 131 | F | IT 221 | S | IT 282 | F | IT 290 | F, S, Su |
| MATH 104 | F, S, Su | SPCH 120 | F, S, Su | Gen Ed Elec | F, S, Su | P REL 100 | F, S |
| $\mathrm{F}=$ fall | ring | summer | =as need |  |  |  |  |

## 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. It may not transfer to four-year institutions.
Basic Certificate - Nurse Assistant (7 Credit Hours)
(ICCB Code: BC 0053)

| COURSES | Credit <br> Hours | Nurse Assistant <br> Basic Certificate |
| :--- | :---: | :---: |
| HLTH 141 Nurse Assistant Training* | 7 | X |
| Total |  | 7 |

* Course is offered spring, summer, fall, semesters

X = Required
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 Program

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 monthly orientation.

Attendance at an orientation session is required to receive a program worksheet to determine eligibility for application.

General Description: The purpose of the Associate Degree Nursing (ADN) program at Richland Community College flows from the Richland Community College purpose and is designed to prepare competent, caring, and critically thinking graduates for entrylevel nursing positions in a variety of health care settings and to encourage commitment to personal and professional growth. The ADN program is a combination of nursing and selected general education courses. The nursing courses consist of classroom, laboratory, 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 manage care for an individual client or a group of clients. Upon satisfactory completion of the program, students will (a) receive an Associate of Applied Science Degree and (b) submit to a criminal background check. (c) On passing the background check, students are eligible to write the National Council Licensing Examination (NCLEX-RN). (d) Graduates who successfully complete the NCLEX-RN and the State of Illinois requirements (e) 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 312-8144500) 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 as long as there are adequate enrollment and faculty.

## 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 can apply for a state license 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 Professional Regulation at 312-814-4500. http://www.dpr.state.il.us/WHO/nurs.asp

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 US. 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 agen-
cies. The current salary for beginning registered nurses in the Richland District ranges from $\$ 15$ to $\$ 18$ per hour. Starting salaries average $\$ 31,200-\$ 37,440$ 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.

- Present high school or college course requirements 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.
- 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 Math or place as follows on placement exams: English (placement in Engl. 101), Math (eligibility for Math 098 or complete Math 091 and Math 106), and a Nelson Denny Reading Score of 12th grade or better.
- 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. (ENGL101, BIOL101, 201, 202, 220, PSYCH110, 145, SOCIO110, Fine Arts, or 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, Engl 101, Fine Arts and Special Topics electives, and all required nursing courses.
- Biology GPA of 2.0 or better on a 4.0 scale. The last biology courses taken (Biol 101, 201, 202, 220) must have been completed within the past five years.
- Applicants must be a Certified Nursing Assistant (CNA) in good standing on the Illinois Department of Public Health Nurse Aide Registry.
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 orientation session to receive a program worksheet 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 Oct 1st for Jan/Spring admission, and March 1st for Aug/Fall admission.

## Conditional Admission:

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, 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

1. Program Grade point average (GPA) of 2.50 or above, on a 4.00 scale in alll 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 15 or more credit hours of the general education credits required for the AAS Degree.
4. Number of Biology courses completed.
5. Nelson Denny Reading Level
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 spaceavailable 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 admissions are considered.
2. In-district students admitted for the first time into Nurs 111/112 and Bridge students entering Nurs 201/251, 205/250 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, they must complete ALL nursing courses required in the semester into which they are 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-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.

| Prerequisite Courses | Credit <br> Hours | Semesters | Trans- <br> ferable <br> $*$ | Profi- <br> ciency <br> Exam |
| :--- | :---: | :---: | :---: | :---: |
| $* *$ Biol 101 Concepts of Biology I | 4 | $\mathrm{~F}, \mathrm{Sp}, \mathrm{Su}$ | No | Yes |
| F=fall $\quad \mathrm{Sp}=$ spring | $\mathrm{Su}=$ summer |  |  |  |


| Course | Credit Hours | Semesters Offered | Transferable |
| :---: | :---: | :---: | :---: |
| First Semester Year 1 |  |  |  |
| Nurs 111 Intro to Nursing | 1 | F, Sp | No |
| Nurs 112 Med Surg 1 | 9 | F, Sp | Yes |
| Psych 110 Intro to Psych | 3 | F, $\mathrm{Sp}, \mathrm{Su}$ | Yes |
| Engl 101 Composition 1 | 3 | F, Sp, Su | Yes |
| Biol 201 Human Anatomy \& Physiology 1 | 4 | F, $\mathrm{Sp}, \mathrm{Su}$ | Yes |
| Second Semester Year 1 |  |  |  |
| Nurs 150 Family Health Nursing | 6 | F, Sp | Yes |
| Nurs 152 Psych | 4 | F, Sp | Yes |
| Nurs 154 Pharmacology | 3 | F, Sp | Yes |
| Psych 145 Life Span Psych | 3 | F, $\mathrm{Sp}, \mathrm{Su}$ | Yes |
| Biol 202 A\&P II Anatomy | 4 | F, $\mathrm{Sp}, \mathrm{Su}$ | Yes |
| Third Semester Year 2 |  |  |  |
| Nurs 205 Med Surg II | 5 | F, Sp | Yes |
| Nurs 250 Med Surg III | 5 | F, Sp | Yes |
| Socio 110 Intro to Sociology | 3 | F, Sp, | Yes |
| Biol 220 Microbiology | 4 | F, Sp, | Yes |
| Fourth Semester Year 2 |  |  |  |
| Nurs 252 Med-Surg IV Acute | 5 | F, Sp | Yes |
| Nurs 254 Leadership | 5 | F, Sp | Yes |
| FA Elective | 3 | F, Sp | Yes |
| Hlth 197/297 Special Topics In Healthcare | 1 | F, Sp | Yes |

$\mathrm{F}=$ fall $\quad \mathrm{Sp}=$ spring $\quad \mathrm{Su}=$ summer

## 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 $65 \%$ or better on each required NLN outcome test
- A $65 \%$ or better on the Mosby Assess Test
- Completion of all nursing skills in the lab and $76 \%$ 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 Integrity Policy


## Advanced Placement Program for LPN's

Graduates of a State-approved Licensed Practical Nursing Program who have a license or are 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.

## Requirements for Application to Nurs 203

In addition to the admission requirements of the RN Program, LPNs must also present:

- Evidence of graduation from a State- approved LPN program or
- Evidence of a State of Illinois LPN license.
- Two (2) letters of reference from an employer, supervisor, director or faculty who is in a position to validate performance.
- GPA of 2.50 in all prerequisite and other courses required for admission, progression, and graduation from the program.
- Completion of all prerequisite courses listed below with a "C" or better.
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 Nursing 101, Nursing 102, Nursing 151, and Nursing 202 for students admitted in 2006, Nursing 111, Nursing 112, Nursing 150, and Nursing 152 for students admitted in 2007.

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.

Prerequisite Requirements for Fall 2006 Admission to Nurs 203 and transition to the new nursing curriculum

| Prerequisite Courses For Nurs 203 | Credit <br> Hours | Semesters <br> Offered | Trans- <br> ferable <br> * | Profi- <br> ciency <br> Exam |
| :--- | :---: | :---: | :---: | :---: |
| Biol 101 | 4 | F, Sp, Su | No | Yes |
| Biol 201 | Human Anatomy \& I | 4 | F, Sp, Su | Yes | No

Course sequence on admission to the Bridge course Nurs 203 Fall 2006

| Course | Credit <br> Hours | Semesters <br> Offered | Trans- <br> ferable |
| :--- | :---: | :---: | :---: |
| Third Semester- Year 2 |  |  |  |
| Nurs 201 Med - Surg Acute - 8 wks | 5 | F, Sp | Yes* |
| Nurs 251 Med - Surg Chronic - 8 wks | 4 | F, Sp | Yes* |
| Nurs 203 Bridge | 7 | F, Sp | No |
| Fourth Semester - Year 2 |  |  |  |
| Nurs 202 Care of the Family | 5 | F, Sp | Yes* |
| Nurs 254 Leadership | 5 | F, Sp | Yes* |
| Socio 110 Intro to Sociology | 3 | F, Sp, Su | Yes |
| FA Elective | 3 | F, Sp | Yes |

Course Prerequisite Requirements for admission to Nurs 203 beginning Spring 2007

| Prerequisite Courses For Nurs 203 | Credit <br> Hours | Semesters <br> offered | Trans- <br> ferable <br> $*$ | Profi- <br> ciency <br> Exam |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| Biol 101 |  | 4 | F, Sp, Su | No | Yes |
| Biol 201 | Human Anatomy \& | 4 | F, Sp, Su | Yes | No |
|  | Physiology I |  |  |  |  |
| Biol 202 | A\&P II | 4 | F, Sp, Su | Yes | No |
| Biol 220 | Microbiology | 4 | F, Sp, Su | Yes | No |
| Engl 101 | Composition | 3 | F, Sp, Su | Yes | No |
| Psych 110 | Intro to Psych | 3 | F, Sp, Su | Yes | Yes |
| Psych 145 | Life Span Psych | 3 | F, Sp, Su | Yes | Yes |
| Socio 110 | Intro to Sociology | 3 | F, Sp, Su | Yes | No |
| Nurs 154 | Pharmacology | 2 | F, Sp | Yes | Yes |

Course sequence on admission to the Bridge course Nurs 203 beginning Spring 2007

| Course | Credit <br> Hours | Semesters <br> offered | Trans- <br> ferable |
| :--- | :---: | :---: | :---: |
| Third Semester- Year 2 |  |  |  |
| NURS 205 Med -Surg II Chronic - 8 wks | 5 | F, Sp | Yes* |
| NURS 250 Med Surg III Surgical - 8 wks | 5 | F, Sp | Yes* $^{*}$ |
| Nurs 203 Bridge | 7 | F, Sp | No |
| Fourth Semester - Year 2 |  |  |  |
| Nurs 252 Med-Surg IV Acute | 5 | F, Sp | Yes* |
| Nurs 254 Leadership | 5 | F, Sp | Yes* |
| Socio 110 Intro to Sociology | 3 | F, Sp, Su | Yes |
| FA Elective | 3 | F, Sp | Yes |
| Hlth 197/297 Special Topics In Healthcare | 1 | F, Sp | Yes* |



## 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 of the 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 -
(62 Credit Hours)
Administrative Assistant - Accounting
(ICCB Code: AAS 0044)
Basic Certificate - Accounting Office
Clerk (ICCB Code: C 044D)
(30-31 Credit Hours)

| Basic Certificate - Advanced Accounting | (41 Credit Hours) |
| :--- | :--- |
| Office Specialist (ICCB Code: C 044E) |  |
| Basic Certificate - Receptionist | (17 Credit Hours) |
| (ICCB Code: C 044 G$)$ |  |



X = Required
*Student may substitute OT 160
**Student may substitute OT 225
***Students transferring to university should take this course.
Minimum typing speed of 40 NWAM for five minutes with five or fewer errors is required for certificates.
Minimum typing speed of 50 NWAM for five minutes with five or fewer errors is required for AAS degrees.

## 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 | F, S, Su | ACCT 101 | F, S, Su | ACCT 102 | F, S | OT 225 | S |
| OT 119 | F, S | OT 120 | F, S, Su | OT 211 | F | OT 290 | AN |
| OT 112 | F, S | OT 150 | S | OT 220 | F | P REL 100 | F, S |
| OT 115 | F, S | OT 210 | S | OT 260 | F | SPCH 120 | F, S, Su |
| OT 170 | F, S | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su |
| F=fall | S=spring | Su=summer | AN=as needed |  |  |  |  |

## Administrative Assistant - General Specialty

For those interested in pursuing this concentration, the following options are available:
Associate in Applied Science Administrative Assistant - General Office (ICCB Code: AAS 0044)
Basic Certificate - Receptionist
(ICCB Code: C 044G)
(60 Credit Hours)
(17 Credit Hours)

Basic Certificate - Office Assistant
(27 Credit Hours) (ICCB Code: C 044H)
Basic Certificate - Business Office Specialist (42 Credit Hours) (ICCB Code: C 044C)

| COURSES | Credit Hours | Administrative Assistant General Office AAS | Receptionist | Office Assistant Certificate | Business Office Specialist Certifica |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110: Business Math | 3 | X | X | X | X |
| OT 112: Document Formatting/Word Processing | 3 | X | X | X | X |
| OT 115: Operating Systems \& Applications (formerly OT 102,104,105) | 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 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 211: Advanced Word Processing | 3 | X |  |  | X |
| OT 212: Desktop Publishing | 3 | X |  |  | X |
| OT 272: Web Page Development | 3 | X |  |  | X |
| OT 290: Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |  |
| OTK 100: Keyboarding (or OTK 101) | 2 |  | 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 |  | 60 | 17 | 27 | 42 |

X = Required
*Students transferring to university should take this course.

Minimum typing speed of 40 NWAM for five minutes with five or fewer errors is required for certificates.
Minimum typing speed of 50 NWAM for five minutes with five or fewer errors is required for AAS degrees.

## 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.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| BUS 110 | F, S, Su | OT 160 | S | OT 200 | F | OT 212 | S |
| OT 119 | F, S | OT 120 | F, S, Su | OT 211 | F | OT 290 | AN |
| OT 112 | F, S | OT 150 | S | OT 205 | F | P REL 100 | F, S S Su |
| OT 115 | F, S | OT 210 | S | OT 272 | F | SPCH 120 | F, S, Su |
| OT 170 | F, S | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su |
| F=fall | S=spring | Su=Summer | AN=as needed |  |  |  |  |

## Administrative Assistant - Legal Specialty

For those interested in pursuing this concentration, the following options are available:
Associate in Applied Science - Administrative (66 Credit Hours)
Assistant - Legal Office (ICCB Code: AAS 0044)

| Basic Certificate - Legal Office Specialist | (42 Credit Hours) |
| :--- | :--- |
| (ICCB Code: C 044 F ) |  | (17 Credit Hours)



X = Required

* Students transferring to university should take this course.

Minimum typing speed of 40 NWAM for five minutes with five or fewer errors is required for certificates.
Minimum typing speed of 50 NWAM for five minutes with five or fewer errors is required for AAS degrees.

## 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.

| 1st Semester |  | 2nd Semester |  | 3rd Semester |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110 | F, S, Su | OT 160 | S | OT 200 | F | OT 212 | S |
| OT 119 | F, S | OT 120 | F, S, Su | OT 211 | F | OT 230 | S |
| OT 112 | F, S | OT 150 | S | OT 205 | F | OT 232 | S |
| OT 115 | F, S | BUS 231 | F, S | OT 272 | F | OT 290 | AN |
| OT 170 | F, S | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su | P REL 100 | F, S |
|  |  |  |  | SPCH 120 | F, S, Su |  |  |
| $\mathrm{F}=$ fall | S=spring | $\mathrm{Su}=$ summer | =as need |  |  |  |  |

## Medical Office Specialist - General Specialty

For those interested in pursuing this concentration, the following options are available:
Associate in Applied Science - Medical Office (66 Credit Hours) Specialist - General (ICCB Code: AAS 045D)

Basic Certificate - Medical Office Specialist (42 Credit Hours) (ICCB Code: C 045C)
Basic Certificate - Receptionist (17 Credit Hours)
(ICCB Code: C 044G)

|  | Credit Hours | Medical Office Specialist AAS | Receptionist Certificate | Medical Office Specialist Certificate |
| :---: | :---: | :---: | :---: | :---: |
| BUS 110: Business Math | 3 | X | X | X |
| HLTH 197: Special Topics in Healthcare* | 3 | X |  | X |
| OT 112: Document Formatting/Word Processing | 3 | X | X | X |
| OT 115: Operating Systems \& Applications (formerly OT 102,104,105) | 3 | X | X | X |
| OT 119: Business English | 3 | X | X | X |
| OT 120: Business Communications | 3 | X |  | X |
| OT 140: Medical Terminology (formerly OT 141) | 3 | X |  | X |
| OT 141: Medical Office Anatomy (formerly OT 142) | 3 | 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 205: Voicing \& Transcription | 3 | X |  |  |
| OT 210: Statistical Keyboard Entry | 3 | X |  |  |
| OT 211: Advanced Word Processing | 3 | X |  | X |
| OT 240: Pharmacology Terminology | 3 | X |  | X |
| OT 245: Insurance/Patient Billing | 3 | X |  | X |
| OT 290: Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |
| OTK 100: Keyboarding (or OTK 101) |  |  | X |  |
| P REL 100: Human Relations | 3 | X |  |  |
| SPCH 120: Business and Professional Speaking (or SPCH 101**) | 3 | X |  |  |
| AAS Group Requirements/Electives | 9 | X |  |  |
| To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Science |  |  |  |  |
| Total |  | 66 | 17 | 42 |

X = Required
*Only Common Diseases topic will meet graduation requirements.
**Students transferring to university should take this course.
Minimum typing speed of 40 NWAM for five minutes with five or fewer errors is required for certificates.
Minimum typing speed of 50 NWAM for five minutes with five or fewer errors is required for AAS degrees.

## 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 |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110 | F, S, Su | OT 160 | S | OT 240 | F | OT 245 | S |
| OT 119 | F, S | OT 120 | F, S, Su | OT 211 | F | OT 290 | AN |
| OT 112 | F, S | OT 150 | S | OT 205 | F | P REL 100 | F, S |
| OT 115 | F, S | OT 141 | S | HLTH 197 | F, S | SPCH 120 | F, S, Su |
| OT 170 | F, S | OT 210 | S | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su |
| OT 140 | F, S, Su |  |  | ( $6 \mathrm{cr} . \mathrm{Hrs}$ ) |  |  |  |
| $\mathrm{F}=$ fall | S=spring | $\mathrm{Su}=$ summer | =as need |  |  |  |  |

## Medical Office Specialist - Coding Specialty

For those interested in pursuing this concentration, the following options are available:
Associate in Applied Science - Medical Office (66 Credit Hours)
Specialist - Coding (ICCB Code: AAS 045D)

Basic Certificate - Medical Coding
(21 Credit Hours) (ICCB Code: C 045B)
Basic Certificate - Receptionist (17 Credit Hours) (ICCB Code: C 044G)

|  | Credit Hours | Medical Office Specialist Coding AAS | Receptionist Certificate | Medical Coding Certificate |
| :---: | :---: | :---: | :---: | :---: |
| BUS 110: Business Math | 3 | X | X |  |
| HLTH 197: Special Topics in Healthcare* | 3 | X |  | X |
| OT 112: Document Formatting/Word Processing | 3 | X | X | X |
| OT 115: Operating Systems \& Applications (formerly OT 102,104,105) | 3 | X | X |  |
| OT 119: Business English | 3 | X | X |  |
| OT 120: Business Communications | 3 | X |  |  |
| OT 140: Medical Terminology (formerly OT 141) | 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 150: Records Management | 3 | X |  |  |
| OT 160: Office Accounting | 3 | X |  |  |
| OT 170: Professional Office Procedures (formerly OT 250) | 3 | X | X |  |
| OT 211: Advanced Word Processing | 3 | X |  | X |
| OT 240: Pharmacology Terminology | 3 | X |  | X |
| OT 243: CPT Coding (formerly OT 245) | 3 | X |  | X |
| OT 245: Insurance/Patient Billing | 3 | X |  |  |
| OT 290: Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |
| OTK 100: Keyboarding (or OTK 101) |  |  | X |  |
| P REL 100: Human Relations | 3 | X |  |  |
| SPCH 120: Business and Professional Speaking (or SPCH 101**) |  | X |  |  |
| AAS Group Requirements/Electives | 9 | X |  |  |
| To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Science |  |  |  |  |
| Total |  | 66 | 17 | 24 |

X = Required
*Only Common Diseases topic will meet graduation requirements.
**Students transferring to university should take this course.
Minimum typing speed of 40 NWAM for five minutes with five or fewer errors is required for certificates.
Minimum typing speed of 50 NWAM for five minutes with five or fewer errors is required for AAS degrees.

## 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 | F, S, Su | OT 143 | S | OT 240 | F | OT 245 | S |
| OT 119 | F, S | OT 120 | F, S, Su | OT 211 | F | OT 290 | AN |
| OT 112 | F, S | OT 150 | S | OT 243 | F | P REL 100 | F, S |
| OT 115 | F, S | OT 141 | S | HLTH 197 | F, S | SPCH 120 | F, S, Su |
| OT 170 | F, S | OT 160 | S | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su |
| OT 140 | F, S, Su |  |  | ( $6 \mathrm{cr} . \mathrm{Hrs}$ ) |  |  |  |
| $\mathrm{F}=\mathrm{fall}$ | $\mathrm{S}=$ spring | $\mathrm{Su}=$ summer | =as need |  |  |  |  |

## Medical Office Specialist - Transcription Specialty

For those interested in pursuing this concentration, the following options are available:
Associate in Applied Science - Medical Office Specialist Transcription (ICCB Code: AAS 045D)
Basic Certificate - Medical Office Specialist (ICCB Code: C 045C)
(42 Credit Hours)

Basic Certificate - Medical Transcription
(21 Credit Hours) (ICCB Code: C 045A)
Basic Certificate - Receptionist
(17 Credit Hours)
(ICCB Code: C 044G)

|  |  | Credit Hours | Medical Office Specialist Transcription AAS | Receptionist Certificate | Medical <br> Transcription Certificate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110: | Business Math | 3 | X | X |  |
| HLTH 197: | Special Topics in Healthcare* | 3 | X |  | X |
| OT 112: | Document Formatting/Word Processing | 3 | X | X | X |
| OT 115: | Operating Systems \& Applications (formerly OT 102,104,105) | 3 | X | X |  |
| OT 119: | Business English | 3 | X | X |  |
| OT 120: | Business Communications | 3 | X |  |  |
| OT 140: | Medical Terminology (formerly OT 141) | 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 150: | Records Management | 3 | X |  |  |
| OT 160: | Office Accounting (or ACCT 101) | 3 | X |  |  |
| OT 170: | Professional Office Procedures (formerly OT 250) | 3 | X | X |  |
| OT 211: | Advanced Word Processing | 3 | X |  | X |
| OT 240: | Pharmacology Terminology | 3 | X |  | X |
| OT 242: | Medical Transcription 2 (formerly OT 243) | 3 | X |  | X |
| OT 245: | Insurance/Patient Billing | 3 | X |  |  |
| OT 290: | Work Experience Practicum \& Seminar (or OT 295) | 3 | X |  |  |
| OTK 100: | Keyboarding (or OTK 101) |  |  | X |  |
| P REL 100: | Human Relations | 3 | X |  |  |
| SPCH 120: | Business and Professional Speaking (or SPCH 101**) | 3 | X |  |  |
| AAS Group | Requirements/Electives | 9 | X |  |  |
| To be selected from areas of Communications, Math, Science, Humanities, Fine Arts, or Social Science |  |  |  |  |  |
| Total |  |  | 66 | 17 | 24 |

X = Required
*Only Common Diseases topic will meet graduation requirements.
**Students transferring to university should take this course.
Minimum typing speed of 40 NWAM for five minutes with five or fewer errors is required for certificates.
Minimum typing speed of 50 NWAM for five minutes with five or fewer errors is required for AAS degrees.

## 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 |  | 4th Semester |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BUS 110 | F, S, Su | OT 142 | F, S | OT 240 | F | OT 245 | S |
| OT 119 | F, S | OT 120 | F, S, Su | OT 211 | F | OT 290 | AN |
| OT 112 | F, S | OT 150 | S | OT 242 | F, S | P REL 100 | F, S |
| OT 115 | F, S | OT 141 | S | HLTH 197 | F, S | SPCH 120 | F, S, Su |
| OT 170 | F, S | OT 160 | S | Gen Ed Elec | F, S, Su | Gen Ed Elec | F, S, Su |
| OT 140 | F, S, Su |  |  | ( $6 \mathrm{cr} . \mathrm{Hrs}$ ) |  |  |  |
| $\mathrm{F}=$ fall | S=spring | $\mathrm{Su}=$ summer | =as need |  |  |  |  |

## 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 unit-dose 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; 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 of the courses may not transfer to four-year institutions.

Basic Certificate - Pharmacy Technician
(18 Credit Hours) (ICCB Code: BC 2074)


## SUGGESTED FULL-TIME PHARMACY TECHNICIAN SEQUENCE

1st Semester - Fall
HLTH 150
HLTH 152
CIS 110

## 2nd Semester - Spring

HLTH 155
HLTH 156
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 Program

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. Details on selective admission are found below in orientation.

Attendance at an orientation session is required to receive a program worksheet to determine eligibility for application.

General Description: The Practical Nursing program at RCC is approved by the Illinois of Department of 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 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 US. 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 $\$ 10$ to $\$ 12$ per hour. Starting salaries average $\$ 20,800-\$ 24,960$ 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.

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.

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 220). 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 Nelsen Denny Reading Score of 12 th 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 March 1st for Aug 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

- 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.
- Biology GPA of 2.00 or better
- Number of Biology courses completed
- Nelson Denny Reading Level
- The number of program course withdrawals and grades less than a "C".
- 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: 050A)

| Prerequisites For Program Courses | Credit <br> Hours | Semesters <br> Offered | Trans- <br> ferable <br> $*$ | Profi- <br> ciency <br> Exam |
| :--- | :---: | :--- | :---: | :---: |
| 4 semesters of high school <br> Biology and 2 semesters of <br> Chem or Physics with a "B" <br> or better or Biol 101 |  |  |  |  |
| - Concepts of Biology I | 4 | F, Sp, Su | No | Yes |
| Psych 110 - Intro Psych |  |  |  |  |


| Course | Credit <br> Hours | Semesters <br> Offered | Trans- <br> ferable |
| :--- | :---: | :--- | :--- |
| First Semester Year 1 |  |  |  |
| Psych 145 | Life Span Psych | 3 | F, Sp, Su |
| Yes |  |  |  |
| Health 220 | Nutrition | 3 | F, Sp, Su Yes |
| Biol 201 A \& P I | 4 | F, Sp, Su | Yes |

## Second Semester Year 1

| PN 101A | Transition I | 1 | F | Yes* |
| :--- | :--- | :---: | :---: | :---: |
| PN 102A | Wellness I - 1st 8 weeks | 6 | F | Yes* $^{*}$ |
| PN 103A | Wellness II - 2nd 8 weeks | 4 | F | Yes* $^{*}$ |
| Nurs 154 | Pharmacology | 3 | F, Sp | Yes* |
| Biol 202 | A\&P II | 4 | F, Sp, Su | Yes |


| Course | Credit <br> Hours | Semesters <br> Offered | Trans- <br> ferable |
| :--- | :---: | :---: | :---: | :---: |
| Third Semester Year 1 |  |  |  |
| PN 104A $\quad$ Transitions II | 1 | Sp | Yes* |
| PN 105 $\quad$ Alterations I - 1st 8 weeks | 7 | Sp | Yes* |
| PN 106 $\quad$ Alterations II - 2nd 8 weeks | 6 | Sp | Yes* |
| Engl 101 | 3 | F, Sp, Su | Yes |
| Hlth 197/Hlth 297 Special Topics in | 1 | F, Sp | Yes* |
| Healthcare elective |  |  |  |
| PN 113 $\quad$ Licensure Prep |  |  |  |

*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/re admissions are considered.
2. In-district Students admitted for the first time into PN 101 / 102 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 the student 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-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 102 , the course syllabus must be submitted to the Dean of Health Professions for review.
9. Only PN 102 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 102.
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 skills in the lab and $76 \%$ 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.


## 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 to 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 Illinois Department of Professional Regulation at 312-814-4500. http://www.dpr.state.il.us/WHO/nurs. asp


## Radiography Program

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. Details on selective admission are found at Health Professions on page 10.

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 much faster than average through 2008. 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 hourly wage in 2004 for fulltime radiographers was $\$ 20.61$, and in Illinois the mean was $\$ 21.81$. The mean for radiographers with $0-2$ years experience was $\$ 18.09$.

## Admission Criteria:

Attendance at an orientation 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.

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; MATH (level equivalent to MATH 098 or com-
plete MATH 091), and a Nelson Denny Reading comprehension score of 12 th grade 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 \& a GPA of at least 2.5 are required for admission, progression, and graduation from the program.

| Prerequisites For Program Courses | Credit <br> Hours | Semesters <br> offered | Trans- <br> ferable <br> $*$ | Profi- <br> ciency <br> Exam |
| :--- | :---: | :---: | :---: | :---: |
| HLTH 140 Medical Terminology | 3 | F, Sp, Su | No | Yes |
| RADT 101 Introduction to | 3 | F | $*$ | No |
| Radiography** |  |  |  |  |
| *Verify transferability of this course with a specific school. |  |  |  |  |
| **Prerequisites: eligibility for English 101 \& math placement score at 098. |  |  |  |  |
| $\quad$ Students may be concurrently enrolled in Math 095 |  |  |  |  |


| Course | Credit <br> Hours | semesters <br> Offered | Trans- <br> ferable |  |
| :--- | :---: | :---: | :---: | :---: |
| First Semester Summer Year 1 |  |  |  |  |
| 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 | $3-0-3$ | F | $*$ |
| RADT 115 | Radiography Clinical I | $0-18-3$ | F | $*$ |
| RADT 116 | Radiation Physics | $3-0-3$ | F | $*$ |
| RADT 118 | Radiographic Procedures II | $2-3-3$ | F | $*$ |
| BIOL 101 | Concepts of Biology 1 | $3-2-4$ | F, 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 \& | $3-2-4$ | F, Sp, Su | Yes |
|  | Physiology I |  |  |  |

## 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 Sp *
RADT 218 Radiographic Procedures IV $\quad 2-3-3 \quad$ Sp $\quad$ *
RADT 219 Radiation Protection \& $2-0-2 \quad$ Sp *
BIOL 202 Human Anatomy \& 3-2-4 F, Sp , Su Yes Physiology II

## 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 | $3-0-3$ | $\mathrm{~F}, \mathrm{Sp}, \mathrm{Su}$ | Yes |
| ENGL 101 | Composition I | $3-0-3$ | $\mathrm{~F}, \mathrm{Sp}, \mathrm{Su}$ | Yes |

[^3]
## 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 Minneapolis, Minnesota. 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 in Springfield, Illinois.

## 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:
1 Applying for degree completion to the Radiologic Technology Program Director
2 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
3 Satisfying Constitution requirement
4 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 program,
- complete all clinical proficiency exams required by ARRT,
- meet standards of the ARRT/ASRT Code of Professional Ethics,
- return film ID markers or make reimbursement, and
- return film badge holder or make reimbursement.


## Surgical Technology Program

This 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 noncore 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 at (www.richland.edu/admissions/admissionreq.php.)

General Description: The Surgical Technology Certificate/AAS Degree Program is accredited by the Commission of Accreditation of Allied Health Education Programs (CAAHEP). The mission of the RCC Surgical Technology program is to prepare students for entry level into the profession, by providing instruction 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 and must be conscientious, orderly, emotionally stable, and 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 signon bonuses and/or educational incentives.

## Admission Criteria:

Attendance at an orientation 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)

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 15, and/or 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.

| Prerequisite Courses | Credit <br> Hours | Semesters <br> offered | Trans- <br> ferable <br> * | Profi- <br> ciency <br> Exam |
| :--- | :---: | :---: | :---: | :---: |
| BIOL 101: Concepts of Biology 1* | 4 | F, Sp, Su | No | Yes |
| Program GPA 2.50 |  | F, Sp, Su | *No | No |
| PSB Scores 50\% |  |  |  |  |

Certificate-Surgical Technology
(48 Credit Hours)
(*courses required for this certificate)
Associate in Applied Science Degree (61-62 Credit Hours)

| Course | Credit Hours | Semesters Offered | Transferable |
| :---: | :---: | :---: | :---: |
| First Semester Fall Year 1 |  |  |  |
| SURGT 100 Surgical Technology | 2-0-2 | Fa | * |
| Orientation* |  |  |  |
| BIOL 220 Microbiology* | 3-2-4 | $\mathrm{Fa}, \mathrm{Sp}, \mathrm{Su}$ | 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 |
| Second Semester Spring Year 1 |  |  |  |
| SURGT 101 Surgical Technology I* | 4-6-6 | Sp |  |
| BIOL 201 Human Anatomy \& Physiology 1* | 3-2-4 | $\mathrm{Fa}, \mathrm{Sp}, \mathrm{Su}$ | Yes* |
| Third Semester Summer Year 1 |  |  |  |
| SURGT 102 Surgical Technology II* | 4-9-7 | Su | * |
| Fourth Semester Fall Year 2 |  |  |  |
| SURGT 201 Surgical Technology III* | 8-15-13 | Fa | * |
| BIOL 202 Human Anatomy \& Physiology* | 3-2-4 | $\mathrm{Fa}, \mathrm{Sp}, \mathrm{Su}$ | Yes |
| 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* |

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

## 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.

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 thru the Liaison Council on Certification for Surgical Technology (LCC-ST).
3. Apply for admission to Richland Community College.
4. Submit transcripts from surgical technology program and any colleges attended to Richland Community College Student 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 without examination 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 in the Certificate/AAS.
3. A Program GPA of 2.5 . Program GPA includes 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<br>(See Paraprofessional Education, Page 66)

## 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 eye-hand coordination, and 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.

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

Basic Certificate-Transportation
(7 Credit Hours)
(ICCB Code: BC 0123)

| Required Courses: | Credit Hours |
| :--- | :---: |
| CDL1000: Tractor/Trailer Driver Training | 7 |

## Welding

General Description: Welding is designed to provide skill development in currently-used welding processes including flat and position welding. Additional skill development may be obtained in brazing, soldering, cutting layout, and fabrication techniques. The program prepares students for certification by ASME and AWS structural code tests. The student should develop sufficient skill to pass both the pressure and structural code tests established by the ASME standards. Welders work indoors and outdoors, often welding in awkward positions. Major employers are metal shops, construction and mining industry, and machine shops.

Aptitudes: Welders need average manual dexterity and eyehand coordination, good physical condition and eyesight, and good math aptitude.

Outlook: Average employment growth is projected in Illinois. Most openings will result from the need to replace experienced workers who leave the labor force.

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

Basic Certificate Welding
(ICCB Code: C 0030)

| COURSES | Credit <br> Hours | Welding <br> Certificate |  |
| :--- | :--- | :---: | :---: |
| DRAFT 101: Fundamentals of Drafting | 4 | X |  |
| MATH 104: | Technical Mathematics | 4 | X |
| WELD 100: | Oxy-Acetylene and Plasma Arc 2 | 1.5 | X |
|  | Cutting |  |  |
| WELD 101: | Shielded Metal Arc Welding | 4 | X |
| WELD 102: | Shielded Metal Arc Welding Advanced | 4 | X |
| WELD 190: | Maintenance Welding | 1.5 | X |
| WELD 201: | Gas Metal Arc and Flux Core Arc | 2 | X |
|  | Welding |  |  |
| WELD 202: | Welder Certification* | 2 | X |
| WELD 204: Pipe Welding | 4 | X |  |
| WELD 205: | Gas Tungsten Arc Welding | 3 | X |
| Total |  |  |  |

## $\mathrm{X}=$ Required

Eligibility for ENGL 101 is a requirement for this certificate.
*WELD 202 is designed to prepare student 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.

## 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 Affairs.
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.

## 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, baccalaureateoriented, 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 11.)
2. Constitution requirement. (See Page 38.)
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 36.)

## 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.

We recommend that interested individuals 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 11.)
2. Constitution Requirement. (See Page 38.)
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 36.)

## 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.

We recommend that interested individuals 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 perspective concerning health, safety, and environment. (Students transferring credit to Richland should see regulations under Admissions, Pages 11.)
2. Constitution requirement. (See Page 38.)
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 36.)

## 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.

We recommend that interested individuals 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 11.)
2. Constitution requirement. (See Page 38.)
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 36.)

## 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.

We recommend that interested individuals 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 perspective to improve family life. (Students transferring credit to Richland should see regulations under Admissions, Page 11.)
2. Constitution requirement. (See Page 38.)
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 36.)

## 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.

We recommend that interested individuals 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 11.)
2. Constitution requirement. (See Page 38.)
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 36.)

## 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 54.)
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, Page 11.)
3. Constitution requirement. (See Page 38.)
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 36.)

## Suggested Courses:

## Communications Skills

ENGL090 - Reading and Study Skills II
ENGL097 - Developmental Writing II
ENGL101 - Composition 1
SPCH101 - Principles of Speech

## Education

ED100 - Introduction to Public Education
Social Science
POL S100-People and Politics
PSYCH100 - Practical Psychology
SOCIO100 - Man, Society, and Culture
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 Music
SOCIO200 - Marriage and the Family
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/her background is appropriate to a particular area of study. Electives may include other introductory courses not listed.



## 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, Art, Early Childhood Education, Drama, Education, English, French, German, Humanities, Journalism, Music, Philosophy, Spanish, Speech)

## Health Professions Division

## Dean - Room S162

(Allied Health, Pharmacy Technology, Practical Nursing, Radiologic Technology, 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 C218
(AgriBusiness, Automotive, Business, Accounting, Drafting \& Design Engineering, Electronics, Engineering, Engineering Technology, Hospitality Management, Horticulture, HVACR, Information Technology, Office Technology, Welding)

## Retention Services

Dean - Room C129
(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; ALSAssociate in Liberal Studies; AA-Associate in Arts; AS-Associate in Science, 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.)
Below is an example of a Course Description that will serve as a key to those descriptions that follow.

$$
\begin{array}{cc}
\text { Prefix Course } & \text { Course Title } \\
\text { No. } & \text { ACCT100-Accounting Fundamentals }
\end{array}
$$

qD7
ən 1027
3-0-3

## ACCOUNTING

## ACCT100-Accounting Fundamentals

is designed to promote success in ACCT101 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 non-business majors and small business managers. Students cannot receive credit toward graduation for both this course and OT160. 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


## ACCT101 - 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


## ACCT102 - Managerial Accounting

Fundamentals (IAI: BUS 904)
(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


## ACCT201 - Intermediate Accounting 1

4-0-4
(Prerequisite: ACCT 102) examines accounting concepts, principles, and theory with an emphasis on the special problems that arise in applying these concepts for external reporting purposes -
specifically 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

ACCT202 - 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 purposes specifically 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


## ACCT205 - Small Business Accounting

2-2-3
(Prerequisite: Acct 101) 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 Applicable

ACCT210 - Tax Accounting (formerly Acct 130) 3-0-3
serves as an introduction to the basic concepts and procedures of federal and state income tax as they pertain to the individual taxpayer and the small business enterprise under the latest amendments 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


## ACCT211 - Managerial Cost Accounting

 (IAl: 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 - Not Applicable


## AFRICAN-AMERICAN STUDIES

AF AM101 - African-American Experience 1 (IAI: HF 906D) 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 AfricanAmerican 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 AM1 02 - 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 - Not Applicable
- Area of Concentration - African-American Studies


## AF AM103 - African-American Experience Through the Arts (IAl: HF 906D)

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)

presents a critical and cultural introduction to AfricanAmerican 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 <br> 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 or Fine Arts
- Area of Concentration - African-American Studies


## AGRICULTURE

## AGRIC106-Animal Science (IAI: AG 902) 3-2-4

is an application of the sciences of genetics, physiology and nutrition to the improvement of the animal industries and an introduction to management and production practices. Includes animal breeds, breeding and selection; anatomy, physiology, and nutrition and growth; environment, health and sanitation; products and marketing; production technology and economics; animal behavior; 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 <br> 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 his-torical 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 only)
- Area of Concentration - Agriculture


## AGRIC195-Contemporary Issues in Agriculture

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

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: CHEM100 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)
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 capital); 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

(Prerequisite: CIS110 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

(Prerequisite: CIS110 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)
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 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

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 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## ANTHROPOLOGY

## ANTHR1 10 - Introduction to Cultural Anthropology (IAl: SI 901N)

3-0-3
(Prerequisite: eligibility for ENGL101) is an introductory anthropology course that discusses the more common life ways that humans use to adapt to their particular physical and social environments. Examples from contemporary and past societies from around the world will be used to provide the students with a broader perspective of their own culture. Various aspects of world cultures to include religion, technology, kinship, political and economic systems, and change are discussed to understand how and why culture works and sometimes fails. 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


## ANTHR120-Introduction to Physical

## Anthropology (IAI: S1 902)

3-0-3
(Prerequisite: eligibility for ENGL101) is an introductory physical anthropology course that deals with human physical and cultural change throughout the course of history. Archaeological data and techniques are discussed as a way of providing information on human change through time. Studies of human and non-human behavior are discussed to point out the effects and consequences of change. 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


## ANTHR130-Introduction to Archaeology

 (IAI: S1 903)3-0-3
(Prerequisite: eligibility for ENGL101) is designed to introduce majors and non-majors to anthropology through the use of archaeological data, concepts, methods, and goals. Emphasis is placed upon New World archaeological data. 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


## ART

ART 100 - Art Appreciation (IAI: F2 900)
3-0-3
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: ART904)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: ART905)

## 2-3-3

(Prerequisite: ART101) 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: ART907)

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: ART908)
2-3-3
(Prerequisite: ART111) involves the study and practice of threedimensional 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: ART906) 2-3-3

(Prerequisite: ART101, 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

2-3-3
(Prerequisite: ART113) 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: ART914)

2-3-3
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 2

2-3-3
(Prerequisite: ART115) 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 - Art

ART 117 - Painting 1 (IAI: ART911) 2-3-3 introduces the student to 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 118 - Painting 2

2-3-3
(Prerequisite: ART117) 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: ART913)

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: ART119) offers further work in various threedimensional 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: ART912)

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: ART121) 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

2-3-3
introduces the student to approaches, techniques, and media of transparent and opaque 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 124 - Watercolor 2

2-3-3
(Prerequisite: ART123) continues the approaches, techniques, and media of transparent and opaque 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: ART917)1-5-3
introduces the student to photography, covering fundamentals of camera, studio, and darkroom techniques. (Students must supply their own fully manual 35 mm cameras. Refer to equipment list for the class.) A fifty-minute laboratory period per week is required in addition to scheduled class hours. 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 126 - Photography 2: Black and White 1-5-3

(Prerequisite: ART125 or evaluation of portfolio) is a continuation of ART125. It offers further study and experimentation with camera, studio, and darkroom techniques. A fifty-minute laboratory period per week is required in addition to scheduled class hours. 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 127 - Digital Photography

1-5-3
provides an introduction to the mechanics of making a color image and the use of basic photo manipulation tools to enhance that image for final output. Techniques using both computer and hand 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 131 - Advanced Ceramics 1

0-6-3
(Prerequisite: ART121) 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


## ART 140 - Principles of Graphic Design 2-3-3

(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

2-3-3
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: ART919) 2-3-3

(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

2-3-3
(Prerequisite: ART151) 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 2-3-3

(Prerequisite: successful completion of ART111 and ART140) covers a broad spectrum of computer graphics applications as they pertain to 3-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 199 - Topics in Art

(Variable Credit and Repeatable)
1-0-1 to 3-0-3
provides the student an opportunity to engage in a comprehensive study of a topics dealing with studio and/or non-studio issues in the fine or applied arts. The course requires no prior depth of knowledge, 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 through Medieval (IAI: F2 901, ART901)

(Prerequisite: successful completion ("C" or better) of ENGL 101) 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, ART902)3-0-3
(Prerequisite: successful completion ("C" or better) of ENGL 101) 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, ART903)
3-0-3
(Prerequisite: successful completion ("C" or better) of ENGL 101) is an introductory course in the art history of the 20th century. 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 - Art


## ART 240 - History of Design

## 3-0-3

(Prerequisite: successful completion ("C" or better) of ENGL 101) 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

(Prerequisite: ART152) 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

1-5-3
(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, self-promotion, 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 - Art


## ART 261 - Illustration

1-5-3
(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 of conveying ideas through imagery and media are explored. Studies will include 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 290-Work Experience/Internship

(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 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

## ASTRO105-Introduction to Astronomy

(IAI: P1906)
4-0-4
(Prerequisite: eligibility for ENGL101 and completion of MATH091 ["C" or better grade) 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

## AUTO101-Basic Theory

2-2-3
provides an overview of basic automotive skills and terminology. Students will learn definitions of common automotive terms, proper care and use of tools, and safety precautions and procedures in the shop. In addition, the course provides a general introduction to automotive components and principles, including the engine, its parts and their functions; fuel systems; batteries and cranking systems; ignition systems; suspension, steering, and brakes; manual and automatic transmissions and heating and air conditioning; and electrical systems and principles. 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


## AUTO102-Electrical Systems

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


## AUTO201-Suspension and 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


## AUTO202-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


## AUTO203-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 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


## AUTO204-Engine Repair

1-7-4
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 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


## AUTO205-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 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


## AUTO206-Automatic Transmissions and 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 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


## AUTO207-Advanced Automotive Electronics 1-6-4

(Prerequisite: AUT0102 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


## AUTO208-Automotive Brakes

teaches the advanced diagnostic and analytical skills that are needed to service today's high tech, electronically-controlled antilock 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 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


## AUTO209-Advanced Drivability Problem Diagnosis

## 1-7-4

(Prerequisite: AUTO102, 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 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


## AUTO290 - Automotive Internship

0-15-3
(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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## biOLOGY

BIOL101 - Concepts of Biology 1
(IAI: L1 900L, BIO 910, CLS 902)
3-2-4
(Prerequisite: eligibility for ENGL101) 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 repro-
duction, 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 910, CLS 901)

3-2-4
(Prerequisite: successful completion ["C" or better grade] of BIOL101) 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 only)
- Area of Concentration - Biology, General Science


## BIOL 106 - Issues in Human Biology

 (IAI: L1904)3-0-3
(Prerequisite: eligibility for ENGL 101) This non-lab/nonmajors course will examine practical aspects of selected concepts in biology and their application to life and technology. Concepts will 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 Biology 201 or Biology 220. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate - All Certificates and All Degrees
- Group Requirement - Natural Science
- Area of Concentration - Biology, General Science


## BIOL 120 - Plants and Society <br> (IAI: L1 901)

3-0-3
(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.

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 130 - Genetics and Society

(IAI: L1 906 approval pending)
(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
- Area of Concentration - Biology, General Science


## BIOL 201 - Human Anatomy and Physiology 1 (IAI: CLS 903, NUR 903)

(Prerequisite: successful completion ["C" or better grade] of BIOL101 or successful completion [" $B$ " or better grade for each coursel 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 and

Physiology 2 (IAI: CLS 904, NUR 904)
(Prerequisite: successful completion ["C" or better grade] of BIOL201 or successful completion of BIOL201 proficiency exam) is a continuation of BIOL201, 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 ENGL101) 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)

## 3-2-4

(Prerequisite: successful completion ["C" or better grade] of BIOL101 or successful completion [" $B$ " or better grade for each coursel 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

## BCON 210 - Mechanical and Electrical Building Service Systems

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

## BUS100-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


## BUS101 Hospitality \& Tourism

(formerly Hosp 100)
3-0-3
(Prerequisite: eligibility for ENGL101) 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 indus-try-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


## BUS110-Business Mathematics

3-0-3
(Prerequisite: eligibility for MATH 091) 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


## BUS121 Purchasing (formerly Hosp 104)

(Prerequisite: eligibility for ENGL101) includes a study and application of purchasing methods for the Hospitality Industry including the distribution system, supplier channels, price and payment, ordering procedures, storage and security, and specifications for food and non-food items. 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


## BUS200 - Customer Service Fundamentals

3-0-3
(Prerequisite: completion of or concurrent enrollment in OT119 or Engl101) 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 (118S. only)
- Area of Concentration - Not Applicable


## BUS220 Cost Management

(formerly Hosp 102)
4-0-4
(Prerequisite: eligibility for ENGL101 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


## BUS221 Security and Loss Prevention

(formerly Hosp 213)
3-0-3
(Prerequisite: eligibility for ENGL101) will examine how to handle vital risk management, claims handling 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, developing 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


## BUS225 - Small Business Management

(formerly Bus 125)
3-0-3
iintroduces 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


## BUS231 - 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 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 - Not Applicable


## BUS232 - Business Law \& Ethics

3-0-3
(Prerequisite: BUS231 or equivalent competencies) includes a study of the legal land social environment of business, with emphases 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


## BUS233 - 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 and all degrees
- Group Requirement - Business (AAS only)
- Area of Concentration - Not Applicable


## BUS240 - Marketing Fundamentals

 (formerly Bus 124)3-0-3
(Prerequisite: completion of or concurrent enrollment in OT119 or eligibility for ENGL101) 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


## BUS245 - 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, AAS, ALS
- Group Requirement - Business (AAS only)
- Area of Concentration - Not Applicable


## BUS250- Selling \& Sales Management

 (formerly Bus 146) 3-0-3is 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


## BUS260 Hospitality Nutrition

(formerly Hosp 202) 3-0-3
(Prerequisite: eligibility for ENGL101) 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 Spring.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## BUS261 Bar and Beverage Management

## (formerly Hosp 203)

(Prerequisite: eligibility for ENGL101) 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


## BUS262 Food Service Presentation

(formerly Hosp 204)
3-0-3
(Prerequisite: eligibility for ENGL101) 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


## BUS263 - 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


## BUS270 Front Office Operations

 (formerly Hosp 211)3-0-3
(Prerequisite: eligibility for ENGL101) places an expanded emphasis on technological applications for the front office, highlighting new ways to achieve maximum quality and efficiency in areas of reservation, registration, checkout and settlement. It will provide insight into related operational areas, including housekeeping and security. 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


## BUS271 Housekeeping Operations

 (formerly Hosp 210)3-0-3
(Prerequisite: eligibility for ENGL101) studies every aspect of housekeeping management; it offers case studies and proven tips from housekeeping pros as well as a valuable technical guide with step-by-step cleaning procedures. Explains how to recruit, hire, orient, train, schedule, motivate, and discipline employees; plan and control inventories, expenses, and security; effectively oversee an on-premises laundry; ensure quality in cleaning every area of the hotel; properly handle chemicals; and comply with OSHA standards. 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


## BUS272 Facilities Management

## (formerly Hosp 214)

3-0-3
(Prerequisite: eligibility for ENGL101) includes a study and application of project planning, food service design and maintenance, work area design and equipment layout, equipment options and functions, facilities engineering, interior design and layout in the hospitality 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


## BUS280 - 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


## BUS281 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 it beneficial to complete Bus 280 Strategic Decision Making prior to taking this course, but it is not a prerequisite. 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


## BUS282 Strategic Tax Management

emphasizes the effect taxation has on decision-making for businesses and individuals. Income tax concepts and the basic income tax model are studied. Choice of business entity, tax compliance requirements, and common tax issues will be discussed. Students will learn to apply tax planning concepts 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


## BUS283 Finance \& Insurance

3-0-3
is an introductory study of personal and small business financial management. Studies include wealth 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


## BUS290 - Work Experience Practicum

## and 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 full-time 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


## BUS295 - Workplace Simulation \& Project 1-10-3

(Prerequisite: students seeking AAS degree or certificate in Business/Accounting/Hospitality Management who have completed at least 40 credit hours of college work or who have 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

## CDEV1 12 - 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 CDEV112 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

## CHEM100-Concepts of Chemistry

(IAI: P1 902L)
(Prerequisite: eligibility for MATH098) examines fundamental concepts of chemistry, both theoretical and practical. Course content includes the following: measurement, atomic structure, chem-
ical bonding, stoichiometry, 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


## CHEM1 10 - Survey of Organic Chemistry 3-4-5

(Prerequisite: CHEM100 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

CHEM131-General Chemistry 1 (IAI: P1 902L, BIO 906, CHM 911, CLS 906, EGR 961, NUR 906) 3-3-4
(Prerequisite: MATH116 and either (1) one year of high school chemistry with " $B$ " or better grade or (2) CHEM100 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


## CHEM132-General Chemistry 2 (IAI: BIO 907,

 CHM 912, CLS 907, EGR 962, NUR 907)3-4-5
(Prerequisite: MATH116 with MATH121 strongly recommended and CHEM131 with " $B$ " or better grade) is the second part of a twosemester 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


## CHEM201 - Organic Chemistry 1

(IAI: BIO 908, CLS 908, EGR 963)
3-6-5
(Prerequisite: CHEM132 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


## CHEM202-Organic Chemistry 2

(IAI: BIO 909, CLS 909, EGR 964)
(Prerequisite: CHEM201 or equivalent competencies) is a continuation of CHEM201. 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. CHEM202 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

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. Offered as needed.

Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Humanities (AAS 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 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. Offered as needed.

Two assigned 25 -minute laboratory periods per week are required in addition to scheduled class hours.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Humanities (AAS only)
- Area of Concentration - Foreign Language


## COMPUTER INFORMATION SYSTEMS

CIS1 10 - Business Applications (|A|: 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 expe-
rience 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: 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.

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

(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, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Computer Science


## CS 230 Event-Driven Programming

## (formerly IT 132)

2-2-3
(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, AAS, ALS
- 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 Intermediate Algebra) 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, read-
ability and maintainability; 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 $\mathrm{C}++$.NET and Java. Offered in Spring.

Applicable for graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Computer Science


## CS 281 - Advanced Object-Oriented

 Programming (formerly CS 152) 3-2-4(Prerequisite: IT 251) is designed to prepare students for largescale 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 $\mathrm{C}++$.NET and Java. Offered in Fall.

Applicable for graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Computer Science


## CRIMINAL JUSTICE

## CRJ1 10 - Criminal Justice Fundamentals

 (IAI: CRJ 901)(Prerequisite: eligibility for ENGL101) 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


## CRJ112 - Investigative Report Writing

(Prerequisite: ENGL101 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


## CRJ113-Criminal Investigation

3-0-3
(Prerequisite: eligibility for ENGL101) 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


## CRJ114-Criminal Law (IAI: CRJ 913)

## 3-0-3

(Prerequisite: eligibility for ENGL101) 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


## CRJI 16 - Probation/Parole

3-0-3
(Prerequisite: eligibility for ENGL101) analyzes modern probation and parole practices and services, 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


## CRJ125-Patrol Procedures

3-0-3
(Prerequisite: eligibility for ENGL101) 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 commu-nity-at-large 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


## CRJ126-Emergency Telecommunications 3-0-3

(Prerequisite: eligibility for ENGL101) 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

CRJ128-Corrections Fundamentals
3-0-3

## (IAI: CRJ 911)

(Prerequisite: eligibility for ENGL101) 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

CRJ130-Juvenile Delinquency
3-0-3
(Prerequisite: eligibility for ENGL101) 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


## CRJ132 - Institutional Behavior in Corrections3-0-3

(Prerequisite: eligibility for ENGL101) 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


## CRJ134-Correctional Counseling

 and Treatment3-0-3
(Prerequisite: CRJ110, CRJ128, CRJ132, and eligibility for ENGL101) 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


## CRJ140-Defensive Tactics for Criminal Justice

 3-0-3(Prerequisite: eligibility for ENGL 101 and completion of CRJ 110 and approval of Criminal Justice Coordinator) This course 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 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 sue of 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


## CRJ200 - Youth, the Law, and Police Intervention

3-0-3
(Prerequisite: eligibility for ENGL101 and completion of SOCIO110, PSYCH110, and CRJ110) covers all aspects of police contact with today's juvenile. Emphasis is on the social/psychological courses 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 contemporary youth 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


## CRJ210 - Law Enforcement and Community Relations

3-0-3
(Prerequisite: eligibility for ENGL101) 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


## CRJ290 - Work Experience Practicum and Seminar <br> 1-10-3

(Prerequisite: eligibility for ENGL101 and approval of the Dean of Mathematics and Sciences) 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 Division 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


## CRJ295 - Workplace Simulation and Projects

1-10-3
(Prerequisite: eligibility for ENGL 101 and completion of CRJ110, PSYCH110, and SOCIO110; sophomore standing; minimum completion of 45 hours toward the AAS in Criminal Justice; and approval from the Coordinator of the Criminal Justice Program) 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


## DRAFTING \& DESIGN ENGINEERING

## DRAFT101 - Drafting Fundamentals 2-4-4

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


## DRAFT102 - Industrial Drafting (IAI: MTM 911) 2-4-4

(Prerequisite: DRAFT101 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


## DRAFT1 10 - Technical Design

2-2-3
introduces the student to the principle 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


## DRAFT1 20 - Technical Graphics

(Prerequisite: DRAFT101 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


## DRAFT130-Tool Design Drafting

## 2-4-4

(Prerequisite: DRAFT101) 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


## DRAFT210-Microstation

2-3-3
(Prerequisite: DRAFT101 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


## DRAFT215 - AutoCad

(Prerequisite: DRAFT101 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: DRAFT210 or DRAFT215) 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


## DRAFT230 - Advanced CAD (IAI: MTM 931) 2-3-3

(Prerequisite: DRAFT220) 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


## DRAFT235 - Solid Modeling (3-D)

2-3-3
(Prerequisite: DRAFT230 or equivalent competencies) provides the student with the knowledge to create advanced 3-D solid model designs using parameter IC modeling procedures. These procedures include the use of the following: sketching and constraining profiles, creating complex shapes, 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


## DRAFT236 - Pro-Engineer

3-2-4
(Prerequisite: DRAFT230 or equivalent competencies) provides the student with the knowledge and procedures to create parametric 3-D solid model designs and assemblies using the Pro-Engineer 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 para-
metric 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


## DRAFT242 - Commercial Architecture

 2-3-3(Prerequisite: DRAFT210 or 215 and DRAFT244 or equivalent industrial experience) will allow the student to design and develop residential and industrial electrical drawings on 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


## DRAFT243 - Structural Steel Detailing

2-3-3
(Prerequisite: DRAFT220) 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

DRAFT244 - Concrete Detailing
2-3-3
(Prerequisite: DRAFT220) 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


## DRAFT245 - Residential Architecture

## 2-3-3

(Prerequisite: DRAFT220) includes the development and execution of a complete set of architectural 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


## DRAFT290 - Work Experience Practicum

0-15-3
(Prerequisite: DRAFT220, 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.

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DRAFT295 - Workplace Simulation and Project

1-10-3
(Prerequisite: DRAFT220, 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.

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DRAMA

## DRAMA150 - Introduction to Theatre

## (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


## DRAMA160 - Theatre Production (IAI: TA 918)

 (Variable Credit and Repeatable) 1-4-1 to 3has 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


## DRAMA170 - Introduction to Acting

 (IAI: TA 914)2-2-3
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 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


## DRAMA180-Stage Craft I

2-2-3
is a lecture/lab course designed to teach the fundamentals of properties, tool use and maintenance, scenery construction, painting, theatre safety, design aesthetics, 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 - Fine Arts
- Area of Concentration - Speech and Drama


## DRAMA181 - 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 - Fine Arts
- Area of Concentration - Speech and Drama


## EARLY CHILDHOOD EDUCATION

(formerly Child Care and Education)

## ECE101 - Introduction to Early Childhood Education (IAI: ECE 911)

(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
- Group Requirement - Not Applicable
- Area of Concentration - Early Childhood Education


## ECE102-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 students 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


## ECE103 - Child Guidance

(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


## ECE1 10 - Health, Nutrition, and Safety for Young Children <br> 3-0-3

(Prerequisite: eligibility for ENGL101) 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. 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


## ECE111-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. 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


## ECE1 12 - 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. Hands-on 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


## ECE113-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 Applicable


## ECE114 - Play Activities for Young Children 2-2-3

(Prerequisite: eligibility for ENGLO90 and ENGL097) explores basic concepts of structured and unstructured play and suggests methods for encouraging the child's creativity in those areas. An important part of the course concerns appropriate play activities associated with the different levels of mental, physical, and emotional development of the individual child. Also included within the course are selection, construction, and maintenance of the equipment related to these activities. Emphasis is on large motor activities. The laboratory includes observation and designing of outdoor 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


## ECE1 15 - Infant and Toddler Development 2-2-3

(Prerequisite: eligibility for ENGL090 and ENGL097) 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. 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


## ECE203 - Child, Family, and Community

## (IAI: ECE 915)

(Prerequisite: eligibility for ENGL101) investigates the historical and current attitudes toward children and families, the history of childcare and economic, cultural and political factors that influence child care practices. Comparisons are made between childcare in the United States and those of other selected cultures. 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


## ECE210 - Curriculum Design for Early Childhood <br> (Prerequisite: eligibility for ENGL101 and completion of

 ECE101 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


## ECE220 - Child Care Administration and Organization

3-0-3
(Prerequisite: successful completion of ENGL101, 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


## ECE230 - Early Childhood Program Management

4-0-4
(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 knowledge and skills in administration and supervision for persons presently engaged in the administration of child care programs as well as for those who aspire to do so. Principles and practices, organization and supervision of staffs, budgets, record keeping, filing, office equipment usage, and legal responsibilities are studied. Equipment and plant operation are topics also 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 - Not Applicable


## ECE235 - 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


## ECE290 - Observation/Clinical <br> Experiences and Seminar

(Variable Credit)
1-10-1 to 3
(Prerequisite: eligibility for ENGL101 and 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. 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

## EASCI210 - Physical Geography

 (IAI: P1 909L)3-2-4
(Prerequisite: eligibility for ENGL101) offers an introductory study of the natural environment and is designed to develop an understanding of the earth and its environments as the home of man. It concentrates on the forces of change that produce the physical settings with which man must deal. A systematic approach is used with a de-emphasis on the mathematics and physics function. 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 - Earth Science


## EASCI220 - Introduction to Physical Geology (IAI: P1 907L)

(Prerequisite: eligibility for ENGL101) is an introductory course to the study of the solid earth to include the earth building processes, landforms and the processes that shape landforms, rocks and minerals, and the use of topographic maps. It is recommended that EASCI210 be taken prior to this 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 - Earth Science


## EASCI230 - Introduction to Weather

 and Climate (IAI: P1 905L)(Prerequisite: eligibility for ENGL101) is an introductory course to the study of weather and climate designed for science and nonscience majors who want a basic understanding of weather terminology, atmospheric conditions, global climates, and climatic change. EASCI210 should be taken prior to this 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 - Earth Science


## ECONOMICS

## ECON225 - Comparative Economic Systems 3-0-3

(Prerequisite: eligibility for ENGL101) 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 market-oriented 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 only)
- Area of Concentration - Economics, International Business

ECON231 - Macroeconomics (IAI: S3 901)
(Prerequisite: eligibility for ENGL101) 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


## ECON232 - Microeconomics (IAI: S3 902) 3-0-3

(Prerequisite: ECON231) 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)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 only)
- Area of Concentration - Teacher Education: ElementarySecondary Special-Early Childhood


## ED101 - 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 and certificates only)
- Area of Concentration - Not Applicable

ED102 - Field Experience in Education 1-10-1 to 3 (IAI: EED 904, SED 905)(Variable Credit \& Repeatable)
(Prerequisite: ED100 or current enrollment in ED100) 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 semi-
nars 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. 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 as needed.

Applicable toward graduation where structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Teacher Education: ElementarySecondary Special-Early Childhood


## ED105-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. 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 only)
- Area of Concentration - Teacher Education: Elementary-Secondary-Special-Early Childhood


## ED107-Art for Elementary School Teachers 3-0-3

(Prerequisite: successful completion of ENGL101) 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. 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 - Teacher Education: ElementarySecondary


## ED108 - The Multicultural Classroom

3-0-3
(Prerequisite: successful completion of ENGL101) 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 only)
- Area of Concentration - Teacher Education: ElementarySecondary


## ED109-Principles of Reading

3-0-3
(Prerequisite: successful completion of ENGL101) 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. 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 - Teacher Education: ElementarySecondary -Special-Early Childhood


## ED199-Topics in Education

(Variable Credit and Repeatable) 1-0-1 to 3-0-3
(Prerequisite: successful completion of ENGL101) 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 only)
- Area of Concentration - Teacher Education: Elementary-Secondary-Special Early Childhood


## ED200 - 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 ED200 and PSYCH200. 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 - Teacher Education: ElementarySecondary Special-Early Childhood


## ED. 210 - Introduction to Bilingual Education 3-0-3

(Prerequisite: eligibility for ENGL 101) 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


## ED220 - The Exceptional Child

(IAI: ECE 913, SED 904)
3-0-3
(Prerequisite: successful completion of ENGL101) 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

## ELTRN101-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


## ELTRN102-Basic Electricity-DC

. 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


## ELTRN1 10 - Introduction to Electricity and Electronics

## 1-3-2

(Prerequisite: MATH091 or equivalent competencies) is a labo-ratory-oriented course in the fundamentals of electricity and electronics beginning with the basic concepts of electrical and magnetic forces, charge, voltage, current, resistance, and power. It also provides familiarization with the basic electronic systems, circuits and components, and methods of representation utilizing block diagram and schematic diagrams. Measurement techniques and use of laboratory instruments are emphasized. Offered in Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Natural Science (AAS only)
- Area of Concentration - Not Applicable


## ELTRN111-Circuit Analysis

2-2-3
(Prerequisite: ELTRN110 and MATH091 or concurrent enrollment or equivalent competencies) begins with definitions of voltage source, current source, and equivalent circuit. The loop, node, branch, ladder methods, Thevenin Theorem, and superposition theorem used in circuit analysis are also covered. The RC and RL time constants are defined, and their applications are introduced. Both inductive reactance and capacitive reactance are defined, and impedance is discussed in terms of complex variables and phasors. Series and parallel resonance circuits are studied. 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


## ELTRN112-Electronic Devices and Circuits 3-4-5

(Prerequisite: ELTRN110 and ELTRN111) begins with the study of basic semiconductor physics with emphasis on the theory of operation of solid state devices including diodes, transistors, and integrated circuits. As electronic devices are introduced, basic elec-
tronic circuits are studied, including power supplies, amplifiers, and oscillators. Measurement and breadboarding techniques and use of laboratory instruments are emphasized. 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


## ELTRN120-Fundamentals of Servicing

1-3-2
(Prerequisite: ELTRN112 or concurrent enrollment) is a labora-tory-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


## ELTRN140 - Solid State Fundamentals for Electricians

2-2-3
(Prerequisite: ELTRN110 and ELTRN111) 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


## ELTRN160 - Digital Electronics

2-4-4
(Prerequisite: ELTRN110 and ELTRN111) 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


## ELTRN203 - Programmable Controllers

2-2-3
(Prerequisite: ELTRN109 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


## ELTRN210-Advanced Electronic Devices \& Circuits <br> 2-2-3

(Prerequisite: ELTRN112) is a continuation of ELTRN112 (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


## ELTRN211 - Pulse, Digital, \& Switching Circuits 3-4-5

(Prerequisite: ELTRN112) 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


## ELTRN212-Communications Systems

(Prerequisite: ELTRN210) 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


## ELTRN240 - Introduction to Microprocessors 2-2-3

(Prerequisite: ELTRN160 or ELTRN211) 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


## ELTRN250 - 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


## ELTRN251 - Electrician Internship 2

0-10-2
(Prerequisite: ELTRN250) 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


## ELTRN252 - Electrician Internship 3

0-10-2
(Prerequisite: ELTRN251) 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


## ELTRN253 - Electrician Internship 4

0-10-2
(Prerequisite: ELTRN252) 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


## ELTRN254 - Electrician Internship 5

0-10-2
(Prerequisite: ELTRN253) 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


## ELTRN295 - Electronics Internship

 (Variable Credit)1-20-5
(Prerequisite: sophomore standing in Electronics) is an on-thejob 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

## EMT100 - First Responder Training Course 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


## EMT120 - EMT - Basic

(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


## EMT140- EMT - Intermediate 1

5-6-7
(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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## EMT150-EMT - Intermediate 2

3-3-4
(Prerequisite: current BLS Health Care provider CPR certification, current EMT-Basic license for the length of the course, and completion of EMT140 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## EMT200 - Paramedic 1 <br> 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


## EMT220 - Paramedic 2 <br> 4-6-6

(Prerequisite: currently licensed as EMT-B or higher, and completion of EMT200-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


## EMT240 - Paramedic 3

## 8-3-9

(Prerequisite: currently licensed as EMT-B or higher, and completion of EMT220-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


## EMT260 - Paramedic 4

4-9-7
(Prerequisite: currently licensed as EMT-B or higher, and completion of EMT240-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


## EMT290 - Paramedic 5

## 1-12-5

(Prerequisite: currently licensed as EMT-B or higher, and completion of EMT260-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 101 Leadership

## 3-0-3

presents the total picture of the manager's job, including motivation, communication, coaching, and discipline. It is intended for those new to management or supervision who have not had formal
education in management principles. Training consultants will help participants assess their own leadership skills and then create an individual leadership picture of success. 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 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: Journeyman's card) 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
Students will 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).Student 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, side walk 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 employee 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) Students will use 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 preformed by the student. Students will enter and 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) Students will use 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 preformed 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 extent their knowledge of UG distribution construction and OH distribution construction methods \& 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 115 - Lineman Apprentice 4

0-15-3
(Prerequisite: EDTL 110) Students will use 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 preformed 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. Students will extent their knowledge of UG distribution construction and OH distribution construction methods \& 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 120 - Lineman Apprentice 5

0-15-3
(Prerequisite: EDTL 115) Students will use 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 preformed 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 \& 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) Students will use 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 preformed by the student. Student will identify substation equipment, its operation and maintenance methods \& 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 $1 \quad \mathbf{6 - 2 - 7}$

(Prerequisite: Math 104 or permission of AmerenIP Training Coordinator) Students will fulfill 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 of them 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 101) Students will 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

EDTM 110 - Polyphase Meter Apprentice $3 \quad$ 4-2-5
(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-ofuse 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 3-2-4

(Prerequisite: EDTM 115) Students will be instructed 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

Students will use 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 preformed by the student. Student will be introduced to Natural Gas including its composition, emergency procedures, ignition sources, conditions causing open flame ignition, electrical spark, sources resulting from work on piping. Also covered in the course is 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) Students will use Basic OSHA requirements and demonstrate proper safety protocols for Gas dis-
tribution Construction and maintenance. OQ (Operator Qualification) requirements for Gas Distribution Construction will be followed during class and any Construction that is preformed by the student. Student 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) Students will use 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 preformed by the student. Student will be introduced 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) Students will use 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 preformed 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 through out 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) Students will use 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 preformed by the student. Student 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, 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 mathe-
(Prerequisite: MATH 091 or satisfactory score on the mathematics placement exam) Students will fulfill 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

(Prerequsite: EDTP 101) Students will use 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 <br> 5-1-5

(Prerequisite: EDTP 105) Students will use 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 water ways; and, acquire basic knowledge of three-phase transformers, vertical/horizontal clearances, three-phase extensions and singlephase 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

5-1-5
(Prerequisite: EDTP 110) Students will use 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 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) Students will 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, the 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


## EDTP 125 - Power Engineer Apprentice 6 3-2-4

(Prerequisite: EDTP 120) Students will 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 \& power construction tools, OSHA 1910.269 compliance training, including Substation Entry training, use of bucket trucks, bucket truck rescue, $\mathrm{AC}-\mathrm{DC}$ 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 included are: Use of precision tools, ridged, thin wall and puc 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) prepares the student for familiarization of 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. Task 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

(Prerequisite: EDTS 115) prepares the student for most aspects of substation breaker maintenance and performance tests. Tasks included are 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

(Prerequisite: EDTS 120) prepares the trainee 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

## ENGR110-Engineering Graphics

(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

ENGR211-Statics (IAI: EGR 942)
4-0-4
(Prerequisite: PHYS151 and MATH122 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


## ENGR212 - Dynamics (IAI: EGR 943)

(Prerequisite: ENGR211 and concurrent enrollment in or completion of MATH221) 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

## ENGT100 - 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 the interrelationship among materials, their selection for use in product design and processes, and how to convert these materials into finished components. Business concepts of profitability, productivity, JIT, Lean Manufacturing, 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


## ENGT101 - Motor Control Fundamentals

(formerly ELTRN 109)
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


## ENGT102 - Blueprint Reading

(formerly MFG 100)
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


## ENGT103 - Fluid Power Fundamentals

(formerly MEC S 112)
2-2-3
(Prerequisite: eligibility for MATH 091) is 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## ENGT104-CNC Fundamentals

(formerly CIM 102) (IAI: MTM 915)
2-2-3
is an introduction to CNC machinery as it applies to the operator. CNC Fundamentals is a hands-on course in the setup, operation, and basic programming of CNC (computer numerical controlled) 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 ship and tool offsets will be programmed. Offline programming will be used to create basic CNC program. The programs will be down-
loaded, 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


## ENGT105-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 handson 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


## ENGT111-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, single-phase 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


## ENGT120 - Process Control Fundamentals

(formerly ELTRN 201)
2-2-3
(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


## ENGT130 - 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 which are common in factories and processing plants are discussed. Topics covered 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


## ENGT150 - Machining Fundamentals

(formerly MACH 101) (IAI: MTM 921)
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


## ENGT151-Cutting \& Workholding

(formerly Mach 102) (IAI: MTM 922)
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. The student 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


## ENGT160 - 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


## ENGT200 - Industrial Materials

(formerly Mfg 110) (IA: 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


## ENGT210 - 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


## ENGT211-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


## ENGT212 - 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


## ENGT213 - Robotic Fundamentals

(formerly ROBOT 101)
2-2-3
(Prerequisite: 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 Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## ENGT214 - Motion Control Applications

## (formerly ELTRN 231)

2-2-3
(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


## ENGT215 - Motion Control Systems

## (formerly ELTRN 232)

2-2-3
(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


## ENGT220 - 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


## ENGT230 - Power Transmission <br> 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


## ENGT231 - 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. Course 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


## ENGT232 - Rigging and 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


## ENGT233 - Lubrication Systems

(formerly MEC S 220)
(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 pri-
marily 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


## ENGT234 - 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


## ENGT235 - Industrial Machinery Repair

## (formerly MEC S 201)

1-2-2
(Prerequisite: ENG 230 or approval of instructor) allows students to solve mechanical problems by combining skills they've 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


## ENGT240 Hydraulic Applications

(formerly MEC S 110)
2-2-3
(Prerequisite: ENGT103 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. Automation Studio is 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


## ENGT241 - Pneumatic Applications

(formerly MEC S 111)
2-2-3
(Prerequisite: ENGT103 and eligibility for MATH 091) provides comprehensive instruction in the area of industrial pneumatics. Pneumatic concepts not covered in ENGT103, Fluid Power Fundamentals, will be discussed. The role of pneumatics in industrial automation will be emphasized. Topics covered include airlogic 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


## ENGT242 - Fluid Power Systems

(formerly MEC S 250)
2-2-3
(Prerequisite: ENGT103 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


## ENG 250 - CNC Turning

(formerly MACH 201) (IAl: MTM 923)
2-2-3
(Prerequisite: ENG 104, ENGT150, ENGT151) 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


## ENGT251 - CNC Milling

(formerly MACH 202) (IAl: MTM 923)
2-2-3
(Prerequisite: ENGT104, ENG 150, ENGT151) 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


## ENGT252 - CAM Applications

(formerly CIM 101) (IAl: MTM 933)
2-2-3
(Prerequisite: DRAFT 236 (or DRAFT 215) and ENGT104 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 three-dimensional 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


## ENGT260 - Quality Fundamentals

(formerly PROD C 130) (IAI:MTM 914)
2-2-3
(Prerequisite: ENG 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 covered 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, 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


## ENGT290 - Work Experience Practicum and 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


## ENGT295 - Workplace Simulation and Project

1-10-3
(Prerequisite: Student should be in last semester of study) is to provide for supervised independent projects in Engineering Technology and is only for students in their last semester. 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


## ENGT299 - 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

## ENGLO88 - Reading and Study Skills 1

3-0-3
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


## ENGLO90 - Reading and Study Skills 2

 3-0-3(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


## ENGL095 - Developmental Writing 1

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

ENGL097 - 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

ENGL101 - Composition 1 (IAI: C1 900)
(Prerequisite: one of the following: 1) "C" or better in English 090 and/or 097; 2) score of 40th 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


## ENGL102-Composition 2

3-0-3

## (IAI: C1 901R, C1 901)

(Prerequisite: ENGL101 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


## ENGLI 10 - Communicating in the Workplace 3-0-3

(Prerequisite: eligibility for ENGL101) 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 only)
- Area of Concentration - Production Control, Supervision of Personnel, Welding

ENGL114 - Comprehensive Speed Reading 1-2-2
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 ENGL090. 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 - Not Applicable


## ENGLI 15 - Introduction to Literature

(IAI: H3 900)
3-0-3
(Prerequisite: eligibility for ENGL101) 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


## ENGL124 - Introduction to Fiction

## (IAI: H3 901, EGL 917)

3-0-3
(Prerequisite: eligibility for ENGL101) 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


## ENGL126 - Introduction to Poetry

(IAI: H3 903, EGL 915)
3-0-3
(Prerequisite: eligibility for ENGL101) 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


## ENGL128-Introduction to Drama

(IAI: H3 902, EGL 916)
(Prerequisite: eligibility for ENGL101) 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


## ENGL140 - Introduction to Film Art (IAI: F2 908) 2-2-3

(Prerequisite: eligibility for ENGL101) 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


## ENGL150 - Topics on Literature

3-0-3
(Prerequisite: eligibility for ENGL101) 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 only)
- Area of Concentration - English


## ENGL160 - Literature and Gender

## (IAI: H3 911D)

3-0-3
(Prerequisite: eligibility for ENGL101) 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


## ENGL201 - American Literature to 1900

(IAI: H3 914, EGL 911)
3-0-3
(Prerequisite: ENGL101, 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


## ENGL202 - American Literature in the 20th Century (IAI: H3 915, EGL 912)

3-0-3
(Prerequisite: ENGL101, 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


## ENGL220 - Introduction to Creative Writing 3-0-3

(Prerequisite: ENGL101 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 only)
- Area of Concentration - English


## ENGL222 - Advanced Creative Writing <br> 3-0-3

(Prerequisite: ENGL220 or equivalent competencies) offers students the opportunity to develop advanced skills in one of the genres presented in ENGL220. 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 only)
- Area of Concentration - English


## ENGL231 - Masterpieces of Western/World

 Literature 1 (IAI: H3 906)(Prerequisite: ENGL101, 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


## ENGL232 - Masterpieces of Western/World

Literature 2 (IAI: H3 907)
3-0-3
(Prerequisite: ENGL101, 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

ENGL240 - Film and Literature
2-2-3
(IAI: HF 908, approval pending)
(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 structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Humanities
- Area of Concentration - English


## ENGL241 - Film History

2-2-3
(IAI: F 2909, approval pending)
(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 structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Fine Arts
- Area of Concentration - English

ENGL251 - English Literature to $\mathbf{1 8 0 0}$
(IAI: H3 912, EGL 913)
3-0-3
(Prerequisite: ENGL101, 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

ENGL252 - English Literature: 19th and 20th
Centuries (IAI: H3 913, EGL 914)
3-0-3
(Prerequisite: ENGL101, 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


## FIRE SCIENCE

## FIRE1 10 - Introduction to Fire Science (Module A)

4-0-4
is 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


## FIRE111-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


## FIRE112-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


## FIRE113-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


## FIRE120 - Fire Prevention Principles 1

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


## FIRE130 - Fire Service Laws \& 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

FIRE140-Fire Science Instructor 1
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 skills-oriented. 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


## FIRE170 - Rescue/Roadway Extrication

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


## FIRE200 - 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


## FIRE210 - Tactics and Strategy 2

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


## FIRE220 - Fire Science Instructor 2

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


## FIRE230 - 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


## FIRE250 - Hazardous Materials Operations

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


## FIRE260 - 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


## FIRE270 - Management 1

3-0-3
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


## FIRE280 - Management 2

3-0-3
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 - Management 3

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 - Management 4

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


## FIRE297 - Fire Science Technologies

 (Variable Credit)1-0-1 to 3-0-3
(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 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

## FREN101-Beginning French 1

4-0-4
is an introduction to contemporary French, including oral practice, listening and reading comprehension, 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. Together with FREN102, it is designed for students with no previous study of French and also is the appropriate first college course for students who have accumulated fewer than five quality points for high school French or those whose prior study of French was completed more than five years ago 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 only)
- Area of Concentration - Foreign Language


## FREN102-Beginning French 2

4-0-4
(Prerequisite: FREN101 or 5 to 11 quality points for high school French completed within the past five years) is a continuation of FREN101. 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 only)
- Area of Concentration - Foreign Language


## FREN201 - Intermediate French 1

4-0-4
(Prerequisite: FREN102 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 only)
- Area of Concentration - Foreign Language


## FREN202 - Intermediate French 2

(IAI: H1 900)
4-0-4
(Prerequisite: FREN201 or 15 or more quality points for high school French completed within the past five years) is a continuation of FREN201, 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

## GERM101 - Beginning German 1 <br> 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 stu-
dents 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 only)
- Area of Concentration - Foreign Language


## GERM102-Beginning German 2

4-0-4
(Prerequisite: GERM101 or 5 to 11 quality points for high school German completed within the past five years) is a continuation of GERM101. 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 only)
- Area of Concentration - Foreign Language


## GERM201 - Intermediate German 1

(Prerequisite: GERM102 or 12 to 14 quality points for high school German completed within the past five years) includes reading of intermediate texts (Novellen and essays) and a review of grammar utilizing aural-oral practice in the classroom and laboratory. 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 only)
- Area of Concentration - Foreign Language


## GERM202 - Intermediate German 2

(IAI: H1 900)
4-0-4
(Prerequisite: GERM201 or 15 or more quality points for high school German completed within the past five years) is a continuation of GERM201, 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

## HLTH035 - Activity Program Director Course 2-1-2

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.

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 040 - Nurse Assistant Competency Skills Assessment

(Prerequisite: Student must have completed an approved Basic Nurse Assistant Training program and be listed on the Illinois Nurse Aide Registry.) This course 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 lif-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


## HLTH 110 - Cardio Pulmonary Resuscitation

0.5-0-0.5

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


## HLTHII 1 - Introductory Seminar on Alcoholism

will prepare 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


## HLTH115 - 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


## HLTH120 - 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 125 - Health and Lifestyles of the Adolescent

3-0-3
(Prerequisite: successful completion of ENGL 101) is designed to introduce the student to adolescent development. The focus of the course is on the relationship of health, family, and society on a child as he/she moves from childhood to adulthood. 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 - Teacher Education: ElementarySecondary


## HLTH130 - 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


## HLTH140 - Medical Terminology

Focuses on vocabulary used in medicine, nursing, and other allied health occupations. Student will learn structures, functions, and terms related to diagnosis, pathology, and treatments for each body system. This course is recommended for students entering all Health Profession program.

Student cannot receive credit for both HLTH 140 and OT 140. 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

HLTH141-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 Allied Health Coordinator) 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, AA, AS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Basic Certificate in Development


## HLTH142 - Homemaker/Home Health Aide 1-0-1

is designed to provide skills needed to give personal care and to perform homemaker services in the home. Concepts and skills will be presented for various stages of the life cycle; the newborn infant, childhood and adolescence, young and middle adulthood, and late adulthood; and the ill and the disabled at any stage. 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


## HLTH 143 - Alzheimer's Disease and Related Dementia Training

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


## HLTH145-Health Unit Coordinator <br> 6-1-6

(Prerequisite: high school diploma or GED certificate, pass the Health pretest in English and Math; Concurrent enrollment in or completion of CIS110 with a grade of "C" or better, or computer/office competency experience as verified by employer(s) and approved by Allied Health Coordinator) trains students in the concepts and skills which will prepare them for employment in a hospital, long-term care facility, or physician's office. Par one of the course is theory presentation. It includes medical terminology, introduction to disease, introduction to pharmacology, study of body systems, communication skills, medical ethics, legal responsibilities, the patient's medical record, transcription of physician orders and medical orders, and the general operation of a health unit. Par two of the course is a practicum. Both parts, theory and practicum, must be successfully completed in order to pass the course.

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


## HLTH150 - Pharmacology

4-0-4
(Prerequisite: acceptance to 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


## HLTH152-Pharmacy Calculations

 2-0-2(Prerequisite: acceptance into the Pharmacy Technician Program, eligibility for MATH 091 and English 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 teach 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


## HLTH155 - The Pharmacy Technician

6-0-6
(Prerequisite: completion of HLTH150, HLTH 152, and CIS110, with a grade of "C" or above) is a review of health care and pharmacy, past and present. Course will include requirements for technician certification, drug regulation and controls, and pharmaceutical terminology. This course will contain training on filling a prescription, routes and formulations, parenterals, compounding, basic biopharmaceutics, factors affecting drug activity, references used inventory management, financial issues and various areas of pharmaceutical care including community pharmacy, 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


## HLTH156 - 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 form 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


## HLTH157-Pharmacy Technician Certification Review

(Prerequisite: completion of (with a grade of "C" or above) or coenrollment in HLTH 155 and HLTH 156) 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


## HLTH197 - Special Topics in Health Care

 (Variable Credit)1-0-1 to 3-0-3
Special Topics in Health Care 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


## HLTH200 - Advanced First Aid Training

2-2-3
(Prerequisite: HLTH 100) will train 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

HLTH220 - Nutrition and Diet Therapy 3-0-3
(Prerequisite: completion of ENGL090 with a grade of "C" or above, or tested out of ENGLO90) 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:

- Certificate of Degree - All Certificates and All Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Dietetic Assistant/Technician, Allied Health and Nursing


## HLTH250 - Rehabilitation Nursing Course 5-0-5

(Prerequisite: $R N$ 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


## HLTH297 - 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 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 course 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

## HVAC100 - Refrigeration Fundamentals

## (Formerly HVAC100 \& HVAC101)

 3-0-3is focused 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

HVAC102 - Refrigeration Applications
2-2-3
(Prerequisite: HVAC100 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


## HVAC106 - Tools \& Piping

## (formerly HVAC200)

2-2-3
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


## HVAC130 - Electricity Fundamentals

analyzes the application of electron theory; DC/AC fundamentals; electrical quantities; OHM's Law; magnetic principles; solenoids, meter usage; power generation and distribution; wiring systems and materials; transformers and relays; schematic diagram development; and the development 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


## HVAC132-Control Applications

(formerly HVAC104)
2-2-3
(Prerequisite: HVAC130) analyzes power supply and distribution systems; operating and safety control construction, operation, and applications; and the development wiring and troubleshooting 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


## HVAC140 - Troubleshooting Air Conditioning

 Systems (formerly HVAC 105)2-2-3
(Prerequisite:HVAC 132 or ENGT 111; and HVAC 102 or concurrent enrollment) promotes the development of diagnostic and repair skills by simulating both electrical and mechanical system faults in computer-generated HVAC 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


## HVAC202 - Residential \& Self-contained Refrigeration

2-2-3
(Prerequisite: HVAC140 or current enrollment) introduces basic refrigeration components; piping systems sizing and selection; installation, servicing, and troubleshooting of residential refrigeration 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


## HVAC204 - Commercial Refrigeration

(Prerequisite: HVAC202 or current 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


## HVAC206 - Troubleshooting Refrigeration Systems (formerly HVAC215)

(Prerequisite: HVAC 102 and HVAC132) 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


## HVAC230 - Motors \& Controls

2-2-3
(Prerequisite: HVAC132) allows students to analyze, set up, and troubleshoot single and poly-phase 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


## HVAC240 - Residential Air Conditioning

 (formerly HVAC210)2-2-3
(Prerequisite: HVAC140 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


## HVAC242 - Residential Heating Systems

## (formerly HVAC220)

2-2-3
(Prerequisite: HVAC132 or ENGT 111) 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


## HVAC250 - Commercial Air Conditioning 2-2-3

(Prerequisite: HVAC132 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


## HVAC252 - 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


## HVAC290 - Work Experience \& Seminar <br> 1-10-3

(Prerequisite: HVAC140 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


## HVAC295 - Workplace Simulation \& Project 1-10-3

(Prerequisite: HVAC140 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

## HIST101 - United States to 1877

(IAI: S2 900, HST 911)
(Prerequisite: eligibility for ENGL101) 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


## HIST102 - United States since 1877

(IAI: S2 901, HST 912)
4-0-4
(Prerequisite: eligibility for ENGL101) 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


## HIST105-History of Illinois

3-0-3
(Prerequisite: eligibility for ENGL101) 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


## HIST111-European Civilization through the Reformation (IAI: H2 901, HST 913) 4-0-4

(Prerequisite: eligibility for ENGL101) 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


## HIST1 12 - European Civilization: The

 Modern Era (IAl: H2 902, HST 914)(Prerequisite: eligibility for ENGL101) 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


## HIST201 - The Origin and Development of Imperial China and Japan (IAl: H2 903N) <br> 4-0-4

(Prerequisite: eligibility for ENGL101) 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


## HIST202 - Modern East Asia (IAI: H2 903N) 4-0-4

(Prerequisite: eligibility for ENGL101) 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


## HIST270 - History of Non-Western Civilization: China (IAI: H2 903 N )

(Prerequisite: eligibility for ENGL101) 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


## HORTICULTURE

## HORT100 - Horticulture Science

(formerly HORT190) (IAI: AG 905)
provides a general background in horticulture plant growth and development. Areas include the production, utilization, and marketing of fruits, vegetables, ornamentals, floriculture, landscaping, 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


## HORT1 10 - Turf Management

(formerly HORT101)
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


## HORTIIl-Turf Production

(formerly HORT104)
(Prerequisite: Hort110 or previous turf experience) covers certain topics related to the care and production of fine turf. Among the topics are irrigation systems, weed control, and the more advanced 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


## HORT120 - Landscape Plant Identification

 (formerly HORT102)2-2-3
identifies commonly used ornamental trees, shrubs, and vines. In addition, their special growth and 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


## HORT121 - Landscape Design Principles

 (formerly HORT103)2-2-3
(Prerequisite: HORT120) 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


## HORT145-Floral Design Fundamentals

## (IAI: AG 912)

2-2-3
introduces student 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


## HORT146-Silk \& Dry Arrangements 2-2-3

 (Prerequisite: HORT145) 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


## HORT150 - Garden Center Management <br> (formerly HORT1 10) <br> 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


## HORT200 - Herbaceous Plant Material

2-2-3
emphasizes identification, selection, use, and management of perennials and ornamental grasses in 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


## HORT201 - Interior Plantscaping <br> (formerly HORT170)

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


## HORT211-Turf Equipment

(formerly HORT105)
2-2-3
(Prerequisite: HORT110 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


## HORT221 - Landscape Design and Construction (formerly HORT191)

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


## HORT230 - Greenhouse Operations

(formerly HORT150)
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


## HORT231 - Bedding Plant Production

2-2-3
(Prerequisite: HORT230) 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


## HORT245 - Funeral Flowers

(Prerequisite: HORT145) applies the principles of form, style, and composition to the design of funeral and sympathy arrangements. 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


## HORT246 - Wedding Flowers

2-2-3
(Prerequisite: HORT145) applies the principles of form, style, and composition to the design of bridal 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


## HORT290 - 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


## HORT291 - 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


## HORT295 - 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 <br> (Required courses for this degree program are listed under Business) 

## HOSP1 10 - Food Service Sanitation


#### Abstract

(formerly FSM110) 1-0-1 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 selfinspection 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

## HUMAN100 - Introduction to the Arts

(IAI: HF 900)
3-0-3
(Prerequisite: eligibility for ENGL101) 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.

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


## HUMAN104 - Introduction to Latin American Culture and Civilization

3-0-3
(Prerequisite: eligibility for ENGL 101) 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
- Area of Concentration - Not Applicable

HUMAN201 - Humanities Honors
Seminar (IAI: HF 900)
3-0-3
(Prerequisite: completion of or concurrent enrollment in ENGL101, either admission to the Honors Opportunities Program or a 3.0 GPA , and permission of the instructor) has the student practice interpreting works 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


## HUMAN280 - Interdisciplinary Field Experience in the Humanities

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 humanities and to increase their awareness and understanding of other cultures. Each field experience will emphasize art, drama, literature, music, language, philosophy, and/or another specific aspect of the culture of the locale being visited for the field experience portion of the class. Textbooks and reading from disciplines in the humanities will be a significant part of the course. Instructors from two or more of these disciplines will provide teaching related to the field experience. Classes will be held on campus prior to and following the off-campus learning experience. Field experiences will include individualized lectures, presentations, and directed field trips. Travel expenses and tuition will be paid by the students. As each individual section of this course will vary depending on the associated field experience, this course may be repeated up to three times. 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 - Art/Drama/English/Humanities/Fine Arts/Music/Philosophy


## INFORMATION TECHNOLOGY

## CIS1 10 - Business Applications (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 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


## IT105-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


## IT115-Windows Fundamentals

2-2-3
introduces students to Microsoft Windows. Topics include pulldown 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


## IT120-Spreadsheet Applications

2-2-3
(Prerequisite: CIS110 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


## IT1 30 - Word Processor Applications

2-2-3
(Prerequisite: CIS110 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


## IT131-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


## IT141 - Networking Fundamentals

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


## IT151 - Internet Techniques (formerly CIS287) 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


## IT153-Web Development

2-2-3
(Prerequisite: CS 105 or CIS 110 and IT 131) introduces students to the fundamentals of website creation. The complete production process including pre-production planning, layout and design considerations, testing, implementing the site, and maintenance are covered. Professional production tools such as Adobe Premier, Illustrator, and Photoshop, or an equivalent Windowsbased 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


## IT173-A+Computer Technologies

(formerly IT171 and IT172)
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 IT105 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


## IT181-eCommerce

3-0-3
(Prerequisite: IT105 and IT151)presents the student with an introduction to the business side of the World Wide Web and the systems and facilities needed to do business on the Web. Topics include e-business History, survey of e-commerce and e-business models, internet marketing, online monetary transactions, e-busi-
ness ethics and the law, system security, and a survey of e-busi-ness/e-commerce information system component 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


## IT205 - Help Desk Techniques <br> 2-2-3

(Prerequisite: IT105 and CIS110) 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


## IT206 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


## IT207 Software Applications Support

(Prerequisite: CIS 110 and IT 115 (or IT 116) or consent of fulltime 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


## IT210 Presentation Graphic Applications 2-2-3

(Prerequisite: CIS110 or consent of full-time Information Technology instructor) presents the student with presentation graphics techniques using MS PowerPoint. The student learns how to design a professional slideshow, format text, change background color, rotate, size, crop, and size graphics, create design templates, incorporate graphics and sound, create column and organization charts, create diagrams, hyperlinks and buttons, automatic presentations, change transitions, add animations, integrate data from other programs, how to 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


## IT220 - Data Management Applications

 (formerly CIS221) 2-2-3(Prerequisite: CIS110 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


## IT221 - Database Design

2-2-3
(Prerequisite: CIS110 or consent of full-time Information Technology instructor) introduces students to structured and object-oriented modeling used in database design, software development, and information system design. Students will learn how to identify data functionality based on business requirements and construct both conceptual and logical models using entity-relationship diagrams (ERDs), data flow diagrams (DFDs), and Unified Modeling Language (UML) to develop object-oriented models. 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


## IT222 - Structured Query Language

2-2-3
(Prerequisite: IT131 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


## IT230 - Project Management

2-2-3
(Prerequisite: CIS110 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
- Area of Concentration - Not Applicable


## IT241 Network Routing Technologies

(formerly IT 142)
2-4-4
(Prerequisite: IT141 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


## IT242 Wireless Networking

2-2-3
(Prerequisite: IT105, IT115, and IT141 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


## IT243 Network Switching Technologies

(formerly IT 143)
2-4-4
(Prerequisite: IT241 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


## IT244 - Wide Area Networks (formerly IT 144) <br> 2-2-3

(Prerequisite: IT243 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


## IT245 - Network Security

2-2-3
(Prerequisite: IT141 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


## IT271 - Windows Server Operating Systems

## (formerly CIS/IT 245)

2-2-3
(Prerequisite: IT116 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


## IT272 - Unix/Linux Fundamentals

2-2-3
(Prerequisite: IT105 or consent of full-time 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. IT272 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


## IT273 - Managing Windows Networks 2-2-3

(Prerequisite: IT271 or consent of full-time Information Technology instructor) is an intermediate course that introduces the student to the theory, strategies and tools of network management through performance and fault analysis of a medium to large enterprise network. Students will examine basic TCP/IP networking concepts and Windows Server 2003 networking services, such as DNS, WINS, RRAS, and network security technologies such as digital certificates and the IP security extensions. 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 Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## IT274 - Windows Active Directory

2-2-3
(Prerequisite: IT271 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 Spring.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## IT280 Advanced Systems Development <br> 3-2-4

(Prerequisite: CS161 and CS230) 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, online/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


## IT282 - Dynamic Web Development

## (formerly IT 183)

2-2-3
(Prerequisite: IT153) 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. This course requires the student to build multiple web pages and implement at least one major website design. Particular attention is given to client-side applications of JavaScript. 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


## IT284-Web Programming

2-2-3
(Prerequisite: IT282 or consent of Information Technology fulltime instructor) presents the student with a comprehensive introduction to the Common Gateway Interface/Perl and JavaServlet server-side coding 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. 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


## IT285 - 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. Student 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, problem-solving, 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


## IT290 - Work Experience Practicum

1-10-3
(Prerequisite: Sophomore standing and a minimum completion of 45 credits hours toward an IT degree, or approval from the full-time Information Technology faculty) provides students in the Information 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. Students will need to work a minimum of 150 hours during the semester to receive 3 credit hours for this course. Students wishing to enroll in this course must complete an application for enrollment and submit it to the instructor. Applications are available in the Business 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


## IT295 - 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 fulltime 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


## IT297 - 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

## JOURN101 - News Writing

3-0-3
(Prerequisite: eligibility for ENGL101 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


## JOURN102 - News Reporting

 3-0-3(Prerequisite: JOURN101) 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


## JOURN1 10 - Introduction to Mass Media

 (IAI: MC 911)3-0-3
(Prerequisite: eligibility for ENGL101) 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


## JOURN220-Introduction to Television Production

(Prerequisite: completion of ENGL101) an introduction to television production, including terminology, basic script writing, direction, audio, lighting, camera operation, and video editing. Course will examine program types and 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


## JOURN221 - Introduction to Radio Production

2-2-3
(Prerequisite: completion of ENGL101) provides an analysis of the radio industry and the internal 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, 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

JOURN222 -Radio/TV Broadcasting 3-0-3
(Prerequisite: completion of Spch. 101 with a "C" or above) study topics include 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

## LEAD150-Leadership Development

(Prerequisite: eligibility for ENGL101) is an extensive exploration of leadership skills, with an emphasis on materials from the humanities, especially literature, philosophy, and film. Typical subjects for discussion include leadership styles, delegation of authority, ethics and leadership, conflict resolution, and creativity in decision making. Core materials for the course come from the Phi Theta Kappa leadership development program, and the course is taught by certified instructors. 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.

## MATH087 - General Mathematics Skills <br> 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


## MATH090 - Pre-Algebra

4-0-4
(Prerequisite: both of the following: (1) MATH087 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL101 or concurrent enrollment in ENGL090) 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


## MATH091 - Basic Algebra

4-0-4
(Prerequisite: both of the following: (1) MATH090 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL101 or concurrent enrollment in ENGL090 and ENGL097) 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


## MATH095 - Basic Geometry

(Prerequisite: both of the following: (1) MATH091 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL101 or concurrent enrollment in ENGL090 and ENGL097) 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


## MATH098 - Intermediate Algebra

(Prerequisite: all of the following: (1) MATH091 with a "C" or better grade or satisfactory score on the mathematics placement
exam, (2) MATH095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL101 or concurrent enrollment in ENGL090 and ENGL097) 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


## MATH1 04 - Technical Mathematics

4-0-4
(Prerequisite: both of the following: (1) MATH091with a "C" or better grade or satisfactory score on the mathematics placement exam and (2) eligibility for ENGL101 or concurrent enrollment in ENGL090 and ENGL097) 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, introduction 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, spheres and composite objects and their volumes, surface areas, and weights, introduction to trigonometric functions, 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


## MATH106 - Mathematics for Health Careers 2-0-2

(Prerequisite: eligibility for MATH091 with a "C" or better grade) 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Mathematics
- Area of Concentration - Nursing


## MATH1 10 - Concepts of Mathematics

## (IAI: MI 904)

4-0-4
(Prerequisite: all of the following: (1) MATH098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL101) 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Mathematics
- Area of Concentration - Not Applicable


## MATHII - Mathematics for Elementary School Teaching 1

4-0-4
(Prerequisite: all of the following: (1) MATH098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL101) 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


## MATH1 12 - Mathematics for Elementary

 School Teaching 2 (IAI: M1 903)4-0-4
(Prerequisite: MATH111 with a " $C$ " or better grade or equivalent competencies and eligibility for ENGL101) is a continuation of MATH111. 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


## MATHI 13 - Introduction to Applied

## Statistics (IAI: M1 902)

4-0-4
(Prerequisite: all of the following: (1) MATH098 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) MATH095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL101) 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Mathematics
- Area of Concentration - Not Applicable


## MATHI 16 - College Algebra

4-0-4
(Prerequisite: all of the following: (1) MATH098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL101) 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.

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


## MATHI 17 - Trigonometry

(Prerequisite: all of the following: (1) MATH098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL101) 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 calculator is required. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Mathematics (AAS only)
- Area of Concentration - Mathematics


## MATH121-Calculus and Analytic Geometry 1

(IAI: M1 900-1, EGR 901, MTH 901)
5-0-5
(Prerequisite: successful completion of both MATH116 with a "C" or better grade and MATH117 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Mathematics
- Area of Concentration - Mathematics, Engineering


## MATH122 - Calculus and Analytic Geometry 2

## (IAI: M1 900-2, EGR 902, MTH 902)

4-0-4
(Prerequisite: MATH121 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

MATH160 - Finite Mathematics (IAI: M1 906) 4-0-4
(Prerequisite: MATH116 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Mathematics
- Area of Concentration - Not Applicable


## MATH170 - Introduction to Statistics

 (IAI: M1 902, BUS 901)(Prerequisite: MATH160 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Mathematics
- Area of Concentration - Not Applicable


## MATH171 - Concepts of Statistics

## (IAI: M1 902, BUS 901)

4-0-4
(Prerequisite: MATH116 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Mathematics
- Area of Concentration - Not Applicable


## MATH190 - Calculus for Business and Social Science (IAI: M1 900-B)

(Prerequisite: successful completion of MATH116 with a "C" or better grade or satisfactory score on the mathematics placement exam) is an introductory calculus course for the non-mathematics major. The course includes sequences, limits, differentiation and integration of polynomials, and exponential and logarithmic functions with applications to business and social science. A graphing calculator is required. 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 - Not Applicable


## MATH210 - Discrete Mathematics

4-0-4
(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 fouryear 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


## MATH221 - Calculus and Analytic Geometry 3 (IAI: M1 900-3, EGR 903, MTH 903) 4-0-4

(Prerequisite: MATH122 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


## MATH230 - Differential Equations

(IAI: EGR 904, MTH 912)
4-0-4
(Prerequisite: MATH122 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

MATH240 - Introduction to Linear Algebra 3-0-3
(Prerequisite: successful completion of MATH122 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 juniorsenior 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

## MUSIC100 - Music Appreciation (IAI: F1 900) <br> 3-0-3

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 101-Class Piano 1

2-0-2
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 102-Class Piano 2

2-0-2
(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


## MUSIC103 - Theory and Ear Training 1 3-2-4

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 correlate 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


## MUSIC104 - Theory and Ear Training 2 3-2-4

(Prerequisite: MUSIC103) is a continuation of MUSIC103 which 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 correlate 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


## MUSIC110-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


## MUSIC120 - 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


## MUSIC130-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


## MUSIC140 - Small Ensemble

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


## MUSIC190 - Introduction to American Music

 (IAI: Fl 904)3-0-3
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 201-Class Piano 3

(Prerequisite: Music 102 or consent of the instructor) is a continuation of Class Piano 2. Topics include various scales, harmonizing using primary chords in minor keys, teaching 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


## 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

(Prerequisites: 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, 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 I Concepts Basic to Nursing Practice 6-9-9

(Prerequisites: completion of NURS111 and completion of or concurrent enrollment in BIOL 201, PSYCH 110, and ENGL101) 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, 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 is the goal. 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 - Familiy Health Nursing 4-6-6

(Prerequisite: Completion of NURS 112 and completion of or concurrent enrollment in NURS152, NURS 154, PSYCH145, and BIOL 202) 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. The nursing process and critical thinking are applied to the management of clients and families from 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


## NURS152-Psychiatric Mental Health Nursing - Old Curriculum 2-6-4

(Prerequisite: NURS101, NURS102, HLTH220, BIOL201, and PSYCH110, concurrent enrollment in NURS151 and NURS154, completion of or concurrent enrollment in BIOL202 and MATH106, or approval of the Dean of Health Professions) 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, communication, and relationship skills to manage clients with alterations in mental health. Clinical experiences provide opportunities to use the nursing process, therapeutic communication, and critical thinking. Students plan and administer care to individuals 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


## NURS152 - Psychiatric-Mental Health Nursing 2-6-4

(Prerequisites: Completion of Nurs 112 and completion of or concurrent enrollment in Nursing 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


## NURS154 - Pharmacological Principles for Nursing Practice

3-0-3
(Prerequisite: Math placement in 098 or completion of Math 091 and completion of or concurrent enrollment in Math 106, BIOL 202, and PN 102 or NURS 112.) 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


## NURS160 - Intravenous Therapy Techniques for LPN's

2-0.5-2
(Prerequisite: LPN license or approval of the Dean of Health Professions) introduces the LPN to the techniques, complications, and special problems of peripheral intravenous therapy. The course teaches the students to perform the following activities under the supervision of a registered nurse: perform a venipuncture, monitor and regulate intravenous fluid rates, observe client for local reactions, add non-medicated solutions to existing lines, change peripheral intravenous tubings and dressings, discontinue intravenous therapy, and monitor existing transfusions and blood components. This course includes laboratory and clinical experiences. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - Basic Certificate
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## NURS200 - Cardiovascular Assessment 1-0-1

(Prerequisite: RN, LPN, or EMT license, or approval of the Dean of Health Professions) presents a systematic method for gathering subjective and objective data related to the physical assessment of the cardiovascular system of adults and geriatric clients. The purposes of the course are to (a) review the anatomy and physiology of the cardiovascular system; (b) provide knowledge of normal findings and deviations from normal findings; (c) identify methods and techniques used to examine cardiovascular functioning; and (d) provide opportunities to practice assessment techniques in a laboratory setting. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - AAS
- Group Requirement - Not Applicable
- Area of Concentration - Nursing


## NURS201 - Medical-Surgical Nursing II <br> 3-6-5

(Prerequisite: NURS151, NURS152, and NURS154, completion of or concurrent enrollment in BIOL220 and ENGL101, or approval of the Dean of Health Professions) applies the nursing process and critical thinking to the care of adult and geriatric clients with alterations in immune, respiratory, endocrine, cardiovascular, and hematologic systems. Assessment and nursing skills are emphasized. Situations are provided to challenge decision making and exercise sound judgments. Clinical experiences occur in a variety of health care settings. 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


## NURS202 - Family Health Nursing

3-6-5
(Prerequisite: NURS201, NURS251, BIOL220, and ENGL101, concurrent enrollment in NURS254, completion of or concurrent enrollment in PSYCH145, SOCIO110, and Humanities elective, or approval of the Dean of Health Professions) 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. The nursing process and critical thinking are applied to the management of clients and families from preconception through adolescence and to clients with diseases of breasts and the reproductive system.

Individual and group teaching, assessment, and nursing skills are emphasized. Clinical experiences in clinics, hospitals, and selected community agencies are 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


## NURS203 - LPN Bridge Course

6-3-7
(Prerequisite for students entering in 2006: Illinois LPN license or license pending, BIOL101, BIOL201, BIOL202, HLTH220, PSYCH110, PSYCH145, MATH106, and NURS154, or approval of the Dean of Health Professions) (Prerequisite for students entering in 2007: BIOL101, BIOL201, BIOL202, BIOL220, ENGL101, PSYCH110, PSYCH145, SOCIO110, NURS154) presents the philosophy of Associate Degree Nursing and provides the nursing knowledge, cognitive and clinical skills from NURS 101, 102, 151, 202 that allow the transition of LPN's into the Associate Degree Nursing program. This course focuses on the nursing process, critical thinking, the teaching and learning process, physical assessment, fluid and electrolytes, and the management of alterations in the renal system, burns, and selected gastrointestinal dysfunctions. The nursing process and critical thinking are applied to the management of clients and families from preconception through adolescence and to clients with diseases of breasts and the reproductive system. Critical nursing skills related to these content areas are validated in both laboratory simulations and clinical experiences. Students must receive a "C" or better to pass this course. Upon successful completion of this course and paying the appropriate fee for credit by advanced placement, students will receive credit for NURS101, 102, 151, and 202. 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


## NURS205 - Med-Surg II Care of the Chronically III Client

(Prerequisites: completion of Nurs 150, Nurs 152, Nurs 154, and completion of, or concurrent enrollment in Biol. 220, Socio 110, 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. Student 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


## NURS210 - Health Assessment in Nursing 3-0-3

(Prerequisite: RN or LPN license or BIOL201, BIOL202, and NURS251, or approval of the Dean of Health Professions) presents a systematic method for collecting subjective data and for performing a physical assessment. The content is organized around the developmental stages, from infancy to old age, and the systems approach. The purposes of the course are to provide (a) knowledge about assessment data needed for each system and the skill neces-
sary for assessment and (b) an opportunity to perform the skills necessary for a complete assessment. The focus of this course is on normal findings along with basic information about common and important abnormal findings. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Nursing


## NURS215-Registered Nurse First Assist <br> 3-1-4

(Prerequisite: $R N$ with experience in the Operating Room) trains professional nurses to become skilled, efficient surgical assistants. In addition to intraoperative behaviors used by the operating room nurse, those unique to the first assistant include handling tissue, using instruments, suturing, and providing hemostasis. The intent of this course is to provide capable nurse assistants when physicians are not available. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Nursing


## NURS250 - Med-Surg 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 Biol. 220, Socio 110, or admission to the LPN Bridge Program) 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 as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - AAS
- Group Requirement - Not Applicable
- Area of Concentration - Nursing


## NURS251 - Long-Term/Acute Care Nursing 2-6-4

(Prerequisite: NURS151, NURS152, NURS154, and NURS201, completion of or concurrent enrollment in BIOL220 and ENGL101, or approval of the Dean of Health Professions) focuses on the use of the nursing process and critical thinking to manage adult and geriatric clients with alterations in neurological, musculoskeletal, and oncological functioning in both acute and long-term health care delivery systems. Students gain clinical experience in oncology care, acute care, and geriatric care. Students develop insight about the effects of an aging population as it relates to health care delivery systems. Emergency room and critical care experiences are also included in the clinical rotation. 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


## NURS252 - Medical-Surgical III - Care of the Acutely III Client

3-6-5
(Prerequisites: completion of Nurs 205 and completion of or concurrent enrollment in Nurs 254, Fine Arts elective, and a general elective) 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 as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Nursing


## NURS254 - Transition from Education to Practice <br> 2-9-5

(Prerequisite for students admitted prior to 2007: NURS201, NURS251, ENGL101, and BIOL220, and concurrent enrollment in NURS202, completion of or concurrent enrollment in SOCIO110 and Humanities elective, or approval of the Dean of Health Professions)(Prerequisite for students admitted in 2007 3-9-6: Completion of NURS250 and completion of or concurrent enrollment in a Fine Arts and a HLTH197/297 elective) 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, diagno-sis-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) <br> 1-1-2

(No previous keyboarding skills required. Recommended course for Business, Information Technology, Criminal Justice, and Office Technology students and all students needing keyboard skills) is 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 Applicable
- Area of Concentration - Not Applicable


## OTK101 - Keyboarding Speed and Accuracy (formerly OT 100)

## 1-1-2

(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


## OT1 12 - Document Formatting/Word Processing

2-2-3
(Prerequisite: touch-key minimum skills of 25 NWAM for three minutes) helps students learn and develop efficient skills in producing business and personal documents using word processing concepts and applications. Students learn to create, edit, print, and maintain documents in a computerized word processing office environment. 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


## OT1 15 - Operating Systems \& Applications

## (formerly OT102/104/105)

introduces students to computer and software applications. Students will be introduced to the Windows operating system and basic spreadsheet features focusing on designing and creating spreadsheets, entering data, and editing. Students will also be introduced to the database management features used in designing, creating, saving, editing, sorting, querying, and preparing and printing reports. (Students cannot receive credit for OT115 and any of the following: OT102, OT104, or OT105.) 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


## OT1 19 - English for Business and Technical Careers (formerly Bus 119)

3-0-3
(Prerequisite: eligibility for ENGL090 and ENGL097) 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, AAS, ALS, AA, AS
- Group Requirement - Business (AAS only)
- Area of Concentration - Not Applicable


## OT120-Business Communications

(formerly Bus 120)
3-0-3
(Prerequisite: OT119 or eligibility for ENGL101) 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 Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Business (AAS only)
- Area of Concentration - Not Applicable


## OT140 - Medical Terminology

## (formerly OT141)

3-0-3
is designed to provide the student with knowledge of the meaning of word parts, pronunciation, and correct spelling of medical
terms. Special emphasis is placed on the medical terminology as it relates to the human body. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificate, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## OT141 - Medical Office - Anatomy

 (formerly OT142) 3-0-3(Prerequisite: OT140) 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


## OT142-Medical Transcription 1

(formerly OT242)
1-3-3
(Prerequisite: OT112, OT140 and completion of or concurrent enrollment in OT 141) provides experience in transcribing a variety of medical reports. Speed and accuracy are emphasized. A review of terminology is 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 - Not Applicable


## OT143-ICD-9 Coding (formerly OT246)

2-2-3
(Prerequisite: OT141 or concurrent enrollment) focuses on the ICD-9 System of medical coding and is designed to provide students knowledge and practical experience encoding patient medical records into appropriate reporting documents. 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


## OT150 - Records Management

3-0-3
(Prerequisite: OT115 and touch-keyboarding skills of 20 net words a minute) 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


## OT160-Office Accounting

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


## OT170 - Professional Office Procedures

 (formerly OT250)3-0-3
(Prerequisite: OT112 or concurrent enrollment, or equivalent competencies) 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

OT200 - Speedwriting (formerly OT131) 3-0-3
(Prerequisite: OT119 or concurrent enrollment, and OT112 or equivalent competencies) 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


## OT205 - Voicing \& Transcription

2-2-3
(Prerequisite: OT119, OT112, and OT115, 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


## OT210 - 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


## OT211 - Advanced Word Processing

2-2-3
(Prerequisite: OT112 or equivalent competencies) covers projects using advanced word processing functions on microcomputers. Some of these processes include creating autotext, macros, tables, outlines, mail merge documents, forms, and styles; sorting; formatting data into columns; and working with multi-page documents. 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


## OT212 - Desktop Publishing Applications

2-2-3
(Prerequisite: OT211 or equivalent competencies) covers projects which use desktop publishing fundamentals on microcomputers.

Some of these processes include basic typography, design, graphics, and newsletter, brochure, and booklet creation. Offered in Spring.

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## OT220 - QuickBooks Pro

(Prerequisite: ACCT101 or OT160, and OT115, or equivalent competencies) provides students experience in using QuickBooks Pro software. Students learn to computerize accounting records for various types of business organizations, record transactions, manage accounts receivable, accounts payable and inventories, and prepare financial statements. 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


## OT225 - Peachtree

2-2-3
(Prerequisite: ACCT101 or OT160, and OT115, or equivalent competencies) provides students experience in using Peachtree software. Students learn to computerize accounting records for various types of business organizations, record transactions, manage accounts receivable, accounts payable and inventories, and prepare financial statements. 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


## OT230 - Legal Terminology and Documents 1-3-3

(Prerequisite: OT211 or concurrent enrollment and OT119, or equivalent competencies) 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


## OT232 - Legal Research

3-0-3
(Prerequisite: OT230 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


## OT240 - Pharmacology Terminology

(Prerequisite: OT140 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


## OT242 - Medical Transcription 2

 (formerly OT243)1-3-3
(Prerequisite: OT142) provides experience in transcribing recorded reports dictated by physicians in general offices, clinics,
and hospitals. Speed and accuracy are emphasized. 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


## OT243 - CPT Coding (formerly OT245) 2-2-3

(Prerequisite: OT141 or concurrent enrollment) focuses on the CPT system of medical coding and is designed to provide students with knowledge and practical experience encoding patient medical information into appropriate reporting documents. 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


## OT245 - Insurance/Patient Billing

2-2-3
(Prerequisite: minimum touch-typing speed of 25 NWAM, OT115, OT140, and OT160; or equivalent competencies) 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


## OT260 - Payroll Records \& Procedures

2-2-3
(Prerequisite: ACCT101 or OT160, and OT115, or equivalent competencies) explores basic payroll accounting procedures covering each area of payroll through examples, illustrations, and exercises. Students will maintain employee time and payroll records including calculation of gross earnings and deductions using a variety of payroll systems. The course will also include preparing and filing the required governmental payroll forms. 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


## OT272 - Web Page Development

2-2-3
(Prerequisite: OT115 and OT211, or equivalent competencies) introduces the student to Webpage design concepts using popular Web-authoring software. Students will plan, design, create, publish, maintain, and improve interactive Web sites containing graphics and animations. Tables, frames, forms and templates will be used to create functional Web pages. 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


## OT290 - Work Experience Practicum \& Seminar

1-10-3
(Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an OT degree, or approval from the Office Technology full-time faculty) 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


## OT295 - Workplace Simulation \& Project

(formerly OT251)
1-10-3
(Prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an OT degree, or approval from the Office Technology full-time 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 cannot receive credit for both OT295 Workplace Simulation \& Project and OT251 Administration Assistant - Work Simulation.) 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 DEV100 - 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 DEV101 - Orientation

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 DEV109-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 CDEV112 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 DEV110-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 CDEV112 and $P$ DEV109, 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 DEV111-Job Preparation

1-0-1
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 CDEV112 and P DEV109, 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

## P RELI00 - Human Relations

3-0-3
(Prerequisite: successful completion of OT119 or eligibility for ENGL101) 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


## P RELI 10 - 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

## PHIL100 - Critical Thinking (IAI: H4 906)

3-0-3
(Prerequisite: eligibility for ENGL101) 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 ENGL101) will examine the sociohistorical 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
- Area of Concentration - Philosophy, African American


## PHILI 10 - Introduction to Philosophy

## (IAI: H4 900)

(Prerequisite: eligibility for ENGL101) 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 there 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


## PHIL1 20 - Introduction to Ethics (IAI: H4 904)

3-0-3
(Prerequisite: eligibility for ENGL101) 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


## PHIL200 - Symbolic Logic

3-0-3
(Prerequisite: eligibility for ENGL101) 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 only)
- Area of Concentration - Philosophy


## PHIL210 - Introduction to World Religions

 (IAI: H5 904N)3-0-3
(Prerequisite: eligibility for ENGL101) 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

PHIL215 - Asian Philosophy (IAI: H4 903N) 3-0-3 (Prerequisite: eligibility for ENGL101) 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


## PHIL220 - Current Issues in Ethics

3-0-3
(Prerequisite: eligibility for ENGL101) 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 only)
- Area of Concentration - Philosophy


## PHIL230 - Philosophy of Religion (IAI: H4 905) 3-0-3

(Prerequisite: eligibility for ENGL101) 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 ED100 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 Lifelong Learning Non-Credit option.

## P ED100-Aerobics

0-2-1
is a low impact and/or step aerobics activity class designed to improve health and fitness, to increase energy levels, and to minimize stress. The class is coeducational and will meet the needs of all adults and levels of aerobic fitness from the beginner to the more advanced. 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


## P ED110-Personal Fitness

 0-2-1is 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 ED111-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 ED112-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 ED113-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 EDI 14 - 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 ED115-Tennis

0-2-1
is 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 be 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 ED116-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 ED117-Soccer
0-2-1
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 ED118-Racquetball

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 ED120-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 ED121-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 ED122-Softball

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 ED140-Beginning Ballet

0-2-1
is designed to help students to understand the 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 two times for a total of two 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


## P ED145-Beginning Jazz Dance

is designed to help students to understand jazz technique used in warm-up exercises at the barre and in the center, center floor work, combinations, and dance routines and to help their basic understanding of jazz terminology. Course may be repeated one time for a total of two 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


## P ED160-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 ED160 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 ED162-Advanced Swimming

0-2-1
(Prerequisite: P ED161 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 ED163-Lifeguard Training

0-2-1
(Prerequisite: P ED162 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 ED214-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 ED215 - 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 S105-Physics of Sound and Light (IAI: P9 900L)

(Prerequisite: eligibility for ENGL101 and completion of MATH091 [with a "C" or better grade]) 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

## PHYS100 - Physics of the Modern

World (IAI: P1 901)
4-0-4
(Prerequisite: eligibility for ENGL101 and completion of MATH091 [with a "C" or better grade]) 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.

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


## PHYS101 - Introduction to Physics 1

(IAI: P1 900L)
3-2-4
(Prerequisite: successful completion of MATH098 [with a "C" or better gradel or equivalent competencies and eligibility for ENGL101) 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 PHYS151. 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


## PHYS102 - Introduction to Physics 2 3-2-4

(Prerequisite: successful completion of PHYS101 [with a "C" or better gradel or equivalent competencies and eligibility for ENGL101) 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 inter-
actions, 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


## PHYS151 - Mechanics and Wave Motions

(IAI: P2 900L, EGR 911)
3-2-4
(Prerequisite: MATH121 or equivalent, MATH122 or equivalent or concurrent enrollment, and one year of high school physics or PHYS101) 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


## PHYS152-Electricity and Magnetism

## (IAI: EGR 912)

## 3-2-4

(Prerequisite: PHYS151 or equivalent competencies and MATH122 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


## PHYS153 - Thermodynamics and

 Modern Physics (IAI: EGR 914)(Prerequisite: PHYS152 or equivalent competencies and MATH122 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 S100 - People and Politics (IAI: S5 903) 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 ENGL101) 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 and Communities (IAI: S5 902, PLS 915)

 3-0-3(Prerequisite: eligibility for ENGL101) 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 $\mathbf{2 9 0}$ - Internship in Political Science/Government

1-0-1 to 3-0-3
(Prerequisite: eligibility for Eng. 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

## PN 101A - Transitions 1 Introduction to Practical Nursing

(Prerequisite: admission to the Practical Nursing Program, and completion of or concurrent enrollment in Biol 202, and Nurs 154) is a self-esteem and introspective course that will help students to
understand their own personal strengths, skills, capabilities, and values, so they will be better prepared for success in the practical nursing program. Communication, team-building exercises, time management, and test taking skills are introduced in this class. The student will be introduced to the history and roles of the Nurse, legal and ethical responsibilities, and health team relationships. Offered in Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Practical Nursing


## PN 102A - Wellness Across the Lifespan I 4-6-6

(Prerequisite: completion of or concurrent enrollment in PN 101A, Biol. 202, and Nurs 154) this course is the study of basic concepts, principles, and skills, which are fundamental to the practice of nursing. The student will develop basic skills in utilizing the nursing process through application of Gordon's 11 functional patterns. The roles as caregiver, teacher, communicator, leader and advocate are introduced and practiced. The student will review the history and roles of the Licensed Practical Nurse, legal and ethical responsibilities, and health team relationships. The student will acquire the basic concepts in the care of the older adult in the long term care setting. Students are also introduced to the Core Values. Offered in Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Practical Nursing


## PN 103A - Wellness Across the Lifespan II 2-6-4

(Prerequisite: completion of PN 102A and completion of or concurrent enrollment in Biol 202 and Nurs 154) facilitates the correlation of knowledge from general education and PN 102A through a focus on the adaptive responses of the Child and Family. Nursing focus is on assessment and the decision-making and utilization of the nursing process in delivering care to the pregnant woman and family. The roles of care-giver, teacher, and communicator continue to be developed and students are building advocacy and leadership skills. Supervised clinical experiences in the hospital obstetric and pediatric settings are included. Values are developed and behaviors practiced with the guidance of faculty. Offered in Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Practical Nursing


## PN 104A - Transitions II Trends and Issues <br> 1-0-1

(Prerequisite: completion of PN 103A, and Nurs 154) 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

4-9-7
(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 ill-
nesses, 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 independence, in the care of the patient with acute illness. Behaviors demonstrating the 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 3-9-6
(Prerequisite: grade of "C" or better in PN 105 and completion of or concurrent enrollment in ENGL101 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 value and professional standards independently. 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 Transition/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 psy-chiatric-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

3-0-3
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


## PSYCHI 10 - Introduction to Psychology

(IAI: S6 900, SPE 912)
3-0-3
(Prerequisite: eligibility for ENGL101) 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


## PSYCH130-Psychology of Gender

3-0-3
(Prerequisite: PSYCH100 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


## PSYCH145 - Human Growth and

Development (IAI: S6 902, PSY 904)
3-0-3
(Prerequisite: PSYCH110) 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


## PSYCH150 - Child Psychology

3-0-3
(IAI: S6 903, S6 904, ECE 912, EED 902, PSY 901, SPE 913)
(Prerequisite: PSYCH110) 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 Education-Elementary/Secondary


## PSYCH200 - 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 ED200 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 Education-Elementary/Secondary


## PSYCH210 - 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

PSYCH220 - Psychology of Death and Dying 3-0-3
(Prerequisite: PSYCH100 or PSYCH110) examines the psychological aspects of death and the dying process by focusing on the existential problem of dying and on the interaction between the dying person and the significant figures during the last phase of one's own death and the deaths of others, including an evaluation of some of the methods of dealing with the dying patient. It investigates the psychological dynamics involved in those who are left behind (the bereaved) by the 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


## PSYCH250 - Human Sexuality (IAI: SW 912)

(Prerequisite: PSYCH110) 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


## PSYCH260 - Theories of Personality

## (IAI: PSY 907)

3-0-3
(Prerequisite PSYCH110) 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 toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Social Science
- Area of Concentration - Psychology, Social Science


## PSYCH280 - 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


## RADIOLOGIC TECHNOLOGY

## RADT101 - 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 - Radiologic Technology


## RADT102-Radiologic Patient Care

3-1-3
(Prerequisite: admission to the Radiologic Technology (Radiography) Program and concurrent enrollment in RADT108) 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 - Radiologic Technology


## RADT108-Radiographic Procedures I

2-3-3
(Prerequisite: admission to the Radiologic Technology (Radiography) Program and concurrent enrollment in RADT102) 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 - Radiologic Technology


## RADT1 10 - Principles of Radiography I

3-0-3
(Prerequisite: completion of RADT101, RADT102 and RADT108 with a grade of " $C$ " or better and concurrent enrollment in or completion with a grade of "C" or better in RADT115, RADT116, RADT118 and BIOL101)content 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 - Radiologic Technology


## RADT1 15 - Radiography Clinical I

0-1 8-3
(Prerequisite: completion of RADT101, RADT102 and RADT108 with a grade of "C" or better and concurrent enrollment in or com-
pletion with a grade of "C" or better in RADT110, RADT116, RADT118 and BIOL101) Content and clinical practice experiences shall be 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 Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Radiologic Technology


## RADT1 16 - Radiation Physics

3-0-3
(Prerequisite: completion of RADT101, RADT102 and RADT108 with a grade of " $C$ " or better and concurrent enrollment in or completion with a grade of "C" or better in RADT110, RADT115, RADT118, and BIOL101) 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 - Radiologic Technology


## RADT1 18 - Radiographic Procedures II

(Prerequisite: Completion of RADT101, RADT102 and RADT108 with a grade of " $C$ " or better and concurrent enrollment in or completion with a grade of "C" or better in RADT110, RADT115, RADT116 and BIOL101) is designed to provide a knowledge base necessary to perform standard radiographic procedures. This course includes radiographic anatomy, pathologic indications, and positioning for lower limb, pelvis, cervical, thoracic and lumbar spines, ribs and sternum. 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 Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Radiologic Technology

RADT120 - Principles of Radiography II 3-0-3
(Prerequisite: completion of RADT110, RADT115, RADT116, RADT118 and BIOL101with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT125, RADT126, RADT128, and BIOL201) 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 - Radiologic Technology


## RADT1 25 - Radiography Clinical II

0-1 8-3
(Prerequisite: completion with a grade of "C" or better in RADT110, RADT115, RADT116, RADT118 and BIOL101 and con-
current enrollment in or completion with a grade "C" or better in RADT120, RADT126, RADT128 and BIOL201) 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 wellbeing 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 - Radiologic Technology


## RADT1 26 - Imaging Equipment

3-0-3
(Prerequisite: completion with a grade of "C" or better in RADT110, RADT115, RADT116, RADT118 and BIOL101 and concurrent enrollment in or completion with a grade " $C$ " or better in RADT120, RADT125, RADT128 and BIOL201) content 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 - Radiologic Technology


## RADT128 - Radiographic Procedures III

2-3-3
(Prerequisite: completion with a grade of "C" or better in RADT110, RADT115, RADT116, RADT118 and BIOL101 and concurrent enrollment in or completion with a grade "C" or better in RADT120, RADT125, RADT126 and BIOL201) 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 - Radiologic Technology


## RADT155 - Radiography Clinical III

0-21-3.5
(Prerequisite: completion with a grade of " $C$ " or better in RADT120, RADT125, RADT126, RADT128 and BIOL201) 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 - Radiologic Technology


## RADT215-Radiography Clinical IV

0-24-4
(Prerequisite: completion with a grade of " $C$ " or better in RADT155 and concurrent enrollment in or completion with a grade " $C$ " or better in RADT218, RADT219 and BIOL202) 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 - Radiologic Technology


## RADT218-Radiographic Procedures IV <br> 2-3-3

(Prerequisite: completion with a grade of " $C$ " or better in RADT155 and concurrent enrollment in or completion with a grade "C" or better in RADT215, RADT219 and BIOL202) 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 - Radiologic Technology


## RADT219 - Radiation Protection \&

## Radiobiology

2-0-2
(Prerequisite: completion with a grade of " $C$ " or better in RADT155 and concurrent enrollment in or completion with a grade of "C" or better in RADT215, RADT218, and BIOL202) 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 - Radiologic Technology


## RADT225 - Radiography Clinical V

0-24-4
(Prerequisite: completion of RADT215 RADT218 and RADT219, and BIOL202 with a grade of " $C$ " or better and concurrent enrollment in or completion with a grade of " $C$ " or better in RADT228, RADT230 ENGL101 and PSYCH110) Content and clinical practice experiences shall be 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 - Radiologic Technology


## RADT228 - Radiographic Image Analysis 1.5-0-1.5

(Prerequisite: completion of RADT215, RADT218, and RADT219, and BIOL202 with a grade of C or above and concurrent enrollment in or completion with a grade of "C" or above in RADT225, RADT230, ENGL101 and PSYCH110) 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 - Radiologic Technology


## RADT230 - Radiography Seminar

2-3-3
(Prerequisite: completion of RADT215, RADT218 and RADT219, and BIOL202 with a grade of $C$ or above and concurrent enrollment in or completion with a grade of C or above in RADT228, RADT225, ENGL101 and PSYCH110) 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 - Radiologic Technology


## SERVICE LEARNING

## SLRN 293 - Service Learning Internship (Variable Credit)

1-5 tol15-1to3
(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 disci-pline-level 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 disci-pline-level 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 disci-pline-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) 0-5to15-1to3

(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 disci-pline-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

## SOC S199-Topics/Issues in the Social Sciences (Variable Credit)

 1-0-1provides 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 only)
- Area of Concentration - Not Applicable


## SOC S280 - Interdisciplinary Field Experiences in the Social Sciences

(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 off-campus 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
- Area of Concentration - Economics, History, Political Science, Sociology, Social Science


## SOCIOLOGY

## SOCIO100 - 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 SOCIO110 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


## SOCIO105 - Domestic Violence and Intervention Techniques

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


## SOCIO1 10 - Introduction to Sociology (IAI: S7 900)

3-0-3
(Prerequisite: eligibility for ENGL101) 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


## SOCIO125-Parenting

3-0-3
(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


## SOCIO130-Criminology (IAI: CRJ 912)

3-0-3
(Prerequisite: eligibility for ENGL101) 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


## SOCIO135 - The Study of Substance Abuse

3-0-3
(Prerequisite: eligibility for ENGL101) is the social-psychological study of the characteristics of substance abuse and the ramifications for society. 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/Psychology


## SOCIO141 - 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


## SOCIO142 - Social Services Field

 Experience1-10-3
(Prerequisite: Completion of SOCIO141 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


## SOCIO150 - Social Problems

## (IAI: S7 901, SOC 911)

(Prerequisite: SOCIO110) 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


## SOCIO200 - Marriage and the Family

(IAI: S7 902, SOC 912)
3-0-3
(Prerequisite: SOCIO110 or PSYCH110) 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


## SOCIO210 - Sociology of Deviant

Behavior (IAI: SOC 915)
3-0-3
(Prerequisite: SOCIO110) explores causes and forms of deviant behavior. Topics covered include juvenile delinquency, substance abuse and related problems, violent crime, white-collar crime, victimless crime, and mental illness. Major sociological research and theory are reviewed and 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


## SOCIO225 - Race, Class, and Gender

in the United States (IAI: SOC 913, S9 900)
(Prerequisite: SOCIO110) 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 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


## SOCIO293 - Service Learning Internship 1-10-1 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) is designed to provide students with opportunities to engage in their larger com-
munity 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

## SPAN101 - Beginning Spanish 1

4-0-4
integrates the acquisition of basic Spanish by the communicative approach employing cultural materials. Together with SPAN102, 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 25minute laboratory periods per week are required in addition to scheduled class hours. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and All Degrees
- Group Requirement - Humanities (AAS only)
- Area of Concentration - Foreign Language


## SPAN102 - Beginning Spanish 2

4-0-4
(Prerequisite: SPAN101 or five to 11 quality points for high school Spanish completed within the past five years) is a continuation of SPAN101. 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 only)
- Area of Concentration - Foreign Language


## SPAN1 10 - Spanish for Educators

4-0-4
(Prerequisite: Eligibility for ENGL101) designed for education majors or anyone involved in education, the course provides functional basics in understanding and speaking Spanish in the classroom. Vocabulary, grammar, and structures relevant to educational 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 - Education, Foreign Language


## SPAN111-Spanish for Healthcare Professionals

3-0-3
(Prerequisite: Eligibility for ENGL101) designed for healthcare professional majors, the course 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 only)
- Area of Concentration - Health Professions, Foreign Language


## SPAN198-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 only)
- Area of Concentration - Foreign Language


## SPAN201 - Intermediate Spanish 1

4-0-4
(Prerequisite: SPAN102 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 only)
- Area of Concentration - Foreign Language


## SPAN202 - Intermediate Spanish 2

## (IAI: H1 900)

4-0-4
(Prerequisite: SPAN201 or 15 or more quality points for high school Spanish completed within the past five years) is a school continuation of SPAN201, 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

## SPCH101 - Principles of Speech (IAI: C2 900) 2-2-3

(Prerequisite: eligibility for ENGL101) 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


## SPCH1 10 - Discussion and Group

 Conference (IAI: SPC 920)2-2-3
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 only)
- Area of Concentration - Speech and Drama


## SPCH120 - Business and Professional Speaking

2-2-3
develops and polishes the student's communication skills for business and professional use. Self-inventories 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 only)
- Area of Concentration - Speech and Drama


## SPCH140 - Forensic Activities (Repeatable) 0-2-1

(Prerequisite: SPCH101 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 only)
- Area of Concentration - Speech and Drama


## SPCH210 - Oral Interpretation of

 Literature (IAI: SPC 915, TA 916)2-2-3
(Prerequisite: SPCH101) emphasizes oral communication as a means of understanding, appreciating, and experiencing literature. Students learn theory and performance techniques through inclass 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


## SPCH230 - Readers' Theatre (Group Interpretation)

2-2-3
(Prerequisite: SPCH210 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 only)
- Area of Concentration - Speech and Drama


## SURGICAL TECHNOLOGY

## SURGT100-Surgical Technology Orientation 2-0-2

(Prerequisite: admission to Surgical Technology Certificate and/or AAS program, completion of or concurrent enrollment in BIOL220, ENGL101, HLTH140, 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 tech-
nology, 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 - Certificate, Degree
- Group Requirement - Not Applicable
- Area of Concentration - Surgical Technology


## SURGT101 - Surgical Technology I

4-6-6
(Prerequisite: SURGT100 or approval of the Surgical Technology Director; concurrent enrollment in or completion of BIOL201 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 - Certificate
- Group Requirement - Not Applicable
- Area of Concentration - Surgical Technology


## SURGT102-Surgical Technology II

4-9-7
(Prerequisite: SURGT101 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 - Certificate, Degree
- Group Requirement - Not Applicable
- Area of Concentration - Surgical Technology


## SURGT201 - Surgical Technology III

8-15-13
(Prerequisite: SURGT102 or approval of the Surgical Technology Director; concurrent enrollment in or completion of BIOL202 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 - Certificate, Degree
- Group Requirement - Not Applicable
- Area of Concentration - Surgical Technology

SURGT202 - Work Experience Practicum
2-21-9
(Prerequisite: SURGT201 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 - Certificate, Degree
- Group Requirement - Not Applicable
- Area of Concentration - Surgical Technology


## SURGT290 - 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

## CDL1 000 - 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## CDL1001 - 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## CDL1002 - CDL Refresher - 8 hours

.5-0-. 5
(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 an eight-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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## CDL1003 - CDL Refresher - 16 hours

(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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## CDL1 004 - 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 has 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## CDL1005 - 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## WELDING

## WELD100-Oxy-Acetylene and Plasma

 Arc Cuttingis 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


## WELD101-Shielded Metal Arc Welding

2-6-4
(Prerequisite. WELD100 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


## WELD102-Shielded Metal Arc Welding,

 Advanced0-8-4
(Prerequisite: WELD101 or equivalent competencies) is designed to prepare students to perform ASME code welds in the 2G, 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


## WELD190-Maintenance Welding

0-3-1. 5
(Prerequisite: WELD100 and WELD101 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

## WELD195 - 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: oxyacetylene 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 - Not Applicable


## WELD201- Gas Metal Arc and Flux Core

## Arc Welding

is designed to prepare students to perform ASME code welds in the $1-\mathrm{G}$ 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

WELD202 - Welder Certification
0-4-2
(Prerequisite. WELD102, WELD201 and WELD204 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


## WELD204 - Pipe Welding

0-8-4
(Prerequisite: WELD102 and WELD205 or equivalent competencies) allows students to develop the skills to weld pipe in 2-G, 5G , 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 Applicable


## WELD205-Gas Tungsten Arc Welding

0-6-3
(Prerequisite. WELD101 or equivalent competencies) is designed to prepare students to perform maintenance and production welding using the gas metal arc process. 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 Applicable



## ADULT EDUCATION COURSES

All Adult Education classes (ABE, ASE, ESL) may be repeated up to three (3) times.

## ADULT BASIC EDUCATION BEGINNING LEVEL

## ABEO10 - Basic Reading 1 <br> (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


## ABEO1 1 - 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


## ABEO12-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 4
is designed for adult readers with a reading level of 6-8.9 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 reading 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


## ABE022B - 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 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


## ABE022I - Self-Esteem for the Family <br> 1-0-1

is designed to give parents reading at the 6-8.9 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


## ABE025B - 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 dealing constructively 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 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


## ABEO25I - Behavior Management 1-0-1

is designed to give parents reading at the 6-8.9 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 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 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


## ABEO30B - Job Skills 1 (Variable Credit) $\quad \mathbf{1 - 0 . - 5}$ 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


## ABE0301 - 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


## ABEO31B - Job Skills 2 (Variable Credit) $\quad \mathbf{1 - 0 - .} 5$ 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


## ABEO31I - 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


## ABEO32B - 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


## ABE032I - Job Skills $\mathbf{3}$ (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


## ABEO40B - 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


## ABEO40I - 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 com-puter-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


## ABE075 - Pre-beginning General Educational Development (Variable Credit) <br> 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


## ABE076 - 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


## ABE077 - Pre General Educational

 Development 2 (Variable Credit) $\mathbf{4 - 0} .5$ to 4is 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


## ABE078-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

## ASE022A - Self-Esteem for the Family

is designed to give parents reading at or above the 9th 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


## ASE025A - Behavior Management

 1-0-1is designed to give parents reading at or above the 9th 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


## ASE030A - Job Skills 1 (Variable Credit) 1-0.. 5 to 4

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


## ASE031 A - Job Skills 2 (Variable Credit) 1-0-.5 to 4

is a course designed for adults reading at or above the 9th 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


## ASE032A - Job Skills 3 (Variable Credit) 1-0-. 5 to 4

is designed for adults reading at or above the 9th 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


## ASEO40A - GED Test Review Individualized

 Study (Variable Credit) 1-0-. 5 to 4is 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 (G.E.D.) 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


## ASE071 - Classroom Anxiety Reduction 1-0-1

provides instruction that will help reduce the effect of perform-ance-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


## ASE079 - General Educational

 Development 4 (Variable Credit) 4-0-. 5 to 4is 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

## ESL081 - 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


## ESL082 - 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


## ESL083 - 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


## ESLO84 - 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)

## ALS090A - Diagnostic Module for Reading, Writing

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


## ALSO90B - 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


## ALS091A - Proportions, Ratios, Decimals, and Percents

1-0-1
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


## ALS091B - Operations of Signed <br> Numbers and Combining Like Terms <br> 1-0-1 <br> 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


## ALS091C - 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


## ALS091D - Geometry of Plane Figures and Solids

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 MATH090 and MATH091. 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


## ALS091F - Operations of Fractions and Mixed Numbers

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


## ALS091G - 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


## ALS091H - Measurement Systems (English-Metric)

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


## ALS091I - 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


## ALS091 J - 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


## ALS091K - 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


## ALS091L - Solving Systems of Equations \& Inequalities <br> 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

ALS091M - 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

ALS091 N - 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


## ALS091P - 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


## ALS092A - Introduction to Word Processing for Composition Course

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


## ALS093A - ESL: Listening Preparation For The TOEFL: Short Conversation

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


## ALS093B - 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


## ALS093C - 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


## ALS093D - ESL: Listening Preparation For The TOEFL: Lectures/Talks <br> 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


## ALS093E - 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


## ALS093F - 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


## ALS093G - ESL: Preparation for TOEFL:

 Adjectives and Adverbsis 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


## ALSO93H - ESL: Preparation for 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


## ALS094A - 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 ENGL088. 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


## ALS094B - Study Skills I

1-0-1
is designed for students who want to improve in their study skills and habits in order to prepare for ENGL088. 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


## ALS094D - 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

ALS094E - 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


## ALS095A - 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


## ALS095B - Phrases and Clauses

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


## ALS095C - 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


## ALS095D - 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


## ALS097A - 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


## ALS097B - 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


## ALS097C - 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



## CORRECTIONAL EDUCATION DIVISION

 OCCUPATIONAL CERTIFICATE PROGRAMSThe 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 which 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

| courses |  | Cr. <br> Hrs. | Basic <br> Certificate |
| :--- | :--- | :---: | :---: |
| 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 |  |  |  |

## COURSE DESCRIPTIONS:

## DKEY 102 - Keyboarding

## .5-.5-2

This course 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

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DBSI 111 - Business Software Applications I .5-5-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DBCOM 112 - Business Communications 1-4-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DBSII 113 - Business Software Applications II .5-5-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DACCT 114 - Accounting

1.5-3-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DMKT 115 - Marketing

2.5-1-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DMGMT 116-Management

2.5-1-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DENTR 117 - Entrepreneurship

1-4-3
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DBSI 118 - Business Software Applications III .5-5-3

This course introduces students to electronic database programs which 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 and 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 which 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

| courses |  | Cr. <br> Hrs. | Basic <br> Certificate |
| :--- | :--- | :---: | :---: |
| DTMA 100: | Vocational-Technical Math | 3 | X |
| DCUST 120: | Introduction to Custodial Services | 3 | X |
| DCLEA 121: | General Cleaning Practices | 3 | X |
| DFLCA 122: | Hard Floor Care | 4 | X |
| DCARP 123: | Carpet and Upholstery Care | 4 | X |
| Total | $\mathbf{1 7}$ |  |  |

$\mathrm{X}=$ Required

## COURSE DESCRIPTIONS:

## DCUST120 - Introduction to Custodial

 ServicesThis course 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


## DCLEA121-General Cleaning Practices 1-4-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DFLCA122 - Hard Floor Care

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCARP123 - Carpet and Upholstery Care 1-6-4

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## COMPUTER TECHNOLOGY

The Computer Technology Basic Certificate is planned to provide educational experiences which 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 Advanced Certificate is planned to provide educational experiences which 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.

## BASIC OR ADVANCED CERTIFICATE REQUIREMENTS -

 ICCB CODE 4004| BASIC CERTIFICATE COURSES | Cr. <br> Hrs. | Basic <br> Certificate |
| :--- | :---: | :---: |
| DTMA 100: Vocational-Technical Math | 3 | X |
| DCTEC 101: Introduction to Computer Technology | 3 | X |
| DKEY 102: Keyboarding | 2 | X |
| DOPSY 103: Introduction to Operating Systems | 3 | X |
| DWP 104: Word Processing Software Aps | 3 | X |
| DSSHT 105: Spreadsheet Software Applications | 3 | X |
| DDBAS 106: Data Base Software Applications | 3 | X |
| DIPS 107: Intro to Presentation Software Aps | 3 | X |
| DHTML108: Introduction to HTML | 2 | X |
| Total | $\mathbf{2 5}$ |  |
|  |  |  |
| ADVANCED CERTIFICATE COURSES | Cr. | Advanced |
| In addition to the Basic Certificate requirements | Hrs. | Certificate |
| DCLPS 107: Computer Logic and Problem Solving | 4 | X |
| DVB 108: $\quad$ Introduction to Visual Basic | 4 | X |
| DIN 109: $\quad$ Introduction to Networking | 3 | X |
| DISAD 110: Into to System Analysis and Design | 3 | X |
| $\quad$ Subtotal | $\mathbf{1 4}$ |  |
| $\quad$ Total | $\mathbf{3 9}$ |  |

$\mathrm{X}=$ Required

## COURSE DESCRIPTIONS:

## DCTEC101 - Introduction to Computer Technology

This course will familiarize the students with the basic computer technology, fundamentals, employability skills, input/output devices, hardware/software components, terms, and peripherals.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DKEY102-Keyboarding

This course 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


## DOPSY 103 - Introduction of Operating Systems

.5-5-3
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DWP104 - Word Processing Software

 ApplicationsThis course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DSSHT105 - Spreadsheet Software

 ApplicationsThis course allows students to set-up a spreadsheet, enter data, modify a spreadsheet, edit, use a spreadsheet to manipulate data, create graphs, formulate reports, and write formulas.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DDBAS106 - Database Software Applications.5-5-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DIPS 107 - Introduction to Presentation Software Applications

.5-5-3
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DHTML108 - Introduction to HTML

.5-3-2
This course introduces the student to the basic HTML concepts as well as screen design techniques and applications. The course also includes creating tables, maps, images and forms, as well as making interesting and functional Web pages for publishing.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCLPS107 - Computer Logic and Problem Solving

2-4-4
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DVB108-Introduction to Visual Basic

(Prerequisite: DCLPS107 or equivalent competencies) This course 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 eventdriven programs.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DIN109 - Introduction to Networking

This course provides an introduction to setting up a network of personal computers, how to plan a network installation, and what a network can and cannot do.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DISAD1 10 - Introduction to System Analysis and Design

 3-0-3This course provides an examination of data systems, data flow, systems study, file design and processing, and selection. The tools and techniques of systems design are presented. Students will develop problem solving skills and a working knowledge of when and how to develop computer systems.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## CONSTRUCTION OCCUPATIONS

The Construction Occupations Certificate is planned to provide educational experiences which 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

| COURSES | Cr. <br> Hrs. | Basic <br> Certificate |
| :--- | :---: | :---: |
| DTMA 100: Vocational-Technical Math | 3 | X |
| DCON 100: Intro to Construction Occupations | 4 | X |
| DCON 105: Blueprint Reading | 4 | X |
| DCON 110: Basic Masonry and Concrete Finishing | 4 | X |
| DCON 115: Basic Carpentry I | 4 | X |
| DCON 120: Basic Carpentry II | 4 | X |
| DCON 125: Basic Plumbing | 4 | X |
| DCON 130: Residential Wiring | 4 | X |
| DCON 135: Painting and Finishing | 3 | X |
| Total | $\mathbf{3 4}$ |  |

X $=$ Required

## COURSE DESCRIPTIONS:

DCON 100 - Introduction to Construction Occupations

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCON 105 - Blueprint Reading

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCON 110 - Basic Masonry and Concrete Finishing

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCON 115 - Basic Carpentry I

.5-7-4
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCON 120 - Basic Carpentry II

.5-7-4
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCON 125 - Basic Plumbing

This course introduces basic plumbing knowledge and skills utilized in the construction industry.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCON 130 - Residential Wiring

.5-7-4
This course introduces basic electrical knowledge and skills utilized in residential wiring applications.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCON 135 - Painting and Finishing

1-4-3
This course 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## FOOD SERVICE TECHNOLOGY

The Food Service Certificate is planned to provide educational experiences which 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

| COURSES | Cr. <br> Hrs. | Basic <br> Certificate |  |
| :--- | :--- | :---: | :---: |
| DTMA 100: | Vocational-Technical Math | 3 | X |
| DFOOD 130: | Introduction to Food Service | 3 | X |
| DSANI 131: | Sanitation and Safety | 3 | X |
| DFPRE 132: | Food Preparation Methods | 3 | X |
| DBAKI 140: | Baking I | 3 | X |
| DBAK 133: | Baking II | 4 | X |
| DPROD 134: Produce Preparation | 3 | X |  |
| DMEAT 135: | Meat, Poultry and Fish Preparation | 4 | X |
| DSSS 136: | Stock, Soup and Sauce Preparation | 3 | X |


\section*{| DFP 137: | Food Presentation | 2 | X |
| :--- | :--- | :---: | :---: |
| DCFS 138: | Careers in Food Service | 1 | X |
|  | Total | $\mathbf{3 2}$ |  |}

$\mathrm{X}=$ Required

## COURSE DESCRIPTIONS:

## DFOOD130-Introduction to Food Service

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

DSANII31 - Sanitation and Safety
This course prepares students to take and pass the Illinois State Sanitation Exam. The development of safe and sanitary working habits needed by each food service worker is stressed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DFPRE132-Food Preparation Methods

(Prerequisite: DFOOD130) This course provides an introduction to food preparation and covers skills involved in preparing breakfast foods, sandwiches, starch products, eggs and dairy items.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DBAKI140 - Baking I

(Prerequisite: DFPRE132) This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DBAK133-Baking II

.5-7-4
(Prerequisite: DBAKI140) This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DPROD 134 - Produce Preparation

(Prerequisite: DFPRE132) This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DMEAT135-Meat, Poultry, and Fish Preparation

2-4-4
(Prerequisite: DFPRE132) This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DSSS136-Stock, Soup, and Sauce Preparation

(Prerequisite: DFPRE132) This course teaches the student to prepare and use stocks, soups, and sauces.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DFP137 - Food Presentation

1-2-2
(Prerequisite: DFPRE132) This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DCFS138-Careers in Food Service

1-0-1
This course prepares students to seek job opportunities in the food service industry.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## HORTICULTURE

The Horticulture Certificate is planned to provide educational experiences which 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

| COURSES |  | Cr. <br> Hrs. | Basic <br> Certificate |
| :--- | :--- | :---: | :---: |
| 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 | X |
| DLPM 148: | Landscape Plant Maintenance | 3 | X |
|  | Total | $\mathbf{3 2}$ |  |
| $\mathrm{X}=$ Required |  |  |  |

## COURSE DESCRIPTIONS:

## DHRT 140 - Introduction to Horticulture

2-2-3
This course will acquaint 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DSOIL 141 - Soils

1.5-1-2

This course will give 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

DPEST 142 - Pest Control
2-2-3
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable



## DGRHS 143-Greenhouse Operations

1-6-4
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DTURF 144 - Turfgrass Management

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DNURS 145 - Nursery Operations

1.5-3-3

This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DLPI 146 - Landscape Plant Identification

This course will introduce the 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DLDI 147 - Landscape Design and Installation

.5-7-4
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## DLPM 148 - Landscape Plant Maintenance

2-2-3
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## COLLEGE GENERAL STUDIES

DTMA100 - Vocational-Technical Math
3-0-3
This course 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 and ALS Degree
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable


## ETC100 - Education-To-Careers Seminar

3-0-3
This course 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 and ALS

Degrees

- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable




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[^0]:    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

    * All General Education Group Requirement courses must be approved IAI courses.

[^1]:    X = Required

    * = Take this course if you plan to attend a four-year university.

[^2]:    $\mathrm{X}=$ Required
    $\mathrm{Y}=$ Directed Elective; select as desired.

[^3]:    * Verify transferability of this course with a specific school. Courses in major may or may not be transferable.

