



## 2012 – 2013 Course Catalog

Community College District 537

One College Park | Decatur, Illinois 62521  
Telephone: (217) 875-7200

Switchboard Hours:  
Monday – Thursday | 7:30 a.m. – 9:30 p.m.  
Friday | 7:30 a.m. – 5:00 p.m.

[www.richland.edu](http://www.richland.edu)

E-mail Address:  
[rcchelp@richland.edu](mailto:rcchelp@richland.edu)

Campus tours available

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

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Richland Community College policy prohibits discrimination on the basis of race, color, religion, sex, marital or parental status, national origin or ancestry, age, mental and/or physical disabilities (except where they are bona fide occupational qualifications), sexual orientation, gender identity, military or veteran status, or other legally protected characteristics or conduct.

The College's nondiscrimination 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 alleging violations of this policy should be immediately reported to the Equal Employment Opportunity Commission (EEOC) Officer, as designated by the President. Complaints reported to the EEOC Officer shall be resolved within the College grievance resolution process.



# Table of Contents

<b>About Richland Community College .....</b>	<b>6</b>	<b>Campus Life .....</b>	<b>27</b>
College Calendar .....	6	Campus Life Program .....	27
Introduction to Richland .....	7	Clubs and Organizations .....	27
Governance .....	7	Student Policies and Procedures .....	28
Accreditation .....	7	Students Rights and Responsibilities .....	29
Recognition .....	7	Student Grievance Policy .....	30
Statement of Purpose .....	7	Student Conduct Policy .....	30
College Vision .....	7	Initiation of Grievance or Disciplinary Proceedings .....	31
College Mission .....	8	Academic Integrity Policy .....	31
Ethics and Leadership .....	8	Removal from a Class or the College .....	31
The Tenets of Community College Trusteeship .....	8	Chronic Communicable Disease Policy .....	31
Core Values and Tenets for Richland Community College Employees .....	9	Substance Abuse – Intoxicant Use .....	32
Facilities .....	10	Possession of Weapons Policy .....	32
		Responsible Use of Information Technology Policy .....	32
		Sexual and Other Harassment .....	33
		Tobacco Policy .....	33
<b>Admissions .....</b>	<b>11</b>	<b>Community Outreach .....</b>	<b>34</b>
Admission to the College .....	11	Adult Education and GED Preparation .....	34
GED Placement Program .....	11	English as a Second Language Program .....	34
Admission to a Program or Course .....	11	Project READ .....	34
Admission to a Program of Study .....	11	Richland Foundation .....	34
Selective Admission to Health Professions Programs .....	11	Alumni and Friends Association .....	34
Credit Equivalency by Licensure or Certification .....	12	Continuing and Professional Education .....	34
Minimum Subject Admission of High School Req. – Transfer Programs .....	12	Creative Center for Learning .....	34
Transfer of College Credit to Richland .....	12	Richland Discover .....	35
Admission of High School Students .....	12	Fitness Center .....	35
Dual Credit .....	12	Off-Campus Programming .....	35
Registration .....	13		
Credit Evaluation Programs .....	13	<b>Academic Information and Regulations .....</b>	<b>36</b>
Course Placement .....	15	Student Status and Classification .....	36
Course Placement Testing .....	15	Full-Time Academic Load .....	36
		Study Time Required .....	36
<b>Financial Information .....</b>	<b>16</b>	Academic Standards .....	36
Tuition, Fees, and Charges .....	16	Health Professions GPA Requirements .....	36
Fees .....	16	Grading Policy .....	37
Payment Information .....	16	Grade Point Average Calculation .....	37
Tuition Payment Plan .....	16	Semester Academic Honors .....	37
Tuition Discount for Senior Citizens .....	16	Appealing a Grade .....	37
Proficiency Examination .....	16	Alternative Delivery of Instruction .....	37
Transcripts .....	16	Methods of Online Instruction .....	38
Refund Policy .....	17	Other Instruction Options .....	38
Residency .....	17	Degree Audit .....	38
Cooperative Agreements .....	17	Dropping a Course .....	38
Charge-Back Authorization .....	17	Repeating a Course .....	38
Financial Aid .....	17	Class Attendance .....	39
Grants .....	18	Changing Program of Study .....	39
Scholarships .....	18	Graduation .....	40
Student Employment .....	19	Transfer of Credits to Other Colleges .....	41
Loans .....	19	Illinois Articulation Initiative .....	41
Standards of Academic Progress for Financial Aid Recipients .....	19	Guarantee of Transfer of Credit .....	41
Veterans' Affairs .....	21		
<b>Student and Academic Support Services .....</b>	<b>22</b>	<b>Instructional Programs .....</b>	<b>42</b>
Academic Advisement .....	22	Programs of Study .....	42
Academic Success Center/Accommodations .....	22	Cooperative Educational Programs with Other Community Colleges .....	43
Academic Success Center/ Testing .....	22	Certified Programs .....	43
Academic Success Center/ Tutoring .....	22	Baccalaureate/Transfer Programs .....	44
The Adele P. Glenn Academy for Early Childhood Education .....	22	Associate in Arts (AA) .....	44
Campus Safety .....	22	Associate in Arts (AA) Degree Transfer Guide .....	45
Career Services .....	22	Associate in Science (AS) Degree .....	46
Child Development Center .....	22	Associate in Science (AS) Degree Transfer Guide .....	47
Counseling Services .....	22	Associate in Liberal Studies (ALS) .....	48
Honors Opportunities Program .....	22	Associate in Liberal Studies (ALS) Degree Transfer Guide .....	49
International Studies .....	23	Associate in Fine Arts (AFA) Degree .....	50
Internships .....	23	Associate in Fine Arts (AFA) Degree Transfer Guide .....	51
Kitty Lindsay Learning Resources Center (Library) .....	24	Associate in Engineering Science (AES) .....	52
Mathematics Enrichment Center .....	24	Associate in Engineering Science (AES) Degree Transfer Guide .....	53
myRichland .....	24	Associate of Arts in Teaching (AAT) .....	54
Off-Campus Centers .....	24	Associate of Arts in Teaching – Early Childhood Education Program .....	54
Online Learning Support .....	24	Early Childhood Education (AAT) Degree Transfer Guide .....	55
Orientation .....	24	Associate of Arts in Teaching – Secondary Mathematics Program .....	56
Parking .....	25	Secondary Mathematics (AAT) Degree Transfer Guide .....	57
Perkins Program .....	25	Associate of Arts in Teaching – Special Education Program .....	58
Self-Registration .....	25	Special Education (AAT) Degree Transfer Guide .....	59
Student Employment .....	25	Areas of Concentration Suggestions for Baccalaureate/Transfer Programs .....	60
Student IDs .....	25	Articulated 2+2 Degree Programs .....	61
Student Success .....	25	Guaranteed Transfer Agreement .....	62
Student Support Services/TRIO .....	26	Career and Technical Education Programs .....	62
Success.net .....	26	Graduation Requirements .....	62
Transfer Center .....	26	Course Prerequisites .....	62
		Course Sequences .....	62
		Group/General Education .....	63



Career and Technical Education Program Degree Requirements.....	63	Arabic .....	174
Accounting .....	64	Art .....	174
Agribusiness & Agriculture .....	66	Astronomy.....	178
Automotive Technology .....	68	Automotive Technology.....	178
Business .....	70	Biology .....	179
Business – Banking Specialty.....	70	Building Construction .....	180
Business – Human Resources Specialty .....	72	Business .....	180
Business – Management Specialty .....	74	Career Planning and Development .....	183
Business – Marketing Specialty .....	76	Chemistry.....	183
Child Care and Education (See Early Childhood Education).....	78	Chinese.....	184
Computer Integrated Manufacturing (See Engineering Technology).....	78	Communication (Formerly Speech) .....	184
Computer Science .....	78	Computer Information Systems .....	185
Criminal Justice.....	78	Computer Science .....	185
Criminal Justice – Corrections .....	80	Criminal Justice.....	186
Culinary Arts.....	82	Culinary Arts.....	187
Desktop Support Technician (See Information Technology) .....	84	Dance .....	188
Drafting & Design Engineering.....	84	Drafting .....	188
Early Childhood Education .....	86	Early Childhood Education.....	190
Education .....	88	Earth Science.....	191
Paraprofessional Education .....	88	Economics .....	191
Electrician .....	90	Education .....	192
Electronics Systems (See Engineering Technology).....	90	Electronics .....	193
Emergency Medical Services.....	90	Emergency Medical Technology .....	194
Energy Distribution .....	92	Energy Distribution .....	195
Engineering Technology .....	92	Engineering.....	198
Engineering Technology – Biofuels Technician .....	92	Engineering Technology.....	198
Engineering Technology – BioProcess Operator .....	94	English .....	203
Engineering Technology – CNC Technology Specialty .....	96	Fire Science.....	205
Engineering Technology – Electrical Systems Specialty.....	98	French .....	207
Engineering Technology – Facilities Maintenance Specialty .....	100	German .....	207
Engineering Technology – Fluid Power Systems Specialty .....	102	Health .....	207
Engineering Technology – Instrumentation Systems Specialty.....	104	Health Information Technology .....	208
Engineering Technology – Machine Repair Specialty.....	106	Heating, Ventilation, Air Conditioning & Refrigeration.....	209
Engineering Technology – Manufacturing Engineering Technology Spec. ....	108	History .....	211
Engineering Technology – Mechanical Systems Specialty .....	110	Horticulture.....	212
Engineering Technology – Renewable Energy Specialty.....	112	Hospitality Management .....	213
Engineering Technology – Sequestration Specialty .....	114	Humanities.....	213
Engineering Technology – Wind Energy Systems Specialty.....	116	Information Technology.....	214
Fire Science.....	118	Journalism.....	217
Graphic Arts .....	120	Leadership .....	217
Health Information Technology .....	122	Leadership Development .....	217
Heating, Ventilation, Air Conditioning & Refrigeration .....	124	Mathematics.....	218
Horticulture.....	126	Music .....	220
Hospitality Management .....	128	Nursing.....	222
Information Technology .....	130	Office Technology .....	223
Desktop Support Technician .....	130	Personal Development.....	225
Network Technology.....	132	Personnel Relations.....	226
Programmer/Analyst .....	134	Pharmacy Technology .....	226
Machine Tool Processes (See Engineering Technology).....	136	Philosophy .....	227
Medical Office Specialist (See Office Technology).....	136	Physical Education.....	227
Network Technology (See Information Technology).....	136	Physical Science .....	228
Nursing – Nurse Assistant.....	136	Physics.....	228
Practical Nursing.....	138	Political Science.....	229
Associate Degree Nursing .....	140	Power Generation.....	229
LPN Bridge to ADN .....	142	Practical Nursing.....	230
Office Technology .....	144	Psychology.....	231
Administrative Assistant .....	144	Radiography.....	232
Administrative Assistant – Accounting Specialty.....	144	Sequestration.....	234
Administrative Assistant – General Specialty.....	146	Service Learning .....	234
Administrative Assistant – Legal Office Specialty .....	148	Sign Language.....	234
Medical Office Specialist.....	150	Social Science .....	234
Medical Office Specialist – General Specialty .....	150	Sociology .....	235
Medical Office Specialist – Coding Specialty.....	152	Spanish .....	236
Medical Office Specialist – Transcription Specialty.....	154	Surgical Technology .....	237
Pharmacy Technology.....	156	Theatre (Formerly Drama) .....	239
Power Generation – Nuclear.....	158	Transportation .....	239
Programmer/Analyst (See Information Technology) .....	160	Welding.....	240
Radiography .....	160	Adult Education Courses .....	242
Surgical Technology .....	162	English as a Second Language .....	242
Teacher Assistant (See Paraprofessional Education) .....	166	Correctional Education Programs Division .....	242
Transportation.....	166	Commercial Custodial Services .....	243
Welding Technology.....	166	Construction Occupations.....	243
Guarantee for Technical Competency.....	168	Food Service Technology.....	244
		Horticulture.....	244
		College General Studies .....	245
<b>Instructional Programs – General.....</b>	<b>169</b>		
General Programs.....	169	<b>Administration, Faculty, and Staff .....</b>	<b>246</b>
Course Responsibilities .....	171	Professor Emeritus .....	249
Applicability of Course to Program.....	171	Staff Emeritus .....	249
Course Titles, Hours, and Credit.....	171		
Key to Course Descriptions .....	171		
<b>Course Descriptions .....</b>	<b>172</b>	<b>Index .....</b>	<b>250</b>
Accounting .....	172	<b>Campus Maps .....</b>	<b>253</b>
African American Studies.....	172		
Agriculture.....	173		
Anthropology.....	174		



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# Welcome to Richland Community College!



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

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

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

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

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

Sincerely,

Dr. Gayle M. Saunders  
President



# College Calendar

(Subject to change)

## SUMMER 2012

June 4	M	Classes Begin
June 28	Th	Midterm
July 4	W	Independence Day (College Closed)
July 24	Tu	Last Day for Withdrawal with "W" for 8-Week Classes*
July 25-26	W-Th	Finals
July 30	M	Grades Due by 11:00 a.m.

\* For all other classes, contact the Registrar at registrar@richland.edu, for alternate withdrawal dates.

## FALL 2012

Aug. 20	M	Classes Begin
Aug. 25	S	Saturday Classes Begin
Sept. 3	M	Labor Day (College Closed)
Oct. 8	M	Columbus Day Observance (College Closed)
Oct. 12	T	Midterm
Nov. 12	F	Veterans Day (College Closed)
Nov. 21	W	College Closed after 5 p.m.
Nov. 22-24	Th-S	Thanksgiving (College Closed)
Dec. 7	T	Last Day for Withdrawal with "W" for 16-Week Classes*
Dec. 8	S	Saturday Final Exams
Dec. 10-13	M-Th	Final Exams
Dec. 17	M	Grades Due by 11:00 a.m.
Dec. 24-31		Holiday Break

\* For all other classes, contact the Registrar at registrar@richland.edu, for alternate withdrawal dates.

## SPRING 2013

Jan. 1	T	New Year's Day (College Closed)
Jan. 2	W	Registration Resumes
Jan. 14	M	Classes Begin
Jan. 19	S	Saturday Classes Begin
Jan. 21	M	Martin Luther King, Jr., Day Observance (College Closed)
Feb. 18	M	Presidents Day (College Closed)
Feb. 26	T	Professional Development Day (College Closed)
Mar. 8	F	Midterm
Mar. 11-16	M-S	Spring Break (No Classes)
Mar. 29-30	F-S	Spring Holiday (College Closed)
May 10	F	Last Day for Withdrawal with "W" for 16-Week Classes*
May 11	S	Saturday Finals
May 13-16	M-Th	Final Exams
May 17	F	Graduation
May 20	M	Grades Due by 11:00 a.m.
May 27	M	Memorial Day (College Closed)

\* For all other classes, contact the Registrar at registrar@richland.edu, for alternate withdrawal dates.

## SUMMER 2013

June 3	M	Classes Begin
June 27	Th	Midterm
July 4	Th	Independence Day (College Closed)
July 23	Tu	Last Day for Withdrawal with "W" for 8-Week Classes*
July 24-25	W-Th	Finals
July 29	M	Grades Due by 11:00 a.m.

\* For all other classes, contact the Registrar at registrar@richland.edu, for alternate withdrawal dates.



## 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 40 years, that is what the College has done. The people of the District have benefited and prospered from the services the College has offered.

Since its founding, the basic purpose and mission have not dramatically changed. What have changed, however, are the scope of activities and the manner in which they occur. The 21st Century places demands on Richland that are far different than the demands in 1971. Today's new economy retains the elements of mass production but adds new standards for quality, variety, sustainability, innovation, 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 variety of ways to diverse people at ever-changing times and places. It must commit to assisting students in completing their educational goals.

Richland's faculty and staff 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 statement of purpose, mission, vision, and goals outline the blueprint, the plan, and the process by which Richland will meet the challenges of the 21st Century.

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

## 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.

## Accreditation

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

The Higher Learning Commission  
230 South LaSalle Street, Suite 7-500  
Chicago, IL 60604-1413  
(312) 263-0456

[www.ncahigherlearningcommission.org](http://www.ncahigherlearningcommission.org)

Richland earned its Reaffirmation of Accreditation from the Higher Learning Commission in Spring 2008. Accreditation has been extended to 2014-2015.

## Recognition

Richland Community College is recognized by the following organizations and agencies:

- Illinois Board of Higher Education
- Illinois Community College Board under the provision of the Community College Act
- Illinois State Board of Education
- University of the State of Illinois
- U.S. Department of Education
- Veterans' Administration
- Illinois Student Assistance Commission

## 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, sex, 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. The Vision Statement was reaffirmed by the Board of Trustees in April 2011.



## College Mission

The Board of Trustees adopted a new mission statement in February 2009:

The mission of Richland Community College is to provide innovative educational experiences, opportunities, and environments that enable individuals, communities, and the region to grow, thrive, and prosper. The Mission Statement was reaffirmed by the Board of Trustees in April 2011. 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 tenets to guide its leaders and managers. The Tenets of Community College Trusteeship, prepared at the request of the Board of Trustees, provide a framework for good trusteeship. The tenets were adopted by the Board of Trustees in March 1990 and reaffirmed in 2007. In 2008, the Board of Trustees amended the Tenets by adding Creating a Culture of Sustainability.

Also in 1989, an Administrator's Creed was developed to establish a viewpoint, framework, and tone from which the College's leaders would lead. The Administrator's Creed was reviewed in 2008; at that time, the Values and Tenets for Richland Community College Employees, utilizing the College's Core Values, definitions, and affirmation statements, replaced the Administrator's Creed.

## 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 commitment requires the devotion of time, thought, energy, effort, and ability whenever needed.

### About Creating a Culture of Sustainability

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

### About Distinction

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

### About Evaluation

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

### About Power

Power rests mostly with the Board of Trustees 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.





# Core Values and Tenets for Richland Community College Employees

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. At Richland Community College, these values are embodied in our Core Values, which were adopted by the Board of Trustees in 2003. In 2008, the Core Values replaced the Administrator's Creed. The Core Values were reaffirmed by the Board of Trustees In April 2011.

These Core Values serve as the guiding principles for Richland Community College and its employees.

## Commitment

We are dedicated to meeting the needs of the communities we serve.

I/We will

- Strive and maintain a quality educational experience.
- Support the mission and vision of the College.
- Focus on student and stakeholder needs.
- Respond to the changing needs of our communities in a timely manner.
- Create new programs and services to meet identified needs.
- Continuously evaluate and improve programs, services, systems, and policies.
- Utilize a shared decision-making process.

## Respect

We recognize the expertise of all members of the College community and encourage individual contributions.

I/We will

- Include stakeholders in the decisions that affect them.
- Treat people with dignity and encourage feelings of self-worth.
- Promote trust through truthfulness, professional courtesy, and fair treatment.
- Recognize and support employee and student contributions.
- Demonstrate faith in and reliance on the integrity and abilities of others.

## Excellence

We strive to develop and pursue higher standards.

I/We will

- Exhibit quality in staffing, facilities, programs, and services.
- Promote continuous improvement.
- Anticipate needs and respond accordingly.
- Encourage creativity and innovation.
- Utilize systems that promote student and employee success.
- Exceed student and stakeholder expectations.
- Encourage decision-making at the level of implementation.
- Encourage interdepartmental collaboration.
- Support risk-taking and view setbacks as learning experiences.

## Accountability

We assume and demonstrate responsibility for our actions.

I/We will

- Take responsibility for personal and professional growth and development.
- Continuously evaluate and improve our systems and policies.
- Establish and communicate clearly defined and articulated goals and objectives.
- Establish and communicate clearly the standards and expectations of staff.
- Ensure our work adds value to the College and District.
- Demonstrate fiscal and social responsibility.

## Diversity

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

I/We will

- Employ a College workforce that reflects the community we serve.
- Ensure fair and equal access for all.
- Recognize, appreciate, and celebrate the strength of diversity.
- Provide educational experiences that promote a greater appreciation for diversity.
- Implement learning activities that integrate diversity topics in the classroom.
- Seek and consider multiple points of view.



## 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 other locations 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-square foot facility houses 44 classrooms and 25 laboratories, located on a site of 155 acres.

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

The Shilling Community Education Center was made possible by a \$750,000 bequest from the Shilling Trust administered by the Main Street Bank and Trust. Construction on the 44,607-square foot 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 public and business use for meetings, programs, performances, and other events.

Richland's Fitness Center, relocated in Spring 2008, 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.

The Kitty Lindsay Learning Resources Center (Library), located next to the Mueller Student Center, provides a variety of resource materials, wi-fi access, and computers and a professional staff trained to help students locate and use materials.

The Richland Bookstore, operated by Validis Resources, a division of Nebraska Book Company, is located next to the Mueller Student Center. It carries textbooks and materials for all Richland courses and a variety of school supplies. VISA, MasterCard, and Discover are accepted by the Bookstore. The Bookstore can be contacted at (217) 875-7211, Ext. 231.

The Richland Coffee House, opened in September 2011, is a student-operated laboratory for the Culinary Arts Institute. The Coffee House offers beverages and pastries produced by students. With advance notice, beverages and pastries may be purchased for groups on campus. Contact the Workforce Development Division, (217) 875-7211, Ext. 740, for more information.

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

The Schrodtt 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-square foot wing, dedicated in January 2003.

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

A variety of fast foods, drinks, and daily specials may be purchased from the Prairie Grill, located 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 Library, 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 Veterans' Affairs, Student Records, and Career and Transfer Services are housed in the area next to the Mueller Student Center.

Located north of the Main Campus, the Center for Sustainability and Innovation is a facility designed and constructed to achieve the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) platinum designation. The facility is a full demonstration of sustainable building technologies and methodologies that reduce Richland's carbon footprint. The University of Illinois Extension is located on the first floor. The second floor is home to Richland's Innovations Lab. The Lab's unique learning environment supports applications of innovative thinking, entrepreneurial exploration and discovery, and creative problem solving.

The wind turbine is the sole source of electrical power for the Center for Sustainability and Innovation. It is Richland Community College's innovation signature and is iconic for the College's campus and new programs as well as serving as the gateway to the Agribusiness Applied Technology Park. Standing at 125 feet high and resting on a 10-foot round base of concrete poured 16 feet into the earth, the Northwind 100 wind turbine is the first on any Illinois community college campus. The tower was installed in 3 sections each weighing 13,000 pounds. Each of the three blades weighs 850 pounds. The wind turbine will generate approximately 200,000 kwh per year.

Ground was broken on the National Sequestration Education Center in July 2011. This facility, funded through a grant from the U.S. Department of Energy, will be a training and demonstration site for a joint project of the U.S. Department of Energy, the Illinois Geological Survey, Archer Daniels Midland Co., and Richland Community College. The opening of the facility is scheduled for summer 2012.

### Off-campus Facilities

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 (217) 423-7323.

The Clinton Extension Center offers admissions, advising, registration, placement testing, virtual testing, financial aid, and many other services. Credit classes, non-credit workshops, and General Educational Development (GED) classes are scheduled in Clinton and other communities throughout the Richland District. General Educational Development (GED) classes are also provided. The Clinton Extension Center is located in Clinton at Clinton High School (northeast entrance), 1200 Highway 54 West. Call (217) 935-6791 for additional information.

The Fairview Park Plaza Center, located in the Fairview Park Plaza, 1485 W. King Street, Decatur, opened in January 2009. Credit classes and non-credit workshops are offered, as well as general College admissions services. Call (217) 462-0480 for additional information.

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



## 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. Intend to enroll in a GED course, or
4. Are high school or gifted students who have principal/administrator approval to enroll.

Students enrolling at Richland Community College are required to submit all transcripts. High school and college transcripts should be sent directly from the appropriate schools to Richland's Student Records Office. Transcripts hand-delivered to the Student Services Center will only be accepted in a sealed, tamper-free envelope from the institution.

## 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, Fire Science, Horticulture, Nursing, Associate of Arts in Teaching) has specific requirements for admission. These requirements are based on the student's previous education, work experience, and levels of achievement. See "Programs of Study" on page 42 for complete list of prerequisites for each program. Information that may be used in admission to a program includes

1. A transcript of the student's high school and college records. The student should request a transcript from the school(s) to be sent to the Student Records Office at Richland. High school seniors applying for admission should also include a list of courses in progress. High school and college transcripts should be sent directly from the appropriate schools to Richland's Student Records Office. Transcripts hand-delivered to the Student Services Center will only be accepted in a sealed, tamper-free envelope from the institution.
2. Test scores. Richland generally uses the American College Testing Assessment (ACT), Standardized Assessment.
3. Application and personal interview, including related experiences since leaving high school or college.

Students may be provisionally admitted to a program even though they fail to meet all the 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 apply to students enrolling in individual courses only.

## Selective Admission to Health Professions Programs

Students who wish to declare a major in some health professions programs must meet specialized criteria under the instructional program section of this [Catalog](#). Admission to some health programs is selective due to availability and limitations of practicum sites and limitations in the number of students who can be accommodated in clinical groups. The selective admissions procedures also apply to readmission students, advanced placement students, and transfer students. Admission to Richland Community College does not guarantee admission to selective admissions programs. The following programs require specialized admission:

- AAS Dental Hygiene – cooperative agreements with Lakeland Community College and Parkland College
- AAS Nursing
- AAS Occupational Therapy Assistant – cooperative agreement with Parkland Community College
- AAS Physical Therapy Assistant – cooperative agreement with Lakeland College
- AAS Radiography
- AAS Respiratory Care – cooperative agreement with Parkland College
- AAS Surgical Technology
- Certified Nurse Assistant Certificate
- Pharmacy Technology Certificate
- Practical Nursing Certificate

### Evaluation of Specialized Courses

Students who would like to request evaluation of specialized coursework from another college must obtain a Request for Evaluation of Specialty Credit Form from the Health Professions Office, submit a weekly outline for the completed course, and pay a fee for each course evaluated. Nursing course credit may be earned by students who wish to transfer core nursing courses from approved programs in the United States. Advanced placement into the ADN Program is possible based upon successful results of the HESI tests for the appropriate course and available space. All admission and graduation requirements must be met, and in order to graduate from Richland's ADN program, transfer students must complete a minimum of two semesters of core nursing courses at Richland. Interested students must complete a Richland Information Form and an Associate Degree Nursing Program Application for Transfer available at [www.richland.edu/health](http://www.richland.edu/health).

### 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.



## Credit Equivalency by Licensure or Certification

If a student has already obtained a recognized license or certification for which the College offers a technical curriculum, that student may be granted credit for specific courses in the program of study that he/she is pursuing. Approved credit will be posted to the student's record after a minimum of eight (8) semester hours of 100-level or above credit has been earned at the College and after any additional program requirements have been fulfilled.

## 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, [registrar@richland.edu](mailto:registrar@richland.edu).

## Transfer of College Credit to Richland

A student who has been officially accepted as a Richland Community College student may apply for and receive college credit for courses taken at a regionally accredited postsecondary institution, as recognized by the Higher Education Directory, and which meet the course objectives of his or her academic program required for graduation at Richland Community College.

Students who wish to transfer credit earned at another accredited college or university must request an official transcript from the college attended. The transcript should be sent directly from the college or university to Richland's Student Records Office. Transcripts hand-delivered to the Student Services Center will only be accepted in a sealed, tamper-free envelope from the institution. The student requesting a transfer of credit must pay any applicable transcript fees.

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

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

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

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

1. The student is a high school student.
2. The student's high school principal submits the appropriate form stating the student is taking the course(s) for high school, dual credit or college credit and has the principal's approval.
3. A high school transcript is submitted to Richland.
4. High school students must pay course tuition to Richland.
5. Both student and parent must complete the appropriate form.

Final approval for enrollment is then determined by Richland. College credit for classes taken by high school students will be held in escrow and awarded to the student upon completion of high school (as verified by an official high school transcript).

"Gifted" students are students with exceptionally high academic ability as determined by the student's high school and the College.

## Dual Credit

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

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



## Registration

Registration for classes at Richland takes place at scheduled times before the beginning of each semester. Class schedules, including a list of all courses offered and registration dates, are available both online and in printed format before the start of the term. Students must complete placement tests in the Testing Center, Room S116, prior to registration.

- Drop/Add registration is held the first week of classes and is limited to courses for which enrollment is not filled.
- Students may register for any course that has not begun if space is available and if the student is eligible.
- At the time of application, students are assigned an academic advisor based on the academic program chosen on their Admission Information Form. Students should meet with their assigned advisor to develop goals, receive advice on course selection each semester, and learn what information a student can access on myRichland, etc.
- Students must have their class schedules and fee forms approved by an academic advisor before registering.
- Students registering for one course only may register in the Student Services Center without seeing an advisor if that course does not have a prerequisite.
- Academic advisors are available during registration periods. Students are encouraged to register early.
- Under certain conditions students may register without seeing an 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. 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 AP examination given by the College Board. College credit granted through an APP examination will be recorded as "AP" and will not be used in computing a grade point average. Approved credit will be posted to the student's record after a minimum of eight (8) semester hours of 100-level or above credit has been earned at Richland. High school students interested in the Advanced Placement Program should contact their high school counselor.
2. **College Level Examination Program (CLEP) and DSST Prometrics Exam**  
Richland participates in the College Level Examination Program (CLEP) and the DSST Prometrics 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. DSST Prometrics exams are available in areas such as education, criminal justice, finance, business, and world religions. Credit through a CLEP or DSST Prometrics examination may be applied to a degree or certificate as general education or elective(s). No credit will be awarded for ENGL 102 or COMM 101 at Richland through either the CLEP or the DSST Prometrics Exam. Credit granted through a CLEP or DSST Prometrics examination will be recorded as credit and will not be used in computing a grade point average. Credit will be recorded after completion of eight (8) semester hours toward an associate's degree or certificate program. Students should check with the Registrar, registrar@richland.edu, to verify how CLEP will be applied. Students who have enrolled in college study before attempting a CLEP or DSST Prometrics examination will not be granted credit if they attempt an examination after they have received a grade for that specific course or for prior college study that is directly related to an exam taken. For more information or to register to take a CLEP or DSST Prometrics examination, contact the Testing Center, (217) 875-7211, Ext. 238, or the Academic Success Center, (217) 875-7211, 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 designated Richland Community College personnel and standards set by the College in those areas and courses deemed appropriate. To take an exam, 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 after a minimum of eight (8) semester hours of 100-level or above credit has been earned at the College. The credit is not included in the calculation of the grade point average and may not be used to establish enrollment status (i.e., full-time, part-time).



#### 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 Course	Proficiency Credit	Required Grade
CS 105	CIS 101	B
CS 281	CS 251	B
CIS 110	CIS 101	B
FREN202	FREN101, 102, 201	B
FREN201	FREN101 and 102	B
FREN102	FREN101	B
GERM202	GERM101, 102, 201	B
GERM201	GERM101 and 102	B
GERM102	GERM101	B
IT 116	CIS 101	B
IT 282	IT 153	B
MATH221	MATH 116, 117, 121 & 122	B
MATH122	MATH116, 117 & 121	B
MATH121	MATH116 and 117	B
NURS203	NURS112, 152, 155	
(if successful completion of HESI with 850 or greater)		C
OTK101	OTK 100	B
OT114	OTK 100	B
SPAN202	SPAN101, 102, 201	B
SPAN201	SPAN101 and 102	B
SPAN102	SPAN101	B
WELD102	WELD100 and 101	B

Students desiring credit by advanced course must apply officially for such credit within 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, students must obtain a "Required for Proficiency Credit by Advanced Course" form from the Student Services Center. 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. Contact the Registrar, registrar@richland.edu, for additional information.

#### 5. Armed Forces Health and Physical Education

Any veteran who has completed a minimum of six (6) 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 (4) semester hours of physical education activity course credit. Approved credit will not be used to compute a grade point average. Approved credit will be posted to the student's record after a minimum of eight (8) semester hours of 100-level or above credit has been earned at the College. Veterans may apply for credit by submitting a copy of their DD-214 or military transcript to the Student Records Office in the Student Services center.

#### 6. Credit for Military Service & Training

A student who has been officially accepted as a Richland Community College student may apply for and receive college credit for courses taken while serving in the military, if the courses meet the objectives of his/her academic program as required for graduation from Richland Community College. Consideration for the awarding of credit for military experience and training will be guided by the college credit recommendations developed by the American Council on Education. Approved credit will be posted to the student's record after a minimum of eight (8) semester hours of 100-level or above credit has been earned at the College. Contact the Registrar, registrar@richland.edu, for further information.

#### 7. Credit Equivalency for Professional Training

Academic course credit for professional training events in some disciplines and technical fields may be granted if the event is offered by Richland Community College and/or one or more of the College's training partners. A training partner is a professional organization or other authorized training provider recognized by the College. This partner ensures that the training meets predetermined standards. In some instances, training must be delivered by certified instructors as dictated by program/curricular requirements. The training must meet all objectives of the relevant course(s) in order to receive credit, as determined by faculty responsible for the content area. Approved credit will be posted to the student's record after a minimum of eight (8) semester hours of 100-level or above credit has been earned at Richland.

#### 8. Credit Equivalency for Professional Experience

Students with wide varieties of experience may develop a portfolio of these experiences and apply for course credit. A portfolio is a collection of documentation of learning, which may include samples of actual work, and is submitted for evaluation in consideration of course credit. The portfolio must meet all objectives of the course in order to receive credit, as determined by faculty responsible for the course. Approved credit will be posted to the student's record after a minimum of eight (8) semester hours of 100-level or above credit has been earned at the College. There is a fee associated with this option. A student interested in this credit should contact the Dean of the division responsible for the course.



## 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

Students are required to complete placement testing in English, mathematics, reading, health, and/or other areas in the Academic Success Center (Testing), Room S116, and/or at the Clinton Extension Center, and Fairview Park Plaza 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 for the mathematics and English sentence skills tests are on the College website at [www.richland.edu/testing](http://www.richland.edu/testing). Other review options are available by asking in the Academic Success Center (Tutoring), Room S118. Retesting for some placement tests for a fee is possible if a student meets certain guidelines. Placement testing results are valid for two calendar years. Once a student begins a sequence of courses based on the test results, the student may not retake the placement test in that area regardless of the amount of time that has elapsed since the course was started. If a student believes he or she is eligible for testing accommodations, the student should contact the Academic Success Center (Accommodations), Room C148, or call (217) 875-7211, Ext. 379, prior to taking any placement test(s).

### English-Reading

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

Students unsure about their placement into reading/writing courses should contact an academic advisor in the Student Services Center or the Dean of Communications, Education, Humanities and Fine Arts, Room C162.

### Foreign Language

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

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

### Mathematics

Some mathematics and science courses require prerequisites for enrollment. In some cases, students will be required to take a placement test in arithmetic, elementary algebra, or college mathematics. Students may also use ACT scores in mathematics to place in certain courses. Students seeking clarification regarding their math placement should see an academic advisor in the Student Services Center or the Dean of Mathematics and Sciences, 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.

Tuition, fees, and other charges are due and payable at designated times each registration session. The College reserves the right to change the rate of tuition, any fees, or any charge without notice.

### Residents of Richland Community College District (and Out-of-District Students with Charge-Back Authorization)

Per Credit Hour Tuition	\$96.00*
Academic/Technology Fee	\$5.00*
Total	\$101.00

### Tuition and Fees for Online Courses

Per Credit Hour Tuition	\$140.00*
Academic/Technology Fee	\$5.00*
Total	\$145.00

Students enrolling in courses offered via the Internet will pay \$140.00 per credit hour. This charge applies to all students; out-of-district and out-of-state tuition charges will be waived.

### Tuition and Fees for Associate Degree Nursing (In-District Students)

Per Credit Hour Tuition	\$115.00*
Academic/Technology Fee	\$5.00*
Total	\$120.00

**Out-of-District Students of Richland Community College pay \$231.00\* per credit hour plus fees.**

**Out-of-State and International Students pay \$363.33\* per credit hour plus fees.**

\* Subject to change with Board approval.

## Fees

Registration Fee (payable with tuition & fees) \$12.00

Course Fees may be required for certain course and programs to offset the costs of consumable supplies. The amount of the fee is listed in the Course Schedule, or a listing is available in the Business Services Offices, Room C129.

The Academic/Technology Fee includes the following services and privileges: use of the computer labs, both for computer-based classes and for open lab use; updated technology for students; and student enrichment programs, including student clubs and organizations, student handbooks, entertainment, and events.

### Health Professions Associate Degree Nursing Fees

Due to the cost of medical and surgical supplies and outcome testing used in some health professions courses, additional fees are required. All program fees are estimates subject to change. Program specific fees are available on the Health Profession's web pages, which can be accessed at [www.richland.edu/health](http://www.richland.edu/health).

## Payment Information

Full payment (100%) of tuition and fees is due approximately one week 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, Room C129. Students are not required to pay at the time of registration unless the date of registration is less than one week before the start of classes. A student payment plan 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 the Student Services Center and must be initiated by the student.

## Tuition Payment Plan

For students desiring additional time for payment, the College offers an online tuition payment plan through Nelnet Business Solutions. The 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.richland.edu/cashier/facts](http://www.richland.edu/cashier/facts). Informational brochures are also available at the cashier's window, Room C129.

## 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, (217) 875-7211, Ext. 227.

## Proficiency Examination

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 13 for information about the process of proficiency.

## Transcripts

Students order official transcripts electronically through their myRichland account or at [www.richland.edu/records](http://www.richland.edu/records). For questions, please contact [transcripts@richland.edu](mailto:transcripts@richland.edu).





## Refund Policy

Richland Community College's refund policy is based on full payment of tuition, fees, and other charges. 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 determined by the Business Services Office and posted in the Course Schedule and online.

All withdrawals and drops must be initiated by the student and must be processed through the Student Services Center to be eligible for a refund. Course fees and all other fees are non-refundable after classes begin.

### Regular Semester/Summer Term:

Prior to beginning of semester	100%
First nine days of classes	100%
After the first nine calendar days of classes	0%

### Non-traditional Session/Course:

Certain courses do not fall within the traditional session periods. Students must withdraw from the course prior to the first official meeting of the course to receive a refund.

Students receiving the Federal Pell Grant will receive refunds computed in accordance with Federal regulations.

## Residency

A student is considered a resident of Richland Community College District 537 if the student establishes a permanent residence in the District for at least 30 days prior to enrollment. The College is authorized to require such written documents, affidavits, verifications or other evidence as are deemed necessary to determine residency.

## Cooperative Agreements

Richland Community College has Cooperative Educational Program agreements with other Illinois community colleges that allow Richland District residents to enroll in a degree and/or certificate program in a vocational-technical program not available at Richland. Cooperative agreements between Richland Community College and the community colleges are listed on page 43. These agreements provide a student with the opportunity to attend another Illinois community college for programs not offered at Richland. 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. Cooperative agreement 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. 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 43. A cooperative agreement form 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 and in the Office of Student and Academic Services, Room W141, and at [www.richland.edu/academics/cooperative](http://www.richland.edu/academics/cooperative)

## 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 Vice President of Student and Academic Services, Room W141, no later than 30 days prior to the beginning of each academic year the student is attending the other community college, regardless of any prior year's approval. All charge-back applications must be approved by the Board of Trustees. Charge-backs will not be approved retroactive to the time of application.

Students are encouraged to contact the Office of Student and Academic Services, Room W141, (217) 875-7211, Ext. 292, 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 employed for less than 35 hours per week, the course must be work-related.

Applicants who are attending an educational institution located within the college district will be charged indistrict tuition. Verification of attendance will be required.

## 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, Room C129, from high school counselors, or at [www.fafsa.gov](http://www.fafsa.gov). Early application is important. The FAFSA is accepted until June 30 in the academic year.



## 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 students as required by the U.S. Department of Education. Any person required to register with the 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. Funding is based on state appropriation.

### 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 and provide proof of Illinois residency. Application should be made early for consideration. Students at the community college level are allowed up to 75 MAP paid credits.

## Scholarships

### Merit Recognition Scholarship

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

### Illinois National Guard Grant (ING)

Funds are available to enlistees and officers to the rank of captain in either of these services for the equivalent of eight (8) semesters or twelve (12) quarters of undergraduate study. The award pays tuition and certain fees. Eligible students should apply at [www.collegeillinois.org](http://www.collegeillinois.org). 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. Veterans must inform the Financial Aid and Veterans' Affairs Office that they want to use ING each semester.

### Policeman/Fireman Grant

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.collegeillinois.org](http://www.collegeillinois.org).

### Correctional Workers' Grant

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.collegeillinois.org](http://www.collegeillinois.org).

### 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 (10) years from the effective date of the veterans' eligibility. The scholarship may be used for twelve (12) years from the initial term of study. For additional information, please contact the Financial Aid Office, Room C129.

### Illinois Veteran Grant (IVG)

The IVG pays the cost of tuition and certain fees for veterans who were residents of Illinois before military service and who returned to Illinois within six (6) months after discharge from service. Anyone who served honorably in the U.S. Armed Forces may be entitled, subject to the following requirements: any veteran who was separated after August 11, 1967, must have served at least one year or have been separated for a disability directly related to such service. The grant may be used for a maximum of 120 semester hours. IVG recipients must meet the Standards of Academic Progress for Financial Aid Recipients. Applications are available in the Financial Aid Office, in the Student Services Center, Room C129, and at [www.collegeillinois.org](http://www.collegeillinois.org). Veterans must inform the Financial Aid and Veterans' Affairs Office that they want to use IVG each semester.

### Department of Human Services Program

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

### Richland Foundation, Private, and Institutional Scholarships

Richland Community College Foundation offers hundreds of scholarships to students at Richland Community College. Scholarships are available for both full-time and part-time students. Some are need-based, while others are based on GPA, merit, declared major, or other criteria.

Students who wish to be considered for a Richland scholarship must first complete the Free Application for Federal Student Aid (FAFSA) @ [www.FAFSA.gov](http://www.FAFSA.gov). The online scholarship application is available in My Richland under "My Student Information". Please contact the Foundation Office, Room N104 or call 217.875.7211, Ext. 350, for assistance.



## 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), who are in good standing as defined by the Financial Aid Satisfactory Academic Progress Policy, and who have an unmet need. Eligibility is determined by filing the Free Application for Federal Student Aid and completing a financial aid file. Student employment applications are available in the Student Services Center, Room C129.

### Institutional Student Employment

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

### Off-Campus Employment

The Career Center, Room C129, maintains a current list of job openings within the Richland District. Many Richland students are employed on a part-time basis by local places of business while attending college full- or part-time. See the job and employment announcements on College bulletin boards or on Richland's web page [www.richland.edu/career](http://www.richland.edu/career), or visit the Career Center, Room C129.

## Loans

Richland participates in the Direct Loan Program, which includes the Direct Subsidized Loan, the Direct Unsubsidized Loan, and Direct PLUS. These are low-interest loans to students made by the Department of Education. In order to receive a loan, students must apply for financial aid by filling out the Free Application for Federal Student Aid and completing their financial aid file prior to submitting a loan request. Students must be enrolled in 6 or more credit hours and not be on financial aid suspension to receive a loan. Loan counseling is required for all applicants. Eligibility for a Direct Subsidized loan is calculated prior to calculating the Direct Unsubsidized and/or Direct PLUS eligibility. For more information, contact the Financial Aid Office, Room C129.

### Transfer Students

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

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 may be placed on financial aid warning or financial aid suspension according to the Standards of Academic Progress. After a successful appeal, transfer students may be taken off financial aid suspension. Appeal forms are available in the Financial Aid Office, Room C129.

## 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 (3) conditions must be met each semester in order to receive financial aid in good standing:

### Condition I. Cumulative Grade Point Average Standard

The following overall 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

Students who do not earn the above overall grade point averages will be placed on warning. Students who have attempted 48 credit hours and do not have a 2.0 GPA will be suspended from financial aid.

### Condition II. Completion of Hours

Based on the student's enrollment status at the end of the add/drop period, the student 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 passing grades; however, they will be reviewed for successful completion for financial aid purposes. 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 warning or suspension until the class is completed and a grade is posted. The completion rate requirement also applies to developmental classes. While developmental hours are not counted in the cumulative grade point average calculation, they are 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. The 150% limit includes all hours attempted, not just hours for which a student received financial aid. It includes grades of F, W, and I. A student requiring developmental education courses will be allowed an additional 30 credit hours attempted for developmental course work.

Students may appeal the 150% maximum time rule by filling out a Financial Aid Appeal available in the Financial Aid Office, Room C129.

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

**Financial Aid Warning**

Students who do not meet the grade point average requirements and/or the completion of hours requirements must be placed on Financial Aid Warning. A student on warning may continue to receive state and federal grants, loans, scholarships, and work-study. If the conditions of warning are met and all other conditions for Satisfactory Progress are met, the student returns to good standing. Subsequent failure to meet the conditions for Satisfactory Academic Progress results in Financial Aid Suspension.

**Financial Aid Suspension**

Financial Aid Suspension will result in the loss of all state, federal, and veterans' financial aid including loans, grants, and work study. Both of the following conditions must be accomplished during one semester in order to be reinstated:

1. Complete at least six (6) credit hours with no drops or withdrawals, at the student's expense, and earn a 2.0 GPA for those six (6) hours. 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.

Maximum credit hour limits for financial aid follow the U.S. Department of Education and the Illinois Student Assistance Commission regulations. 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 received financial aid. Students will be allowed to complete a Financial Aid Appeal if they feel unusual circumstances should be considered. Students who have attempted 120 credit hours and do not have a certificate or degree will not be eligible for financial aid at Richland Community College.

**Appeals**

A student may appeal financial aid suspension and the 150% limit by completing a Request for Consideration and submitting appropriate documents to the Director of Financial Aid. A student may appeal financial aid suspension and the 150% limit by completing a Financial Aid Appeal and submitting appropriate documents to the Director of Financial Aid. Appeals to be placed on financial aid warning from suspension must demonstrate circumstances beyond the reasonable control of the student, such as illness, accident or death in the family, and must include supporting documentation. 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 Student Services Center. Financial Aid appeals follow the College's Student Resolution Process Chart. (See the Student Handbook.)

Students should submit a Special Circumstances form for a possible adjustment to the Expected Family Contribution 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 or pass a U.S. Department of Education-approved test to determine the ability to benefit from post-secondary education. 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, Room C129.

**Bills/Refunds to Pell Recipients**

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

**Verification**

All federal and state financial aid students are required to sign a Policies and Procedures Statement. Students selected for verification by the Department of Education Central Processing System are required to submit certain financial documents that verify the financial information reported on the Free Application for Federal Student Aid (FAFSA) and a Verification Worksheet.



## Veterans' Affairs

Veterans may be eligible for federal and/or state benefits to assist them in completing a certificate, associate's degree, or transportation courses. Information is available in the Financial Aid and Veterans' Affairs Office, Room C129, at [www.richland.edu/veterans](http://www.richland.edu/veterans) or on the web at [www.gibill.va.gov](http://www.gibill.va.gov) and [www.collegeillinois.org](http://www.collegeillinois.org). Richland offers the following veterans' programs:

- Chapter 30 – Montgomery GI Bill – Active Duty Educational Assistance Program
- Chapter 31 – Disabled Veterans – Vocational Rehabilitation
- Chapter 32 – Veterans' Educational Assistance Program (VEAP)
- Chapter 33 – Post 9/11 GI Bill
- Chapter 35 – Survivors and Dependents' Educational Assistance Program
- Chapter 1606 – Montgomery GI Bill – Selected Reserve Educational Assistance Program
- Chapter 1607 – Reserve Educational Assistance Program (REAP)
- Illinois Veteran Grant – [www.collegeillinois.org](http://www.collegeillinois.org)
- Illinois National Guard Grant – [www.collegeillinois.org](http://www.collegeillinois.org)
- MIA/POW Scholarship – [www.collegeillinois.org](http://www.collegeillinois.org)

Veterans must first apply for VA benefits using the VONAPP at [www.gibill.va.gov](http://www.gibill.va.gov).

Veterans requesting benefits from the US Department of Veterans' Affairs are expected to inform the Richland Financial Aid and Veterans' Affairs Office of their enrollment each semester. When applying for benefits, a veteran must submit 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 the Student Records Office for evaluation of transfer credits. If all transcripts are not evaluated, benefits may be suspended.

Veterans receiving benefits from the VA must inform the Financial Aid Office each semester that they want to be certified for benefits. Only courses needed for the educational program will be certified. Veterans receiving benefits from the VA are encouraged to complete all credit hours certified each semester. If a veteran stops attending any course, even though he or she may not have withdrawn from the course, the veteran is responsible to report the last date of attendance to the Financial Aid and Veterans' Affairs Office.

"Accelerated" courses or independent study 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 Satisfactory Academic Progress guidelines for financial aid recipients. Each type of military benefit has its own limit. Student receiving military benefits will be placed on warning and suspension in the same manner as other financial aid students.

Students who receive the Illinois Veteran Grant, Illinois National Guard Grant, or the MIA/POW Scholarship must meet the College's GPA standard. Veterans receiving these benefits should inform the Financial Aid and Veterans' Affairs Office each semester.

### Veteran Tutorial Assistance

The Academic Success Center, Room S118, offers tutoring for students who need extra help in courses.



## Academic Advisement

The role of an academic advisor is important for a student's success at Richland Community College. An advisor will serve as an advocate to help students form educational strategies and make the most of their time at Richland. Advisors will help students develop their goals, give advice on course selection each semester, and show students what information they can access on myRichland, among other tasks. As a result, students are assigned an academic advisor based in part on the academic program noted on their Admission Information Form. A student's assigned advisor's contact information is found within Academic Information on the My Student Info tab in myRichland. Most advisors' offices are located within the Student Services Center, Room C129. Appointments or walk-in assistance is available. Information about Academic Advisement is available at [www.richland.edu/advising](http://www.richland.edu/advising).

## Academic Success Center

### Accommodations

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. If a student believes he or she is eligible for testing accommodations, the student should contact the Academic Success Center (ASC)/Accommodations Office prior to taking any placement test(s). Documentation of disability is required for all services.

For more information, students should contact the Academic Success Center (ASC), Room C148, (217) 875-7211, Ext. 379, or visit [www.richland.edu/las](http://www.richland.edu/las).

### Testing

The Testing Center, located in Room S116, Ext. 238, provides testing services for placement in reading, writing, mathematics, and health courses. Also administered are exams from other universities, online/hybrid classes, 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 DSST Prometrics testing may need to pay an additional fee. If a student believes he or she is eligible for testing accommodations, the student should contact the Academic Success Center/Accommodations Office, Room C148, or (217) 875-7211, Ext. 379, prior to testing. For more information, visit the Richland Testing Center online at [www.richland.edu/testing](http://www.richland.edu/testing), or contact by e-mail at [testingcenter@richland.edu](mailto:testingcenter@richland.edu).

### Tutoring

The Academic Success Center/Tutoring (ASC), Room S118, (217) 875-7211, Ext. 419, offers free tutoring to students who may need help with classes or programs. Both peer and faculty tutors are available on an appointment or walk-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 ASC may offer study groups each semester. Schedules with location and time are posted in the ASC SLC. Computers with tutorial software and word processing programs are available for student use any time the ASC is open. For more information, visit the Academic Success Center online at [www.richland.edu/slc](http://www.richland.edu/slc) or e-mail [slc@richland.edu](mailto:slc@richland.edu)

## The Adele P. Glenn Academy for Early Childhood Education

Richland Community College is committed to providing children and families with a quality early childhood education program focused on Kindergarten Readiness. The Adele P. Glenn Academy for Early Childhood Education program provides a print-rich environment, hands-on exploration and many opportunities for young students to be creative through the visual arts, dance, and music in a Reggio Emilia-inspired program.

The Morning session is offered from 8:30 to 11:30 a.m. The Afternoon session is offered from 12:30 to 3:30 p.m. Contact the Academy at (217) 875-7211, Ext. 387, for more information.

## Campus Safety

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

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

Richland is committed to continuing the process of making the campus learning environment as safe as possible. Emergency procedures can be found on the College website, [www.richland.edu/security/plan/procedures](http://www.richland.edu/security/plan/procedures). Contact the Office of Safety and Security at (217) 875-7211, Ext. 555.

## Career Services

Selecting a career is an important part of each student's educational planning. The counselors and academic advisors in the Student Services Center assist students in all phases of the career planning process. Students may select from a variety of interest and personality inventories that provide insight into their career interests and values. Students meet with a counselor to explain the inventory results and also recommend other resources for further exploration. Career Services, Room C129, offers many resources for students to use when planning a career or when looking for a job. For more information, visit Richland's Career Services website at [www.richland.edu/career](http://www.richland.edu/career).

## Child Development Center

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

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

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

Preschool activities are available to combine play with learning. These activities include art, music, science, math, motor development skills, and language skills. School-age children are



offered table games, art, and science activities. Computer software is available for all ages.

The Child Development Center is licensed by the Illinois Department of Children and Family Services and is supported by Richland student activity funds, user funds, and fundraising activities. Contact the Child Development Center at (217) 875-7211, Ext. 319, for the cost of child care services and for the hours of operation. Center hours are subject to change.

## Counseling Services

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

## Honors Opportunities Program

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

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

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

To be admitted to the Honors Opportunities Program:

1. Recent high school graduates must have an ACT composite score of 25 with no individual score lower than 22 (or equivalent scores on any national testing program).
2. Presently enrolled students or transfer students 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 and must maintain a 3.25 GPA.
3. All Trustees Scholars are eligible and should participate in Honors.
4. All students must agree to complete the requirements of the program as outlined in the Honors Opportunities Program.

Brochures are available from the Student Services Center, Room C129, or from Division offices. Honors projects must be completed by the end of the semester in which the Honors course is taken.

Contact one of the Director of the Honors Program, Dr. Laurie Hughes at (217) 875-7211, Ext. 373, or [lhughes@richland.edu](mailto:lhughes@richland.edu) or Professor Rosemarie King at (217) 875-7211, Ext. 349, or [rking@richland.edu](mailto:rking@richland.edu) for more information.

## International Studies

Richland offers students the opportunity to attend universities in other countries and receive credit to apply to Richland degrees. Students may apply for acceptance into a number of programs, including study in Costa Rica, England, Austria, and the Netherlands. Pell Grant funds may be used to cover tuition and fees for some programs. For more information, contact the Office of Student and Academic Services, (217) 875-7211, Ext. 292.

## 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 (8) to sixteen (16) weeks.

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

- Accounting
- Agribusiness
- Art
- Automotive Technology
- Business Banking
- Business Management
- Business Marketing
- Criminal Justice
- Culinary Arts
- Drafting & Design
- Early Childhood Education
- Engineering Technology
- Graphic Arts
- Heating, Ventilation, Air Conditioning & Refrigeration
- Horticulture
- Hospitality Management
- Information Technology
- Office Technology
- Political Science
- Sociology
- Surgical Technology



## Kitty Lindsay Learning Resources Center (Library)

The purpose of the Kitty Lindsay Learning Resources Center (Library) is to support and expand classroom instruction. The Library manages print and electronic resources from students, faculty, and the broader College community. Library staff offer research assistance, information literacy sessions, course reserves, and individual and group study areas. Visit the Richland Kitty Lindsay Learning Resources Center at [www.richland.edu/lrc](http://www.richland.edu/lrc).

## Mathematics Enrichment Center

The Mathematics Enrichment Center allows students to advance more quickly and efficiently through the developmental mathematics sequence so that they can find college success. Thirty-one computer learning stations are accessible on a walk-in basis. The software program, MyMathLab, has powerful multimedia learning aids. These include instant textbook access, interactive explanations, immediate feedback, a pop-up on demand video instructor, and an individualized study plan that changes each time a student takes a quiz or test. Students receive both classroom instruction and hands-on application. The Mathematics Enrichment Center is fully staffed with professors and tutors, and students receive personalized one-on-one assistance as needed. Help numbers are available for after-hours tutoring. Contact 217.875.7211, Ext. 383, Room W117, <http://www.richland.edu/mec>

Summer and Fall Semester Hours (Summer hours vary; please call to confirm. Closed during holiday breaks according to the College calendar.)

Mondays-Thursdays	9:00 A.M. – 8:00 P.M.
Fridays	9:00 A.M. – 3:00 P.M.
<b>FAIRVIEW PARK PLAZA</b>	
Tuesdays & Thursdays	10:00 A.M. – 7:00 P.M.

## myRichland

myRichland is Richland's campus information portal for students, faculty, staff, and alumni. Users can access a wide variety of web-based services, including online registration, academic information, Richland e-mail, the Angel Learning Management System, and the Library research databases. Academic information available includes current semester schedule, unofficial transcripts, enrollment certification, official transcript requests, grade point average projection, financial aid information review, online payment services, and degree auditing to see how much of a degree is completed. Student grades are posted only via myRichland. Grades will not be mailed to students unless requested. Visit <http://my.richland.edu>

Students with a "hold" placed on their records due to a financial obligation to the College or other unmet requirement will be unable to view academic records.

## Off-Campus Centers

### Clinton Extension Center

The Clinton Extension Center offers admissions, advising, registration, placement testing, virtual testing, financial aid, and many other services. Credit classes, non-credit workshops, and General Education Development (GED) classes are scheduled in Clinton and other communities throughout the Richland District. The Clinton Extension Center is located in Clinton at Clinton High School (northeast entrance), 1200 Highway 54 West, Clinton, IL. Call (217) 935-6791 for information.

### Fairview Park Plaza Center

The Fairview Park Plaza Center is located in the Fairview Park Plaza, 1485 W. King Street, Decatur. Credit classes and non-credit workshops are offered, as well as general college admissions services. Call (217) 462-0480 for more information.

## Online Learning Support

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

Students enrolling in online or hybrid classes should already be able to create folders, browse for files, save files to other drives, save files as different file types, rename or delete files, cut, copy and paste, drag and drop, basic word processing, install plug-ins, attach and download files, send e-mails (with and without attachments), and post messages to discussion boards.

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

The Online Learning Help Desk staff may be contacted by e-mail at [ochelp@richland.edu](mailto:ochelp@richland.edu), by calling (217) 875-7211, Ext. 376, or by walk-in, Room W143. Appointments are also available. Visit the Online Learning page at [www.richland.edu/online](http://www.richland.edu/online) for more information.

## Orientation

### Online Learning Orientation to Angel (OLOA)

Students enrolling in online or hybrid courses need to become familiar with Angel, Richland's Online Learning Management System. To ensure success, all students enrolled in online and hybrid courses are required to complete a one-time online introduction to Angel. This self-paced orientation is available in Angel within 24 hours of a student registering for an online or hybrid course and can be taken any time up to the start of classes. On average the orientation should take between 2-3 hours. Students can access their online or hybrid courses on the first day of class if orientation has been completed and passed. After the start of the semester, students will not be able to access their online or hybrid classes until the Orientation has been completed and passed.

Failure to satisfactorily complete the Orientation by the end of the first week of classes may result in students being dropped from class. Students should check with their instructors for more information. In addition, more information about the Orientation can be found by going to [www.richland.edu/online/orientation](http://www.richland.edu/online/orientation).

### New Student Orientation

New students are required to participate in new student orientation to become familiar with College services, policies and regulations, social and recreational activities, and campus facilities. New Student Orientation is provided through the Office of Student Engagement, Room C133.





## 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.

## 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 a career and technical education program and meet one of the following requirements:

1. student is enrolled in a non-traditional field of gender (i.e., female in Fire Science, 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 a career and technical education area, he or she is automatically enrolled in the Perkins Program. Students may call the Perkins Program Office at (217) 875-7211, Ext. 223 or 740, for more information.

## Self-Registration

Students may register themselves if they have completed twelve (12) semester hours at Richland, have a 2.00 grade point average, and are eligible for ENGL 101 and MATH 098.

Students eligible for self-registration are sent a notification by Richland e-mail approximately 3 weeks prior to the start of registration.

## Student Employment

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

Students may also request résumé writing assistance, as well as other job search assistance, by making an appointment with the Career Services staff. A computer, printer, and special résumé software are also available for student use. All services are free.

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

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

Visit Richland Career Services online at [www.richland.edu/career](http://www.richland.edu/career) for more information.

## Student IDs

Photo student identification cards are required and available at no cost to registered students. Students must show a photo ID to access services such as 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, Room C130.

## Student Success

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

Student Success offers

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

### Emerging Scholar Program (ESP)

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

**Adults Who Are Reentering Education (AWARE)**

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

**Start Out Successful (SOS)**

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

**Achieving College Excellence (ACE)**

ACE is a program for students who are repeating a core college course (English, mathematics, or science) three (3) or more times. This program provides specialized workshops designed to assess academic needs and assist the student in developing study skills that will facilitate student success.

**Workshops and Seminars**

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

Students are invited to participate in the PASSport workshop series. Pathway to Achieving Student Success is a program designed to help students develop study skills and become familiar with Richland's resources. Students will set up a NetID, look at the Richland e-mail program, see how Richland databases work remotely for research, and learn about myRichland (view student grades, see financial aid status, and see degree completion information). This series is scheduled periodically throughout the semester and before classes begin.

Students and faculty are welcome to call (217) 875-7211, Ext. 267 or 314, or stop by the office in the Student Services Center, Room C129, for workshop/seminar registration information.

## Student Support Services/TRiO

Student Support Services/TRiO (a federally funded program from the U.S. Department of Education) is a student-oriented program that provides a variety of free support services to Richland Community College students. The services provided are designed to help program participants maximize their effectiveness as students to successfully complete a transferable degree at Richland. The successful graduate will then transfer to a four-year college/university to complete a baccalaureate degree.

From enrollment to graduation, the Student Support Services/TRiO staff offers assistance that will help enhance the academic, personal, and professional growth of student participants.

SSS/TRiO offers loaner equipment, transfer trips, cultural events, financial literacy, job shadowing, and student clubs.

**Program Eligibility**

Richland Community College students working to complete a two-year degree with the intentions of transferring to a four-year college/university upon graduating from Richland may be eligible for the SSS/TRiO program if they meet any one of the following criteria:

- First-generation college student (neither parent graduated from a four-year college/university)
- Demonstrate a financial need according to federal guidelines
- Have a documented disability

Individuals are invited to stop by the SSS/TRiO office, Room C143, to meet and discover how the SSS/TRiO staff can help students meet their academic goals. All services for SSS/TRiO participants are free. Applications to the SSS/TRiO program are accepted throughout the year.

## Success.net

Success.net is a computerized system that allows the instructor to identify and advise the student who may be having academic difficulties. The system provides an approach to students that presents information on workshops that will address the student's academic difficulty. Success.net is designed to be efficient and user-friendly for instructional and support staff, as well as informative, direct and non-threatening for students. Students and faculty are welcome at any time to contact the Director at (217) 875-7211, Ext. 314, or stop by the office in the Student Services Center, Room C129.

## Transfer Center

Students planning to transfer to other colleges or universities should contact the Transfer Center, 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. For more information, visit the Richland Transfer Center website at [www.richland.edu/transfer](http://www.richland.edu/transfer).



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

Students are encouraged to become involved in Campus Life campus activities, organizations, and clubs to enrich college life. For more information, contact the Director of Student Engagement in Room C137, (217) 875-7211, Ext. 305, or visit [www.richland.edu/campuslife](http://www.richland.edu/campuslife).

## Clubs and Organizations

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

- **Anime Club** – Anime Club is an organization made up of students who have an interest in animation either through watching, drawing, or evaluating anime, manga, and computer generated animation while creatively doing charitable work.
- **Black Student Association (BSA)** – The purpose of the BSA is to create unity among African-American students by promoting political, social, and economic awareness among Black students at Richland Community College and within the Black community. Some goals are to help African-American students become better acquainted with the social and academic activities of the College; to sponsor educational and political forums and activities; to sponsor cultural and recreational activities; to promote self-reliance among African-American students; to promote academic success among African-American students at Richland Community College.
- **Ceramics Club** – The purpose of the Ceramics Club is to stimulate interest in the ceramic arts for both art students and non-art majors. The club also gives students a chance to unwind, experiment with their creativity in an enjoyable way, utilize the Richland facility to its fullest, and promote credit courses.
- **Communicator** – The *Communicator* is the student newspaper at Richland Community College. Funded by student auxiliary fees, the paper is published four to six times a semester and is staffed by student reporters, photographers, and students from Richland's journalism classes. Stipends are available for some members of the editorial board. The *Communicator* office is located within the office of Campus Life, Room C135. Story and picture ideas and contributions in the form of commentaries and/or letters to the editor are always welcome. The newspaper is distributed at various locations on and off campus.
- **Culinary Club** – The Culinary Club's purpose is to raise culinary awareness at Richland and in the community. It will also host events to fundraise for supplies, and members will engage in food-related community service.
- **Delta Alpha Pi** – Delta Alpha Pi is an honor society for students with disabilities. The organization's goals are to encourage academic excellence for students with disabilities and to broaden the understanding of and support for students with disabilities.
- **Early Childhood Professionals** – The purpose of the Early Childhood Professionals Club is to promote educational opportunities for early childhood students by making attendance possible at conferences and meetings. This organization also strives to promote speakers and hold educational events on early childhood issues, including parenting, diversity, or any issue that will directly affect early childhood educators.
- **Film Club** – The purpose of Film Club is to share a general appreciation of film and its culture. The club introduces new people to the world of cinema while encouraging veterans to expand their knowledge, with an emphasis on genre, history and style.
- **Fire Science Club** – The purpose of this club is to promote interest in the Fire Service and enhance the opportunities of the Fire Science students.
- **Gamers Club** – Gamers Club is a social group that provides an outlet for all types of game activities from board games, magic cards, to role-playing. The Gamers Club also educates people on the various types of games available today.
- **Girlsology** – Girlsology is a club founded to educate, empower, and encourage women, girls, teenagers, men, boys, etc. through various workshops, seminars, activities, and other methods of communication in an effort to evoke higher self-esteem, self-confidence, and self-empowerment. We provide service through the community and our goal is to serve others. Through our mission we believe that Richland Community College will benefit from an improvement of students who succeed and in turn give back to their community.
- **History Club** – The mission of this club is to encourage and facilitate a greater understanding of history among students and our community by hosting speakers, screening films and taking field trips to historical sites.
- **H.O.P.E. (Helping Out People Everywhere)** – The purpose of H.O.P.E. is to provide a forum to discuss the social, educational, and developmental needs of people around the global community. Students will work on projects and perform volunteer work to help make an impact.
- **International Club** – The International Club promotes a multicultural exchange of perspectives between international and American students, faculty, administrators, staff, and members of the local community. The club provides both a support system and leadership opportunities for students, and is responsible for planning various activities and outings. International and American students alike are encouraged to make informal presentations to the club describing their native lands, examining the unique features of their cultures, and offering personal insights on important social and political issues.
- **Intervarsity Christian Fellowship** – The purpose of Intervarsity Christian Fellowship is to establish and advance witnessing communities of students and faculty who follow Jesus Christ as Savior and Lord; growing in God's love, strengthened in unity, encouraging fellowship, promoting a basic understanding of God's Word and the Biblical truths which provide the foundation of Christianity to people of every ethnicity and culture, and pursuing God's purposes in the world through spiritual, intellectual, physical, and social activities.
- **LPN Student Nurses Club** – The club's goal is to perform community services and to provide educational opportunities for Richland students 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.
- **Mentor Ambassadors (MAs)** – Mentor Ambassadors participate in the New Student Orientation and other programs throughout campus. They help new students make a smoother transition to higher education and introduce new students to the broad educational opportunities at Richland. They provide on-going support to students in the areas of positive attitude development and relationship-building with faculty, staff, and peers. Mentor Ambassadors are knowledgeable and can refer students to appropriate College services and to staff who provide services for students. Mentor Ambassadors are selected from Richland's student trustee scholarship program.
- **M.O.D. (Men of Distinction)** – The purpose of Men of Distinction of Student Support Services/TRIO is to provide support for each other and to become empowered women through education, knowledge, awareness, skills, appreciation of diversity, and service to the community.
- **N.A.A.C.P. College Chapter** – The purpose of this club is to promote diversity as an asset by having students from various social and cultural groups come together to discuss issues perpetuated by race, creed, religion, sex, or national origin. Further, this club will assist students in their endeavors to understand the cultures of others.
- **P.A.W. (Performing Arts Workshop)** – P.A.W. spends their fall doing creative fundraisers to finance a student-directed, student-produced play in the spring. PAW also travels to see several plays a year including one trip to a major city to see a touring Broadway show and have their end-of-the-year banquet.
- **Phi Beta Lambda (PBL)** – Its mission is to bring business and education together in a positive working relationship through innovative leadership and career development programs. PBL is the premier nonprofit, business education association with over 11,000 students nationwide preparing students for careers in business and business-related fields. It is the oldest business student organization starting in 1958. PBL is not just another student group – it gives members the opportunity to learn, travel, and grow as a business professional. Employers are looking for students with cutting-edge skills. PBL gives members the chance to gain these skills and prepares them for the "real-world" after college. If you are interested in developing leadership, communication, and team skills, participate in competitive events, or are simply looking for an organization to meet and network with others at the local, state and national levels and have fun, then PBL is the organization for you. Richland's chapter is called Rho Alpha Zeta. Any student can join.
- **Phi Theta Kappa (PTK)** – This organization, an international two-year college honor society, supports four hallmarks – leadership, fellowship, scholarship and service. Activities to meet these hallmarks are developed by student members. Students with a 3.5 GPA in at least twelve (12) hours at the 100 level courses of transferable credit during a specific semester are invited to join. Phi Theta Kappa initiates new members each fall and spring.
- **P.R.I.D.E. (People Respecting Individual Differences in Everyone)** – The purposes of People Respecting Individual Differences in Everyone (P.R.I.D.E.) are to provide education surrounding gay, lesbian, and bisexual issues, to foster a greater awareness and tolerance for gay, lesbian, and bisexual persons and issues, and furnish social and emotional support to gay, lesbian, and bisexual persons and allies on campus.
- **Program Board** – The Program Board consists of students, faculty, and staff who plan and arrange College-wide events. Involvement in the Program Board brings hands-on experience in the areas of time management, delegation, and budgeting, as well as developing skills in leadership and decision making. Membership on the Program Board is open to all students who are enrolled in three (3) semester hours and in good academic and financial standing with the College. Along with developing the calendar section of the Student Handbook and the Reception and Recognition Program, unique learning opportunities are provided through professional entertainers, seminars, lectures, and displays.
- **RN Student Nurses Club** – The RN Student Nurses Club promotes interest and provides 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.



- **Student Senate** – The purpose of the Student Senate is to represent the students of Richland Community College through effective communications by promoting unity and fellowship with all members of the College community. We encourage the development of campus organizations and activities that will meet the needs and interests of the students. The Student Senate strives to represent and interpret student opinion as related to the information on campus policy and to distribute the academic fees to provide a variety of educational and social opportunities for students. Students are elected each Spring Semester to the 12-member board. Petitions are available at the secretary's desk in the Campus Life Office. Full- and part-time students are eligible for governmental posts providing they are in academic and financial good standing with the College. The Student Senate meets weekly to take action on matters of concern for the student body. Members of the Senate also serve with faculty and administration on designated committees to represent the students' point of view. The Student Trustee is elected each Spring Semester by the student body to serve as an advisory voting member of the Board of Trustees. The Student Trustee may make and second motions during the Board meetings, and the Student Trustee also serves on the Student Senate.
- **Surgical Technology Club** – The purpose of this club is to provide a forum to explore the education and vocation of surgical technology. Membership in this club is open to anyone with an interest in surgical technology and/or surgical technology education.
- **Sustainable Agriculture Club** – The purposes of the Sustainable Agriculture Club are to bring awareness of the Horticulture Program to the College and the community; to establish a designated fund for horticulture at Richland Community College to be used to purchase needed library materials and equipment; to furnish a greenhouse; to enrich student education by attending and organizing educational seminars; to increase public awareness of the program and encourage designated donated funds to the horticulture program.
- **W.O.W. (Women Of Worth)** – The purpose of Women of Worth of Student Support Services/TRIO is to provide support for each other and to become empowered women through education, knowledge, awareness, skills, appreciation of diversity, and service to the community.
- **X-Ray Vision** – X-Ray Vision promotes their profession by community service events and fundraising to attend the Annual ISSRT Conference. Membership is open to all who have an interest in the radiography profession and all radiography program students.

Contact the Director of Student Engagement, Room C137, or the club's current advisor for more information.

## Student 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 specifically exempted under FERPA. Student education records are classified as follows:

1. **Directory Information** – Name, address, telephone listing; electronic mail address; photograph and video; date and place of birth; major field of study; enrollment status; participation in officially recognized activities; dates of attendance; degrees, honors, and awards received; most recent educational institution or agency attended; Student ID Number, user ID, or other unique personal Identifier used to communicate in electronic systems that cannot be used to access education records without a PIN, password, etc (A Social Security Number in whole or in part cannot be used for this purpose). 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 Student Records Office.
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 educational records by submitting a written request to the Student Records Office, 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 may 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 written consent. Written requests must specify the records to be released, state the purpose of the disclosure, identify the party or class of parties to whom disclosure may be made, and be signed and dated by the student. 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.

An education institution may disclose personally identifying information from an education record of a student, without the consent required, if the disclosure meets one or more of the following conditions:

1. School officials with legitimate educational interest (may include a contractor or other party to whom an institution has outsourced institutional services or functions);
2. Other schools to which a student is transferring;
3. Specified officials for audit or evaluation purposes;
4. Appropriate parties in connection with financial aid to a student;
5. Organizations conducting certain studies for or on behalf of the school;
6. Accrediting organizations;
7. To comply with a judicial order or lawfully issued subpoena;
8. Appropriate officials in cases of health and safety emergencies; and
9. State and local authorities, within a juvenile justice system, pursuant to specific State law.

### Withholding Student Information

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



# Students Rights and Responsibilities

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

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

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

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

## Statement of Student Rights

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

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

## Statement of Student Responsibilities

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

- Read the [College Catalog](#) and [Student Handbook](#)
- Become knowledgeable about College policies and procedures
- Abide by College policies and procedures
- Be aware of academic and graduation requirements
- Provide accurate information on College forms
- Meet financial obligations to the College
- Attend classes and be on time
- Complete assignments and exams based upon course syllabus information
- Participate in class
- Fulfill their academic responsibilities in an honest and forthright manner
- Utilize appropriate support services when needed
- Seek help from faculty when needed
- Seek out answers to questions
- Abide by the equipment usage policy
- Meet published deadlines
- Notify College officials if a condition exists which is in violation of a student's rights, College policies, rules, standards, and procedures
- Join/seek out groups and individuals that will help students achieve their goals
- Abide by state and federal laws
- Conduct themselves in a responsible manner in and out of the classroom
- Protect, support, and contribute to a safe environment within the learning community
- Show regard for the property of the College, its community members and visitors
- Assist the College in fulfilling its administrative responsibilities



## Student Grievance Policy

When a student believes that a condition exists which is in violation of his or her rights, College policies, rules, standards, and procedures, he or she has the right to file a grievance. Refer to the student resolution chart in the [Student Handbook](#) and/or the "Student Rights and Responsibilities Guide" located in the Student Services Center, Room C129, and in Division offices. A grievance may be categorized as follows:

1. Academic Concerns
  - a. Academic Dishonesty
  - b. Academic Suspension
  - c. Educational Guarantee
  - d. Grade Appeals
  - e. Graduation Requirements
  - f. Other Academic Concerns
2. Americans With Disabilities Act (accommodations)
3. Discrimination (age, disability, gender, race, color, sexual orientation, religion)
4. Financial Aid Suspension
5. Family Educational Rights and Privacy Act (confidentiality)
6. Sexual Harassment (by students, staff, or faculty)
7. Student Conduct
8. 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 Services Center, Room C129, the "Student Rights & Responsibilities and Grievance & Disciplinary Proceedings Guide," [Student Handbook](#), and the [College Catalog](#).

## Student Conduct Policy

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

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

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

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

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

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

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

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

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



## Initiation of Grievance or Disciplinary Proceedings

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. Every attempt will be made to resolve grievances or problems at the point of origin. With the exception of a complaint of discrimination or harassment, including sexual harassment, the following process should be followed. Complaints alleging discrimination and/or harassment, including sexual harassment, must be filed with the Human Resources Office. The process for investigating a complaint of discrimination or sexual harassment may be obtained from the Student Services Center, Room C129, or the Human Resources Office, Room E111.

### 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) must be signed by the student. The agreement shall outline the provisions of the resolution and indicate that the student was aware of, but waived the right to, a formal hearing.

In cases of sexual harassment or discrimination, 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 Director of Human Resources. The Vice President of Student and Academic Services will convene the Judicial Board. The President or designee will convene the Special Committee. Students are encouraged to meet with the campus Ombudsperson in Campus Life, Room C133, in preparation of requesting a formal hearing.

## Academic Integrity Policy

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

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

## Removal from a Class or the College

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

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

## Chronic Communicable Disease Policy

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

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

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

The student shall be re-evaluated periodically, 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, Room C129, can make referrals for psychological counseling through the Heritage Behavioral Health Center.



## Substance Abuse – Intoxicant Use

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.

Possession and use of intoxicants on College property is 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.

Numerous pamphlets are available throughout the College dealing with drug, substance, and alcohol use and addiction. Counselors in the Student Services Center, Room C129, can make referrals to appropriate agencies.

## 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 official/officer in the performance of his or her duty. The College may request current/valid identification authorizing someone to possess a weapon and reserves the right to confirm the authorization with proper authorities.

A weapon is defined as any instrument or device designed or likely to produce bodily harm or property damage including but not limited to a firearm, dangerous chemical, an explosive device of any description, compressed air guns, pellet guns, BB guns, knives, stun guns, or electric shock devices used in a threatening manner toward another individual on College property. The College reserves the right to further determine the definition of a “weapon” and may prohibit other devices on an individual basis.

Legal defensive devices, such as pepper sprays, etc., will be permitted, unless used in an offensive manner.

Any exceptions to this policy must be preapproved through the President’s Office.

Individuals who are found to be in violation this policy are subject to disciplinary actions up to and including termination of employment, expulsion from the College, and/or being barred from College property.

## 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.

The Policy for Responsible Use of Information Technology at Richland Community College shall be adhered to by all College units as well as all individuals who operate or use the information technology resources of the College. In addition, this policy applies to use of information technology resources that are entrusted to the institution by other organizations. In case of conflict, local, state, or federal laws supersede this policy.

Access to the College’s information technology facilities is a privilege, not a right, 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 in a manner consistent with the College’s mission and vision, policy, and guidelines. All users of the technology systems are bound by applicable local, state, and federal laws and regulations. All people must act ethically, appropriately, and responsibly while using the College’s information technology resources. All users of College information systems must respect the rights of other users, maintain the integrity of the resources, and comply with all pertinent licenses and contractual agreements. 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). Authorized personnel are permitted to view and/or modify any electronic files, including electronic mail messages, as required by law, for any legitimate business reasons, or in the course of diagnosing and resolving system problems and maintaining information integrity.

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.

This policy provides general guidance and may be supplemented by additional regulations governing particular subsystems of the College information technology resources. The Board of Trustees charges the administration with the responsibility, and the Board delegates to the administration the authority to develop appropriate guidelines, regulations, and procedures to implement the policy. The College makes no warranties of any kind, expressed or implied, for the technology services it is providing. The College will not be responsible for any actual or perceived damages suffered from the use of its information technology.

Violations of this policy shall be cause for discipline. Alleged violations of this policy shall be subject to the College’s disciplinary procedures. Illegal activities by users of the College technology including but not limited to illegal downloading and file sharing are prohibited.

In accordance with Illinois law, any depiction of child pornography discovered by members of the College’s information technology staff will be immediately reported to law enforcement authorities.





## Sexual and Other Harassment

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

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

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

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

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

Complaints alleging a violation of this policy must be brought to the attention of the Director of Human Resources, Room E111.

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

## Tobacco Policy

It is the policy of Richland Community College to disallow the use of tobacco products on College-owned property, in College vehicles or at events sponsored by the College.



## Adult Education and GED Preparation

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 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. For more information, visit the Adult Education Office, Room W121, or call (217) 875-7211, Ext. 355.

## 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 pre-beginning, beginning, intermediate, and advanced levels. Persons interested in enrolling in these classes should contact the Adult Education office, (217) 875-7211, Ext. 355, for further information. All classes and textbooks for this program are free.

## Project READ

The goal of Project READ is to provide educational services for adult students reading below the ninth-grade level. Services include recruiting, training, and placing volunteers in locations where they can be effective tutors for those adult students. The office is located at the Decatur Public Library, 2nd floor, 130 N. Franklin, Decatur, IL. Prospective students and volunteers may call for appointments or for further information at (217) 423-7323 or visit <http://projectread.richland.edu>.

## Richland Foundation

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

## Alumni and Friends Association

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

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

## Continuing and Professional Education

Richland Community College provides a variety of professional training and community education opportunities in formats ranging from full-day classes to short-term workshops held in the evening, during the day, and on Saturdays. Richland can provide customized training that fits the specific needs of any business, industry, or individual. It is Richland's priority to serve the needs of the College District's varied population.

**Professional Development:** business and corporate training options to update knowledge and theory in order to fulfill job responsibilities, find a new career, or upgrade one's current position are offered in areas such as occupational safety, workforce training for specific applications, commercial truck driver training and supervisory management skills.

**Personal Development:** opportunities for self-growth and development of new skills are available in non-credit topics ranging from technology and horseback riding, to dance, culinary, or crafts. Special classes and programs are also scheduled for older adults via the Creative Center for Learning and for youth during the school year and through the Richland Discover summer kids' college.

**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.

## Creative Center for Learning

The Creative Center for Learning (CCL) is a program established to increase opportunities for learning and personal growth for adults 55 and older. Instruction is conducted by community volunteers with special passion and expertise. Classes are open to all interested learners. Costs include a \$10 registration fee per semester along with a \$5.00 per course tuition fee on most classes. A schedule of courses is published each semester. For more information, call (217) 875-7211, Ext. 265.



## Richland Discover

A variety of summer classes are offered for youth and include such topics as hands on academic review, art camp, horseback riding, dance, and kids culinary. Richland's summer kids' college also includes Discovery Theatre where students learn about props, set design, acting, costuming and make up for theatre in a 7-week class culminating in a full stage production.

## Fitness Center

With staff assistance, each person develops a personalized fitness program, based on individual goals and abilities. The health-related 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. Students are encouraged to use the Center on a daily basis. The Fitness Center is available on a first-come, first-serve basis; usually there is no waiting for use of the equipment. Locker room and shower facilities are available. The Fitness Center is located in Room W175.

### Circuit Training with a Personal Trainer

This class is designed for one-on-one training. A personal workout will be designed based on individual goals. Cardiovascular equipment and weight training will be used throughout the 6-week course. Call (217) 875-7211, Ext. 324, for Circuit Training availability.

## Off-Campus Programming

Credit classes and non-credit workshops and seminars are scheduled in communities throughout Richland's District. General Education Development (GED) and English as a Second Language (ESL) classes are also provided. Course and workshop locations are listed in the class schedules and on the Richland website. Call (217) 875-7211, Ext. 267, for location information.



## 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 application for admission in order to activate their files.
- Freshman: one who has earned 30 or fewer semester hours (or 45 quarter hours) toward a degree or certificate at Richland.
- Sophomore: one who has earned more than 30 semester hours (or 45 quarter hours) toward completion of a program at Richland.
- Unclassified student: one who has reached junior standing at a college or university or who has earned a degree and is enrolled in elected 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, Room C129, 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 (3) hours or more of laboratory work are required for one credit hour, students should be able to complete assignments during the laboratory period.

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

## Academic Standards

### Graduation

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

### Probation

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

Cumulative hours attempted	GPA required
1 – 15 hours	1.70
16 – 30 hours	1.85
31+ hours	2.00

A student on academic probation is encouraged to meet with his or her assigned academic advisor in Enrollment Services to discuss career and educational goals. The advisor 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 may wish to utilize the Academic Success Center, Room S117, for tutorial assistance.

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

### Suspension

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

## Health Professions GPA Requirements

Many Health Profession programs have higher GPA requirements than the minimum 2.0 required by the College. The specific requirements are listed in the Instructional Program portion of this [Catalog](#) under the "Other Graduation Requirements" section of each health program or on the Health Profession web pages, which can be accessed at [www.richland.edu/health](http://www.richland.edu/health).



## 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 "Other Instruction Options" in this section.)
CR	Completed course requirements. Grade only applicable for vocational skills courses and adult education courses
X	Did not completed course requirements or did not complete course requirements. Grade only applicable for vocational skills courses and adult education courses.
I	Incomplete (For more information, see "Other Instruction Options" in this section.)
P	Pass (not used for courses in a degree sequence or for transfer courses)
W	Withdrawn
AC	Advanced Course
AP	Advanced Placement
CE	Proficiency Exam
CL	CLEP
DA	DSST Prometrics Exam
JO	Journeyman Card
LI	Licensure
PT	Professional Training
PO	Portfolio

## 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 (A = 4, B = 3, C = 2, D = 1, and F = 0). The grades AU, I, W, 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:

A = 4 quality points and 4 x 3 hours = 12

B = 3 quality points and 3 x 3 hours = 9

9 + 12 = 21 total points

21 divided by 6 (attempted credit hours) = 3.5, the grade point average for that term.

\* Developmental Courses (below 100) are not calculated in the cumulative grade point average.

## 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 3.50 GPA or higher for the current term.

## Appealing a Grade

A student who feels he/she has received an unfair or inaccurate grade may appeal through the Student Grievance Policy found in the Student Rights & Responsibilities and Grievance & Disciplinary Proceedings.

## Alternative Delivery of Instruction

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



## Methods of Online Instruction

Students are expected to possess the computer skills necessary to type papers, browse and search the Web, access College information, and communicate through e-mail. Beyond these basic expectations, online, hybrid, and web-enhanced sections offer alternatives to traditional face-to-face classroom instruction. Additional information is available on the Online Learning at [www.richland.edu/online](http://www.richland.edu/online).

### Online Classes

In an online class, all of the instruction is provided online and no face-to-face classroom instruction is required. Students are required to complete and pass a one-time online orientation before being allowed access to their online class. Students may also be required to take proctored exams on campus or at an approved location near the student; please refer to the course schedule for more information.

### Hybrid Classes

A hybrid class is a combination of face-to-face classroom instruction and online instruction. A portion of the instruction is provided online, but some regular face-to-face instruction is still required. Face-to-face time requirements will vary between hybrid courses and sections; please refer to the course schedule for more information. Students are required to complete and pass a one-time online orientation before being allowed access to their hybrid class.

### Web-Enhanced Classes

In a Web-enhanced class, all of the instruction is provided in a face-to-face classroom setting. However, students are expected to regularly supplement their learning through the use of technology. Examples include sections with online assessments, homework, or discussions.

Note: Students in Web-enhanced classes may be required to complete a one-time Online Student Orientation to Angel (OLOA). Please check with your instructor to determine the orientation requirements for your class.

## Other Instruction Options

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. An **independent study** option is generally available for students meeting the following conditions: the course must be required for graduation or professional certification, and the requested term for independent study and the term of graduation must be the same. Students must complete the Independent Study form available in the appropriate division office and discuss the request with the appropriate Dean. If the request is granted, regular meetings in person or online between the student and instructor are held during the arranged term of the course. Only those courses included in the Richland [Catalog](#) are available for Independent Study.

A **course audit** is another alternative for enrollment. Any credit class offered by Richland may be taken as an audit unless otherwise specified. Students wishing to audit a class will be assessed the credit hour rate and other applicable fees and must complete an audit form in the Student Services Center, Room C129, 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. No credit will be awarded for auditing a course. If auditing Summer term courses, the form must be filed within the first 3 days of the term.

An **incomplete** grade may be assigned as a temporary final grade if a faculty member and student complete an Incomplete Grade Agreement form. The faculty member will provide a description of work to be completed and a completion deadline (All coursework must be finished by the end of each term, unless the instructor agrees in writing to a specified grace period no longer than 60 days after the end of the term). Failure to complete coursework within the 60-day grace period will result in the grade the student would earn without completing the coursework. A grade of "W" or "AU" is not allowed on an incomplete. Incomplete Grade Agreements are filed electronically, and a copy of the agreement is sent to the student's Richland email address.

## Degree Audit

Through myRichland, students can run a degree audit, which gives them access to an updated list of degree requirements left to be completed. Students can also run a "what-if" degree audit. This "what-if" audit shows what a student would need to complete if he or she changed a program of study at Richland.

## Dropping a Course

Students dropping after the ninth day (or equivalent) of traditional session classes each term will have a grade of W recorded on their permanent academic record. Students are responsible for submitting the withdrawal to Student Services. All withdrawals must be filed no later than 7 days prior to the end of the course (inclusive of finals). Students are advised to contact their instructor and financial aid before dropping.

### Administrative Drop

Prior to submitting a final grade roster, an instructor may drop a student who has failed to meet attendance standards or attain sufficient progress in the course but is not required to do so.

### Withdrawing from a Course or the College

Students dropping after the ninth day (or equivalent) of traditional session classes each term will have a grade of W recorded on their permanent academic record. Students are responsible for submitting the withdrawal to Student Services. All withdrawals must be filed no later than 7 days prior to the end of the course (inclusive of finals). Students are advised to contact their instructor and financial aid before dropping a course. A grade of "W" will be given for current courses if the courses are officially withdrawn.

## 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 least through the midterm of the semester.

At midterm, the College may administratively drop students who have failed to meet the attendance standard as certified by the instructor. See Dropping a Course, for more information.

## Changing Program of Study

All program changes must be processed through myRichland, at the Student Services Center, or with an academic advisor. Students who want to change their course of study are encouraged to discuss their plans with their assigned academic advisor, or an instructor in the new program. Various resources are available in Career Services, Room C129.



# Graduation

## Graduation Day

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

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

## Applying for Graduation

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

1. The student should review the requirements for graduation through myRichland for the program of study, including courses taken or in progress, grade point average, and other requirements. The student may contact their assigned academic advisor to assist with the review.
2. The student must complete an Application for Graduation, which may be obtained on myRichland (My Student Info -> Degree Information -> Apply for Graduation). The form is to be completed during the term immediately preceding the term in which the student expects to graduate.
3. A review of the student's graduation application will be provided to the student 2-4 weeks after submission.
4. The student is encouraged to review the returned copy with his/her assigned academic advisor to discuss completion of any unmet requirements.
5. If the student is unable to complete the requirements before the anticipated graduation date, contact [graduation@richland.edu](mailto:graduation@richland.edu) to update the graduation record.

The Registrar, assigned academic advisor, or Dean of Enrollment Services can answer questions regarding the application for graduation process.

## Graduating With Multiple Certificates or Degrees

Richland students may work toward completion of more than one program of study.

Students may receive all certificates and AAS degrees for which they have completed the requirements. Only the highest award will be announced at the commencement ceremony. In areas where there are multiple concentrations or specialties (e.g. Business, Engineering Technology), only one AAS degree may be earned.

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

1. Complete all graduation requirements for the second degree; and
2. Complete at least an additional ten (10) hours of applicable credit beyond the first degree.

A student may earn only one AA degree, one AS degree, one AFA degree, and one AES degree.

## Graduating Transfer Students

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

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

If a transfer student completes a course at Richland that is substantially the same as a course for which the student received transfer credit, the hours of transfer credit will be replaced by the hours earned at Richland. Transfer credit will be posted to the student's transcript upon evaluation.

## Earning Graduation Honors

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

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

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

## Effect of Changes in Program on Graduation

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 Student Records Office ([transcripts@richland.edu](mailto:transcripts@richland.edu)) for an evaluation of the quarter hours earned.

Because of licensing criteria, legal requirements, or other conditions, graduation from certain programs (including selective admissions programs), such as those in the Health Professions Division, may fall under different guidelines as determined by the Registrar in consultation with the appropriate Dean. In such cases, the student must follow the program in existence at the time of admission to or re-entry into the program.

If a student wished to graduate under program provisions other than those above, the Registrar will review the student's Application for Graduation and will consult with the appropriate Dean regarding clearance for graduation.





### Health Professions Graduation

Many Health Profession programs have additional graduation requirements as dictated by state and national accreditation standards. The specific requirements are listed in the Instructional Program portion of this [Catalog](#) under the "Other Graduation Requirements" section of each health program or on the Health Profession web pages, which can be accessed at [www.richland.edu/health](http://www.richland.edu/health).

## 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 transferring Richland students and credit hours earned.

Many Illinois institutions (with the exception of the University of Illinois) have made a "General Education Compact," which states that community college students who have earned an Associate in Arts (AA) or Associate in Science (AS) Degree will meet all lower-division (freshman-sophomore) 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. (Some "compacts" are under review, and departmental requirements at the senior college or university level may affect some courses that the student transfers in.)

For those colleges without such an agreement, Richland students should follow the guidelines for transfer credits listed in that senior college's transfer guide or handbook. Richland recommends that students planning to transfer meet with his/her assigned advisor 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 172) as to whether a specific Richland course qualifies. IAI information may also be found online at [www.itransfer.org](http://www.itransfer.org).

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

- AG – Agriculture
- BIO – Biological Sciences
- BUS – Business
- CHM – Chemistry
- CS – Computer Science
- CRJ – Criminal Justice
- EGL – English
- EGR – Engineering
- HST- History
- IND – Industrial Technology
- MC – Mass Communication
- MTH – Mathematics
- PHY – Physics
- PLS – Political Science
- PSY – Psychology
- SOC – Sociology
- TA – Theatre Arts

## Guarantee of Transfer of Credit

Richland Community College guarantees to those earning an appropriate transfer degree beginning May 1993 that their courses will transfer to Illinois state colleges or universities as identified in the most currently published transfer information or equivalency guide.

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. 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 (2) years before the attempt to transfer.
3. Any refund request must be made no later than two (2) years after Richland Community College graduation.



## Programs of Study

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

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

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

The **Associate in Arts (AA)** (see page 44), **Associate in Science (AS)** (see page 46), **Associate in Fine Arts (AFA)** (see page 50), **Associate in Engineering Science (AES)** (see page 52), and **Associate of Arts in Teaching (AAT)** (see page 54) degree programs are designed for students planning to continue their formal education at a four-year university or upper-division college to obtain a baccalaureate degree. Those planning to major in natural sciences or mathematics usually follow the AS program, while those in humanities or fine arts will generally seek the AA degree. Those planning to major in social science may select either the AA or AS curriculum.

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

Other programs are based on Career and Technical Education offerings and lead to Certificates in those fields or the **Associate in Applied Science (AAS) Degree** (see page 62).

The **Associates in Arts in Teaching** (see page 54) is designed to attract students into high need discipline areas for preparation to transfer into a four-year college/university education program. Students may select from a concentration in secondary mathematics (see page 56), special education (see page 58), and early childhood education (see page 54), all with teacher certification opportunities.

General Studies programs are individually structured by each student to meet specific interests or needs and lead to the awarding of a Certificate in a particular field (see page 161) or the **Associate in Liberal Studies (ALS) Degree** (see page 48).

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

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



## Cooperative Educational Programs with Other Community Colleges

Richland Community College has Cooperative Educational Program agreements with other Illinois community colleges that allow Richland District residents to enroll in a vocational/technical degree and/or certificate not available at Richland. Students are able to enroll in such a program at the cooperating college's in-district tuition rate. The colleges and programs offered are listed below. Individuals with questions about a particular program should call Richland's Student Services Center at (217) 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.

The following community colleges have cooperative educational program agreements for Richland District residents for all Career and Technical Education Certificates and Degrees not offered by Richland Community College:

- Black Hawk College, Moline
- Carl Sandburg College, Galesburg
- Danville Area Community College, Danville
- Elgin Community College, Elgin
- Heartland Community College, Bloomington
- Highland Community College, Freeport
- Illinois Central College, East Peoria
- Illinois Valley Community College, Oglesby
- John Wood Community College, Quincy
- Joliet Junior College, Joliet
- Kankakee Community College, Kankakee
- Kaskaskia Community College, Centralia
- Kishwaukee College, Malta
- Lake Land College, Mattoon
- Lewis and Clark Community College, Godfrey
- Lincoln Land Community College, Springfield
- McHenry County College, Crystal Lake
- Moraine Valley Community College, Palos Hills
- Morton College, Cicero
- Parkland College, Champaign (See Below)
- Prairie State College, Chicago Heights
- Rock Valley College, Rockford
- Sauk Valley College, Dixon
- South Suburban College of Cook County, South Holland
- Spoon River College, Canton
- Southwestern Illinois College, Belleville
- Waubensee Community College, Sugar Grove

The following community colleges have cooperative educational program agreements for Richland District residents for the programs listed:

- Parkland College, Champaign: Certificates:
  - Automotive Collision Repair: Custom Auto Design
  - Automotive Collision Repair: Estimate
  - Automotive Collision Repair: Refinishing
  - Automotive Collision Repair: Welding
  - Building & Construction Repair
  - Computed Tomography
  - Construction: Bricklayer
  - Construction: Carpenter
  - Construction: Floor Coverer
  - Construction: Glazier
  - Construction: Iron Workers
  - Construction: Laborer
  - Construction: Millwright
  - Construction: Painting & Decorating
  - Construction: Plumbers & Pipefitters
  - Construction: Sheet Metal
  - Magnetic Resonance Imaging
- Parkland College, Champaign: AAS Degrees:
  - Automotive Collision Repair
  - Construction Trade Technology
  - Construction Design & Management
  - Construction Design & Management: Building & Materials

- Construction Design & Management: Surveying Technology
- Dental Hygiene:
- Diesel Power Equipment Technology
- Equine Management
- Mass Communications: Radio/TV/Video
- Occupational Therapy Assistant
- Respiratory Care

Richland Community College has cooperative educational program agreements with the following community colleges for students in their districts for Career and Technical Education Certificates and Degrees offered by Richland Community College but not offered at their respective community college:

- Black Hawk College, Moline
- Danville Area Community College, Danville
- Heartland Community College, Bloomington
- Highland Community College, Freeport
- Illinois Central College, East Peoria
- Illinois Valley Community College, Oglesby
- John Wood Community College, Quincy
- Joliet Junior College, Joliet
- Kankakee Community College, Kankakee
- Kishwaukee College, Malta
- Lake Land College, Mattoon
- Lincoln Land Community College, Springfield
- McHenry County College, Crystal Lake
- Moraine Valley Community College, Palos Hills
- Morton College, Cicero
- Prairie State College, Chicago Heights
- Rock Valley College, Rockford
- Sauk Valley College, Dixon
- South Suburban College of Cook County, South Holland
- Spoon River College, Canton
- Waubensee Community College, Sugar Grove

Richland Community College has cooperative educational program agreements with the following community colleges for students in their districts for the programs listed offered by Richland Community College but not offered at their respective community college:

- Kaskaskia College, Centralia:
  - AAS in Heating, Ventilation, Air Conditioning & Refrigeration
- Parkland College, Champaign:
  - Certificate and AAS in Heating, Ventilation, Air Conditioning & Refrigeration

## Certified Programs

### Business and Technology Division

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

### Health Professions Division

- EMT-Basic – Illinois Department of Public Health
- EMT-Intermediate – Illinois Department of Public Health
- EMT-Paramedic – Illinois Department of Public Health
- Certified Nurse Aide Program – Illinois Department of Public Health
- AAS Nursing is granted accreditation by the National League for Nursing Accrediting Commission (NLNAC).
- Radiography Program is a recognized educational program by the American Registry of Radiologic Technologists (ARRT).
- Surgical Technology Program is granted accreditation by the Commission on Accreditation of Allied Health Educational Programs  
CAAHEP, 1361 Park Street  
Clearwater, FL 33756  
(727) 210-2350  
[www.CAAHEP.org](http://www.CAAHEP.org)



## Baccalaureate/Transfer Programs

### Associate in Arts (AA) Degree

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, Room C129, for additional advice.

1. Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.):
  - a. Communications 9 semester hours
  - b. Fine Arts/Humanities (at least one course selected from each area) 11-12 semester hours
  - c. Social Science (selected from 2 or more disciplines) 9-10 semester hours
  - d. Life/Physical Science (at least one course selected from each area) 7-8 semester hours
  - e. Mathematics 3-4 semester hours
2. Area of Concentration:
  - a. Two (2) 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 (4) 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. Total Credits Required – 60 semester hours in courses numbered 100 and above (Students transferring credit to Richland should see regulations concerning transfer students.)
5. Cumulative Grade Point Average – 2.00 ("C") or better for all work applicable toward the degree that was completed at Richland (see page 37).



# Associate in Arts (AA) Degree

Area of Concentration: \_\_\_\_\_

Designed to provide two academic years of college study for transfer toward a Bachelor of Arts degree at \_\_\_\_\_  
(College or University)

General Education Requirements – 39-43 Hours	Course & Number	RCC	Semester & Year	Transfer	Total
<b>Communications: 3 courses (9 Hours)</b> ENGL 101, 102; COMM 101 (required) ("C" or better required in both ENGL 101 and 102)					
<b>Social and Behavioral Sciences: 3 or 4 courses (9-10 Hours)</b> (Selected from two or more disciplines) ANTHRO 110, 120, 130; ECON 231, 232; HIST 101, 102; POL S 100, 110, 120; PSYCH 110, 145, 150, 210; SOCIO 110, 150, 200, 225					
<b>Humanities/Fine Arts: 3 or 4 courses (11-12 Hours)</b> (Select at least one course from humanities and at least one course from fine arts.) <b>Humanities:</b> AF AM 103, 104, 120, 140; ENGL 115, 124, 126, 128, 160, 201, 202, 231, 232, 240, 251, 252, 253, 261, 270, 280; CHIN 202; FREN 202; GERM 202; HIST 111, 112, 201, 202, 270, 271; HUMAN 100, 104, 106, 107, 201; PHIL 100, 110, 120, 210, 215, 230; SPAN 202 <b>Fine Arts:</b> AF AM 103, 120, 140; ART 100, 210, 220, 230; ENGL 140, 240, 241; HUMAN 100, 104, 106, 107, 201; MUSIC 100, 180, 190; THRE 150, 210					
<b>Life/Physical Science: 2 courses (7-8 Hours)</b> (Select at least one course from life science and at least one course from physical science including at least one laboratory course). <b>Life Science:</b> BIOL 101, 106, 120, 210 <b>Physical Science:</b> ASTRO 105; CHEM 100, 106, 131; EASCI 210, 220, 230; PHY S 105; PHYS 100, 101, 151					
<b>Mathematics: 1 courses (3-4 Hours)</b> MATH 110, 112, 113, 121, 122, 160, 170, 171, 190, 221					
<b>Area of Concentration</b> (See <a href="#">College Catalog</a> for Area of Concentration Suggestions)					
<b>Electives:</b> Must be transfer courses. (Hours vary)					
<b>Total Hours – 60 Required.</b> Minimum of 15 credit hours at Richland.					

2.0 GPA required for all Richland degrees.

It is strongly recommended that students consult with an academic advisor both at Richland and their transfer institution. While not part of the Core Curriculum, foreign language competency may be required for Bachelor of Arts degrees.



## Associate in Science (AS) Degree

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, Room C129, for additional advice.

1. Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.):
  - a. Communications 9 semester hours
  - b. Fine Arts/Humanities (at least one course selected from each area) 9-10 semester hours
  - c. Social Science (selected from 2 or more disciplines) 9-10 semester hours
  - d. Life/Physical Science (at least one course selected from each area) 7-8 semester hours
  - e. Mathematics 7-8 semester hours
2. Area of Concentration:
  - a. Two (2) 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 (4) or more courses, completing one or more sequences, in the specific subject areas of biology, chemistry, or mathematics; OR
  - c. Four (4) 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. Total Credits Required – 60 semester hours in courses numbered 100 and above (Students transferring credit to Richland should see regulations concerning transfer students.)
5. Cumulative Grade Point Average – 2.00 ("C") or better for all work applicable toward the degree that was completed at Richland (see page 37).



# Associate in Science (AS) Degree

Area of Concentration: \_\_\_\_\_

Designed to provide two academic years of college study for transfer toward a Bachelor of Science degree at \_\_\_\_\_  
(College or University)

General Education Requirements – 41-45 Hours	Course & Number	RCC	Semester & Year	Transfer	Total
<b>Communications: 3 courses (9 Hours)</b> ENGL 101, 102; COMM 101 (required) ("C" or better required in both ENGL 101 and 102)					
<b>Social and Behavioral Sciences: 3 or 4 courses (9-10 Hours)</b> (Selected from two or more disciplines) ANTHR 110, 120, 130; ECON 231, 232; HIST 101, 102; POL S 100, 110, 120; PSYCH 110, 145, 150, 210; SOCIO 110, 150, 200, 225					
<b>Humanities/Fine Arts: 3 or 4 courses (9-10 Hours)</b> (Select at least one course from humanities and at least one course from fine arts.) <b>Humanities:</b> AF AM 103, 104, 120, 140; CHIN 202; ENGL 115, 124, 126, 128, 160, 201, 202, 231, 232, 251, 252, 253, 261, 270, 280; FREN 202; GERM 202; HIST 111, 112, 201, 202, 270, 271; HUMAN 100, 104, 106, 107, 201; PHIL 100, 110, 120, 210, 215, 230; SPAN 202 <b>Fine Arts:</b> AF AM 103, 120, 140; ART 100, 210, 220, 230; ENGL 140, 240, 241; HUMAN 100, 104, 106, 107, 201; MUSIC 100, 180, 190; THTRE 150, 210					
<b>Life/Physical Science: 2 courses (7-8 Hours)</b> (Select at least one course from life science and at least one course from physical science including at least one laboratory course). <b>Life Science:</b> BIOL 101, 106, 120, 210; <b>Physical Science:</b> A101, 106, 120, 210; Physical Science: ASTRO 105; CHEM 100, 106, 131; EASCI 210, 220, 230; PHY S 105; PHYS 100, 101, 151					
<b>Mathematics: 2 courses (7-8 Hours)</b> MATH 110, 112, 113, 121, 122, 160, 170, 171, 190, 221					
<b>Area of Concentrations</b> (See <a href="#">College Catalog</a> for Area of Concentration Suggestions)					
<b>Electives:</b> Must be transfer courses.					
<b>Total Hours – 60 Required.</b> Minimum of 15 credit hours at Richland.					

2.0 GPA required for all Richland degrees.

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



## Associate in Liberal Studies (ALS) Degree

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

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

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

1. Group requirements:
  - a. Communication Skills 9 semester hours
  - b. Humanities 10 semester hours
  - c. Social Sciences 10 semester hours
  - d. Natural Science and Mathematics 10 semester hours
2. General Electives 10 semester hours (May include career and technical education-oriented courses)
3. Total Credits Required – 60 semester hours in courses numbered 100 and above (Students transferring credit to Richland should see regulations concerning transfer students.)
4. Cumulative Grade Point Average – 2.00 ("C") or better for all work applicable toward the degree that was pursued at the College (see page 37).





# Associate in Liberal Studies (ALS) Degree

Area of Concentration: \_\_\_\_\_

Designed to provide two academic years of college study for transfer toward a Bachelor degree at \_\_\_\_\_  
(College or University)

General Education Requirements – 39 Hours	Course & Number	RCC	Semester & Year	Transfer	Total
<b>Communications: 9 Hours</b> ENGL 101, 102; COMM 101 (required) ("C" or better required in both ENGL 101 and 102)					
<b>Natural/Life/Physical Science and Math: 10 hours</b> AGRIC 130; ASTRO 105; BIOL 101, 102, 106, 120, 130, 201, 202, 210, 220; CHEM 100, 110, 131, 132, 201, 202; EASCI 210, 220, 230; ELTRN 110; HORT 100; MATH 104, 106, 110, 111, 112, 113, 116, 117, 121, 122, 160, 170, 171, 190, 210, 221, 230, 240; PHYS 100, 101, 102, 151, 152, 153; PHY S 105					
<b>Social Science: 10 hours</b> ANTHR 110, 120, 130; ECON 225, 231, 232; ED 100, 101, 108, 199, 200; HIST 101, 102, 105; P REL 100, 110, 120, 200; POL S 100, 110, 120; PSYCH 100, 110, 130, 145, 150, 200, 210, 220, 250, 260, 280; SOCIO 100, 105, 110, 125, 130, 135, 141, 150, 200, 210, 225; SOC S 199, 280					
<b>Humanities/Fine Arts: 10 hours</b> AF AM 100, 103, 104, 105, 120, 130, 140, 141; ART 100, 210, 220, 230, 240; ENGL 115, 124, 126, 128, 140, 150, 160, 201, 202, 231, 232, 240, 241, 251, 252, 253, 261, 270, 280; FREN 101, 102, 201, 202; GERM 101, 102, 201, 202; HIST 111, 112, 201, 202, 270, 271; HUMAN 100, 104, 106, 107, 201, 280; MUSIC 100, 180, 190; PHIL 100, 110, 120, 200, 210, 215, 230; SPAN 101, 102, 201, 202; THTRE 150, 210					
<b>Electives: 21 hours</b> May include any course numbered 100 or above.					
<b>Total Credit Hours – 60 Required</b> Minimum of 15 Credit Hours at Richland.					

2.0 GPA required for all Richland degrees.

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



## Associate in Fine Arts (AFA) Degree

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, Room C129, for additional advice.

1. Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.):
  - a. Communications 9 semester hours
  - b. Fine Arts/Humanities 6 semester hours
  - c. Social Science (selected from 2 or more disciplines) 6 semester hours
  - d. Life/Physical Science 7-8 semester hours
  - e. Mathematics 3-4 semester hours
2. Required Art Courses – ART 101, 102, 111, 112, 113, 210, 220, and 230.
3. Art Electives – 9 semester hours selected from ART 105, 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. Total Credits Required – 64-66 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 37).



## Associate in Fine Arts (AFA) Degree

Area of Concentration: \_\_\_\_\_

Designed to provide two academic years of college study for transfer toward a Bachelor degree at \_\_\_\_\_  
(College or University)

General Education Requirements – 40-42 Hours	Course & Number	RCC	Semester & Year	Transfer	Total
<b>Communications: 3 courses (9 Hours)</b> ENGL 101, 102; COMM 101 (required) ("C" or better required in both ENGL 101 and 102)					
<b>Social and Behavioral Sciences: 6 Hours</b> (Selected from two or more disciplines) ANTHR 110, 120, 130; ECON 231, 232; HIST 101, 102; POL S 100, 110, 120, 230; PSYCH 110, 145, 260, 210; SOCIO 110, 150, 200, 225					
<b>Humanities: (6 Hours)</b> AF AM 103, 104, 120, 140; ENGL 115, 124, 126, 128, 160, 201, 202, 231, 232, 240, 251, 252, 253, 261, 270, 280; CHIN 202; FREN 202; GERM 202; HIST 111, 112, 201, 202, 270, 271; HUMAN 100, 104, 106, 107, 201; PHIL 100, 110, 120, 210, 215, 230; SPAN 202					
<b>Life/Physical Science: 2 courses (7-8 Hours)</b> (Select at least one course from life science and at least one course from physical science including at least one laboratory course.) <b>Life Science:</b> BIOL 101, 106, 120, 210 <b>Physical Science:</b> ASTRO 105; CHEM 100, 106, 131; EASCI 210, 220, 230; PHY S 105; PHYS 100, 101, 151					
<b>Mathematics: 1 course (3-4 Hours)</b> MATH 110, 112, 113, 121, 122, 160, 170, 171, 190, 221					
<b>Required Art Courses:</b> ART 101, 102, 111, 112, 113, 210, 220, 230					
<b>Electives: (9 hours selected from the following)</b> ART 105, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 151, 152, 160, 240, 251, 252, 261					
<b>Total Hours – 64-66 Required.</b> Minimum of 15 credit hours at Richland.					

2.0 GPA required for all Richland degrees.

It is strongly recommended that students consult with an academic advisor both at Richland and their transfer institution. While not part of the Core Curriculum, foreign language competency may be required for Bachelor of Arts degrees.



## Associate in Engineering Science (AES) Degree

The Associate in Engineering Science degree is designed to provide the student with the general education, math, science and engineering courses required by the College of Engineering (COE) at the University of Illinois Champaign (UIUC) campus. Students who complete this sequence and are transferring to the COE at UIUC will be able to transfer as juniors. While the general education requirements listed will satisfy the requirements of most senior institutions, students should identify as early as possible the institutions to which they will be applying for transfer to determine the specific requirements of those institutions for the freshman and sophomore years. The sequence of courses should be carefully planned with assistance from an advisor with a specific four-year institution in mind.

**Note:** The general education requirements listed below do not include all the courses prescribed by the IAI Core General Education Curriculum. Be aware that completing the AES Degree requirements will not automatically meet the general education requirements of most public and private colleges and universities in Illinois. The courses in this degree will lead to junior status in a major field, but students may need to complete additional general education requirements to achieve official junior status at the senior institution of their choice.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CHEM 131	4
ENGL 101	3
ENGR 110	3
MATH 121	5

<u>Spring Semester</u>	
CHEM 132	5
ENGL 102	3
MATH 122	4
PHYS 151	4
Humanities/Fine Arts	
Elective	3

<u>Fall Semester</u>	
ECON 231	3
ENGR 211	4
MATH 221	4
PHYS 152	4
*CS Elective	4

<u>Spring Semester</u>	
ECON 232	3
ENGR 212	4
MATH 230	4
PHYS 153	4

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame. A grade of "C" or better in ENGL 101 is required for the AES degree.

\*CS Elective (CS 251 or CS 281)



# Associate in Engineering Science (AES) Degree

Area of Concentration: \_\_\_\_\_

Designed to provide two academic years of college study for transfer toward a Bachelor of Arts degree at \_\_\_\_\_  
(College or University)

General Education Requirements – 53 Hours	Course & Number	RCC	Semester & Year	Transfer	Total
<b>Communications: 2 courses (6 Hours):</b> ENGL 101, 102 ("C" or better required in both ENGL 101 and 102)					
<b>Physical Science: 5 courses (21 Hours):</b> CHEM 131, 132, PHYS 151, 152, 153					
<b>Mathematics: 4 courses (17 Hours):</b> MATH 121, 122, 221, 230					
<b>Computer Science: 1 course (4 Hours):</b> CS 251 or CS 281					
<b>Engineering: 3 courses (11 Hours):</b> ENGR 110, 211, 212					
<b>Social Science: 2 courses (6 Hours):</b> ECON 231, 232					
<b>Humanities/Fine Arts : 1 course (3 Hours)</b> <b>Humanities:</b> AF AM 103, 104, 120, 140; CHIN 202; ENGL 115, 124, 126, 128, 160, 201, 202, 231, 232, 240, 251, 252, 253, 261, 270, 280; FREN 202; GERM 202; HIST 111, 112, 201, 202, 270, 271; HUMAN 100, 104, 106, 201; PHIL 100, 110, 120, 210, 215, 230; SPAN 202 <b>Fine Arts:</b> AF AM 103, 120, 140; ART 100, 210, 220, 230; ENGL 140, 241; HUMAN 100, 104, 106, 107, 201; MUSIC 100, 180, 190; THTRE 150					
<b>Total Credit Hours – 64 Required</b> Minimum of 15 Credit Hours at Richland.					

2.0 GPA required for all Richland degrees.

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



## Associate of Arts in Teaching (AAT) Degree

The Associates of Arts in Teaching (AAT) program is designed to prepare students in high need discipline areas for preparation to transfer into a four-year college/university education program. The program will be guided by the Illinois Professional Teaching Standards, Core Language Arts, and Core Technology Standards, as well as by the College's core values (Commitment, Respect, Excellence, Accountability and Diversity). The AAT student will spend a minimum of fifteen (15) hours of field experience in a variety of school settings with a minimum of eight (8) hours in a concentration area. A criminal background check may be required in order to participate in field experiences.

Additional graduation requirements for completion of AAT degree programs include a "C" or better in all program courses, a cumulative grade point average of 2.5, passing score on the Illinois Basic Skills Test, completion of documented field experience hours, and completion of standards-based portfolio artifacts. 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-register. Students must meet admission requirements prior to applying to the AAT program.

While enrolled in Introduction to Public Education and Introduction to Early Childhood Education, students will be required to complete fifteen (15) 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. Students will complete artifacts that demonstrate teaching standards addressed. Students granted credit for education courses have met all requirements of documented field experience hours.

## Associate of Arts in Teaching – Early Childhood Education Program

The Associate of Arts in Teaching – Early Childhood Education provides students with the program equivalent of the first two years of most four-year college teacher education programs in Early Childhood Education. Students should check individual school requirements before completing the curriculum as outlined. The degree consists of the following components: general education courses, professional education courses, and courses in the Early Childhood Education major area. These courses include the eleven (11) Illinois Professional Teaching Standards, the Core Technology Standards for All Teachers, and the Core Language Arts Standards for All Teachers. Students must also pass the Illinois Test of Basic Skills test to earn the AAT – Early Childhood Education. AAT students are advised to complete the degree prior to transfer. Transfer students obtaining the Early Childhood Education (AAT) degree will be on "equal footing" with native four-year institution students when seeking admission to an upper-division Early Childhood Education Degree program. Admission into baccalaureate degree programs is competitive, and most senior institutions require a cumulated GPA of 2.5 or higher; completion of these courses alone does not guarantee admission.

- |    |  |   |
|----|--|---|
| 1. | Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.) Students should follow the Early Childhood Education (AAT) degree curriculum plan when selecting courses: |   |
|    | a. Communications  | 9 semester hours  |
|    | b. Fine Arts/Humanities  | 9 semester hours  |
|    | c. Life/Physical Sciences  | 7 semester hours  |
|    | d. Mathematics   | 8 semester hours  |
|    | e. Social/Behavioral Sciences  | 21 semester hours   |
|    | d. Professional and Special Education Core   | ECE 101, 110, 112, 203, 210; ED 100; PSYCH 150  |
| 2. | Total Credits Required   | 64 semester hours   |
| 3. | Cumulative Grade Point Average   | 2.5 or better for all work applicable toward the degree that was completed at Richland. |



# Early Childhood Education (AAT) Degree

Area of Concentration: \_\_\_\_\_

Designed to provide two academic years of college study for transfer toward a Bachelor degree at \_\_\_\_\_  
(College or University)

General Education Requirements – 63 Hours	Course & Number	RCC	Semester & Year	Transfer	Total
<b>Communications: 9 Hours</b> ENGL 101, 102; COMM 101 (2.5 cumulative GPA required for both ENGL 101 and 102)					
<b>Social &amp; Behavioral Sciences: 10 Hours</b> (Select from three disciplines.) HIST 102; POL SCI 110; PSYCH 110					
<b>Humanities/Fine Arts: 9-10 Hours</b> ART 100 Fine Arts Elective Non-Western Humanities Elective					
<b>Life/Physical Science: 7 Hours</b> (Select one from life science and one course from physical science including at least one laboratory course.) <b>Life Science:</b> BIOL 106 <b>Physical Science:</b> EASCI 210					
<b>Mathematics: 8 Hours</b> MATH 111, 112					
<b>Required Education Courses: 21 Hours</b> ECE 101, 110, 112, 203, 210; ED 100; PSYCH 150					
<b>Total Credit Hours – 64 Required</b> Minimum of 15 Credit Hours at Richland.					

**2.5 GPA required for AAT degrees.**

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

Constitution, passing score on Illinois Basic Skills Test, Documented Field Experience Hours and Digital Portfolio requirements must be met in order to fulfill degree requirements.



# 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 (15) hours of field experience in a variety of school settings with a minimum of eight (8) hours in the secondary mathematics environment. The program will be guided by the Illinois Professional Teaching Standards, Core Language Arts Standards, and Core Technology Standards, as well as by the College's core values (Commitment, Respect, Excellence, Accountability, and Diversity). Admission into baccalaureate degree programs is competitive, and most senior institutions require a GPA of 2.5 or higher; completion of these courses alone does not guarantee admission. (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  | 9 semester hours  |
|    | d. Life/Physical Science (At least once course selected from each area)  | 7-8 semester hours  |
|    | e. Mathematics   | 17 semester hours (see AAT – Math academic plan)  |
|    | f. Professional and Special Education Core   | ED 100, 105, 200; PSYCH 145   |
| 2. | Total Credits Required   | 64 semester hours   |
| 3. | Cumulative Grade Point Average   | 2.5 or better for all work applicable toward the degree that was completed at Richland. |





## Secondary Mathematics (AAT) Degree

Area of Concentration: \_\_\_\_\_

Designed to provide two academic years of college study for transfer toward a Bachelor degree at \_\_\_\_\_  
(College or University)

General Education Requirements – 64 Hours	Course & Number	RCC	Semester & Year	Transfer	Total
<b>Communications: 9 Hours</b> ENGL 101, 102; COMM 101 (*2.5 cumulative GPA required for both ENGL 101 and 102)					
<b>Social &amp; Behavioral Sciences: 9 Hours</b> (Select from three disciplines) POL S110; PSYCH 110; SOCIO 110, 200					
<b>Humanities/Fine Arts: 8-9 Hours</b> (Select from 2 disciplines) ENGL 115; HIST 201, 202, 270; PHIL 215; ART 100; MUSIC 100					
<b>Life/Physical Science: 7-8 Hours</b> (Select one from life science and one course from physical science including at least one laboratory course.) <b>Life Science:</b> BIOL 101, 210 <b>Physical Science:</b> ASTRO 105; CHEM 100; EASCI 210, 220, 230; PHY S 105; PHYS 100, 151					
<b>Mathematics: 4 Hours</b> MATH 113					
<b>Required Education Courses: 25 Hours</b> ED 100, 105, 200; MATH 121, 122, 221; PSYCH 145					
<b>Total Credit Hours – 64 Required</b> Minimum of 15 Credit Hours at Richland.					

**2.5 GPA required for AAT degrees.**

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

Constitution, passing score on Illinois Basic Skills Test, Documented Field Experience Hours and Digital Portfolio requirements must be met in order to fulfill degree requirements.

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



# Associate of Arts in Teaching – Special Education Program

The Associate of Arts in Teaching – Special Education provides students with the program equivalent of the first two years of most four-year college teacher education programs in special education. Students should check individual school requirements before completing the curriculum as outlined. The degree consists of the following components: general education courses, professional education courses, and courses in the special education major area. These courses include the eleven Illinois Professional Teaching Standards, the Core Technology Standards for All Teachers, and the Core Language Arts Standards for All Teachers. Students must also pass the Illinois Basic Skills test to earn the AAT – Special Education. AAT students are advised to complete the degree prior to transfer. Transfer students obtaining the AAT – Special Education Degree will be on “equal footing” with native four-year institution students when seeking admission to an upper division Special Education Degree program. Admission into baccalaureate degree programs is competitive, and most senior institutions require a GPA of 2.5 or higher; completion of these courses alone does not guarantee admission.

- |    |  |   |
|----|--|---|
| 1. | Group Requirements (Area of concentration courses may be counted toward satisfaction of group requirements.) Students should follow the AAT Degree-Special Education curriculum plan when selecting courses: |   |
|    | a. Communications  | 9 semester hours  |
|    | b. Fine Arts/Humanities  | 9 semester hours  |
|    | c. Life/Physical Sciences  | 7 semester hours  |
|    | d. Mathematics   | 8 semester hours  |
|    | e. Social/Behavioral Sciences  | 9 semester hours  |
|    | f. Professional and Special Education Core   | ED 100,105, 200, 220, PSYCH 1505  |
|    | g. Select 2 of the following:  | ECE 111, ED 108, 109  |
| 2. | Total Credits Required   | 63 semester hours   |
| 3. | Cumulative Grade Point Average   | 2.5 or better for all work applicable toward the degree that was completed at Richland. |



## Special Education (AAT) Degree

Area of Concentration: \_\_\_\_\_

Designed to provide two academic years of college study for transfer toward a Bachelor degree at \_\_\_\_\_  
(College or University)

General Education Requirements – 63 Hours	Course & Number	RCC	Semester & Year	Transfer	Total
<b>Communication: 9 Hours</b> ENGL 101, 102; COMM 101 (2.5 cumulative GPA required for both ENGL 101 and 102)					
<b>Social &amp; Behavioral Sciences: 9 Hours</b> (Select from three disciplines.) POL S 110; PSYCH 110; SOCIO 110					
<b>Humanities/Fine Arts: 9-10 Hours</b> Fine Arts Elective Humanities Elective Non-Western Humanities/Fine Arts Elective					
<b>Life/Physical Science: 7 Hours</b> (Select one from life science and one course from physical science including at least one laboratory course.) <b>Life Science:</b> BIOL 106 <b>Physical Science:</b> EASCI 210					
<b>Mathematics: 8 Hours</b> MATH 111, 112					
<b>Required Education Courses: 21 Hours</b> ED 100, 105, 200, 220; PSYCH 150  Select 2 of the following: ECE 111; ED 108, 109					
<b>Total Credit Hours – 63 Required</b> Minimum of 15 Credit Hours at Richland.					

**2.5 GPA required for AAT degrees.**

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

Constitution, passing score on Illinois Basic Skills Test, Documented Field Experience Hours and Digital Portfolio requirements must be met in order to fulfill degree requirements.



# Areas of Concentration Suggestions for Baccalaureate/ Transfer Programs

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

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

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

- **Accounting (AA or AS)**  
Area of Concentration: ACCT 101, 102; ECON 231, 232  
Other suggested courses: MATH 160, 170, 171, 190; CIS 110
- **African-American Studies (AA or AS)**  
Area of Concentration: AF AM 101, 102, 103, 104, 105
- **Agriculture (AS)**  
Area of Concentration: AGRIC 106, 130, 210; HORT 100
- **Anthropology (AA or AS)**  
Area of Concentration: ANTHR 110, 120, 130
- **Art (AA)**  
Area of Concentration: ART 101, 102, 111, 112, and at least two courses from those listed below  
Other suggested courses: ART 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 131, 140, 145, 151, 152, 160, 162, 210, 220, 230, 240, 251, 252, 261
- **Biology (AS)**  
Area of Concentration: BIOL 101, 102, 201, 202, 210, 220  
Other suggested courses: CHEM 131, 132
- **Business (AA or AS)**  
Area of Concentration: ACCT 101, 102; BUS 231; ECON 231, 232  
Other suggested courses: CS 105 or CIS 110; MATH 116, 160, 170, 190, and above; psychology
- **Business – International (AA or AS)**  
Area of Concentration: ACCT 101, 102; ECON 225, 231, 232; HIST 112, 202; CIS 110  
Other suggested courses: MATH 160, 170, 190
- **Chemistry (AS)**  
Area of Concentration: CHEM 131, 132, 201, 202  
Other suggested courses: MATH 121, 122
- **Communication (AA or AS)**  
Area of Concentration: COMM 102, 130, 240, 250  
Other suggested courses: PHIL 100, 120; POL S 100
- **Computer Science (AS)**  
Area of Concentration: BIOL 101 or 210; CS 105, 161, 230, 251, 281; MATH 121, 122, 210, 221; PHY S 151, 152, 153
- **Dentistry**  
See Pre-Dentistry.
- **Earth Science (AS)**  
Area of Concentration: EASCI 210, 220, 230
- **Economics (AA or AS)**  
Area of Concentration: ECON 231, 232  
Other suggested courses: ECON 225; MATH 160, 170, 190, plus courses in sociology and political science
- **Education**  
See Teacher Education.
- **Engineering (AES)**  
See Associate in Engineering Science.
- **English (AA)**  
Area of Concentration: (a selection of four of the following)  
ENGL 115, 124, 126, 128, 140, 150, 160, 200, 201, 202, 231, 232, 240, 241, 251, 252, 260, 261, 270, 280  
Other suggested courses: courses in economics, foreign language, history, or political science.
- **Foreign Language (AA)**  
Area of Concentration: two years of study in the chosen language  
Other suggested courses: one sequence in history, and literature and humanities related to the foreign language.
- **General Science (AS)**  
Area of Concentration: BIOL 101, 102 or CHEM 131, 132 or PHYS 101, 102 plus three or more science courses in addition to one of the one-year sequences listed above, selected from the fields of biology, chemistry, or physics
- **History (AA)**  
Area of Concentration: HIST 101, 102, 105, and either HIST 111, 112; or HIST 201, 202  
Other suggested courses: courses in economics, foreign language, history, literature, or political science
- **Journalism (AA)**  
Area of Concentration: JOURN 101, 102, 110, 220, 221  
Other suggested courses: JOURN 222, 224
- **Mathematics (AS)**  
Area of Concentration: MATH 121, 122, 221, plus one additional mathematics course  
Other suggested courses: CHEM 131, 132; PHYS 151, 152, 153
- **Medicine**  
See Pre-Medicine.
- **Philosophy (AA)**  
Area of Concentration: PHIL 100, 110, 120, 200, 210, 215, 220, 230  
Other suggested courses: humanities and/or history courses
- **Physics (AS)**  
Area of Concentration: PHYS 151, 152, 153  
Other suggested courses: CHEM 131, 132; MATH 121, 122, 221, 230
- **Political Science/Pre-Law (AA or AS)**  
Area of Concentration: POL S 100, 110, 120  
Other suggested courses: ECON 231, 232; HIST 101, 102; PHIL 110, 130
- **Pre-Dentistry (AS)**  
Students planning to enter dentistry school should consult the entrance requirements of the school they plan to attend.
- **Pre-Forestry (AS)**  
Area of Concentration: General Science, including BIOL 101, 102, 210; CHEM 131, 132  
Other suggested courses: MATH 117; PHYS 101; and courses in accounting, business, and economics. Since the study of special forestry courses generally comes during the third and fourth years of a bachelor degree program, students desiring a BS in forestry should select General Science as their area of concentration at Richland.
- **Pre-Medicine (AS)**  
Students planning to enter medical school should consult the entrance requirements of the institution they plan to enter.
- **Pre-Veterinary (AS)**  
For purposes of identifying an area of concentration at Richland, biology is recommended as an area of concentration.  
Other suggested courses: CHEM 131, 132
- **Psychology (AA or AS)**  
Area of Concentration: PSYCH 110, plus two or more from the following: PSYCH 130, 150, 200, 210, 250, 260, 280  
Other suggested courses: MATH 160, 170, or 190 and other social science
- **Sociology (AA or AS)**  
Area of Concentration: SOCIO 110, plus three or more from the following: SOCIO 125, 130, 135, 141, 150, 200  
Other suggested courses: MATH 170



- **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 early childhood, elementary, secondary, or special education, students must complete a minimum of 60 semester credits (up to a maximum of 64 semester credits). Community college students are strongly encouraged to complete an Associate in Arts, Associate in Science, or Associate of Art in Teaching degree prior to transfer. A minimum grade point average of 2.5 (on a 4.0 scale) and passage of the Illinois Enhanced Basic Skills Test (reading, writing, grammar and math) are required prior to admission to a teacher education program. Information on testing dates and registration materials for the Illinois Basic Skills Test is available in the Student Services Center and on the internet. 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. Additional coursework may be required by the transfer institution.
- **Early Childhood Education (AA, AS, AAS)**  
Area of Concentration: ECE 221; ENGL 101; COMM 101; PSYCH 110, PSYCH 150, plus fine arts and math electives.  
Other suggested courses: ECE 101, 110, 111, 203; ED 105, 220
- **Early Childhood Education (AAT)**  
Students concentrating in early childhood should follow the requirements of the AAT – Early Childhood Education transfer program.
- **Elementary Education (AA or AS)**  
Area of Concentration: ED 100, 105, 200, 220; MATH 112; PSYCH 150; SOCIO 200; Literature Elective; and Non-Western History Elective  
Other suggested courses: ED 107, 108, 109 and ECE 111  
Some transfer institutions may require a foreign language course. Students should complete up to nine sophomore-level semester credits in one academic discipline (i.e., mathematics, science, English, or social science).
- **Paraprofessional Educator (AAS)**  
Area of Concentration: ED 100, 200, 220; ENGL 101; COMM 101; PSYCH 110, 150; SOCIO 200, plus fine art, math, physical science, and U.S. History electives.
- **Secondary Education (AA or AS)**  
Area of Concentration: ED 100, 105, 200, 220; POL S110; PSYCH 145; SOCIO 120 or 200; Literature Elective; and Non-Western History Elective.  
Some transfer institutions may require a foreign language course. Students should complete up to nine sophomore-level semester credits in one academic discipline.
- **Secondary Math Education (AAT)**  
Students concentrating in math education should follow the requirements of the AAT – Secondary Math Education transfer program.
- **Special Education (AAT)**  
Students concentrating in special education should follow the requirements of the AAT – Special Education transfer programs.
- **Theatre (AA)**  
Areas of Concentration: THTRE 160 (3 credit hours), 170, 180, 210, 230  
Other suggested courses: THTRE 150, 171, 181, 220; ENGL 128  
Students planning to transfer to a four-year theatre program should meet with the Theatre Program Coordinator.

## Articulated 2+2 Degree Programs

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

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

- **Benedictine University**  
Business  
Psychology
- **DeVry University**  
Technical Management
- **Eastern Illinois University**  
Communications Studies  
Foreign Language  
History  
Industrial Technology and Surgical Technology  
Journalism  
RN to BSN
- **Franklin University, Columbus, Ohio**  
Business Administration  
Computer Science  
Health Services Administration  
Public Safety Management  
Management Information Systems  
Technical Management
- **Greenville College, Greenville, Illinois**  
Organizational Leadership
- **Millikin University**  
Accounting  
Business Management  
Early Childhood Education  
Business Marketing
- **Robert Morris College**  
Graphic Arts
- **Southern Illinois University, Carbondale**  
Automotive Technology  
Information Technology
- **University of Illinois, Springfield**  
Accounting  
Management  
Clinical Lab Science  
Computer Science  
English  
History  
Liberal Studies  
Mathematics  
Philosophy



## Guaranteed Transfer Agreement

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

University of Illinois, Urbana-Champaign fields of study include

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

## Career and Technical Education Programs

Richland Community College strives to provide educational opportunities to enable individuals to become contributing members of the workforce. The workplace has changed with new work hours and work patterns due to improved telecommunications and computer technologies. Over 65% 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 career and technical education 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 career and technical education 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 (see page 61) and/or capstoned (see below) with four-year institutions for completion of a Bachelor's degree.

### Capstone Options

Some career and technical education programs and/or courses transfer to senior institutions although they are not designed specifically for transfer. Southern Illinois University at Carbondale, for example, offers the Capstone Option allowing students who have earned certain two-year career and technical education 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 career and technical education program are the completion of

1. The program as outlined in this [Catalog](#). (Students transferring credit to Richland should see regulations under Admissions, see page 11.)
2. 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 37).

## 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 career and technical education program fields through high schools or whose work experience may benefit from that knowledge, the College recognizes such education through credit evaluation programs (see page 13). Transfer of college credit to Richland is explained under Admissions (see page 12).

If any student pursuing a career and technical education 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 part-time students in the AAS curriculum are encouraged to pursue their respective programs by taking general and related courses along with their special interest courses rather than taking all courses in the order listed. The appropriate prerequisite experiences should be completed prior to enrolling in a course having prerequisites.



## Group/General Education

### Requirements for Career and Technical Education Certificates and AAS Degrees

Several programs require some study in courses that satisfy certain Group Requirements.

Meets both General Education & Group Requirements

- **Communications**
  - ENGL **101, 102**, 110, 114, 220, 222
  - COMM **101**, 110, 120, 130, 140, 201, 240, 250
- **Humanities**
  - AF AM 100, **103, 104**, 105, **120, 130, 140, 141**
  - ARAB 115
  - CHIN 101, 102, 201, **202**
  - ENGL **115, 124, 126, 128**, 150, **160, 200, 201, 202, 231, 232, 240, 251, 252, 253, 260, 261, 270, 280**
  - FREN 101, 102, 111, 201, **202**
  - GERM 101, 102, 201, **202**
  - HIST **111, 112, 201, 202, 270, 271**
  - HUMAN **100, 104, 106, 107, 201, 280**
  - PHIL **100, 106, 110, 120, 200, 210, 215, 220, 230**
  - SPAN 101, 102, 110, 111, 115, 198, 201, **202**
  - THRE **230**
- **Fine Arts**
  - AF AM 100, **103, 105, 120, 140**
  - ART **100, 210, 220, 230, 240**
  - ENGL **140, 240, 241**
  - HUMAN **100, 104, 106, 107, 201, 280**
  - MUSIC **100, 105, 180, 190**
  - THRE **150, 210, 230**
- **Mathematics**
  - MATH 104, 106, **110, 111, 112, 113, 116, 117, 121, 122, 160, 170, 171, 190, 210, 221, 230, 240**
- **Natural/Life/Physical Science**
  - AGRIC **130**
  - ASTRO **105**
  - BIOL **101, 102, 106, 120, 130, 201, 202, 210, 220**
  - CHEM **100, 106, 110, 131, 132, 201, 202**
  - EASCI **210, 220, 230**
  - ECE 110 (ECE only)
  - HORT **100**
  - PHY S **105**
  - PHYS **100, 101, 102, 151, 152, 153**
- **Social Science**
  - ANTHR **110, 120, 130**
  - ECON 225, **231, 232**
  - ED 100, 101, 102, 105, 107, 108, 109, 199, 200, 210
  - HIST **101, 102, 105, 203**
  - P REL 100, 110
  - POL S **100, 110, 120**
  - PSYCH 100, **110, 130, 145, 150, 200, 210, 220, 250, 260, 280**
  - SOCIO 100, 105, **110, 125, 130, 135, 141, 142, 150, 155, 200, 210, 225**
  - SOC S 199, 280
  - SLRN 293

**Bold print indicates IAI-approved general education classes.**

## Career and Technical Education Program Degree Requirements

- Accounting (Cert., AAS)..... 64
- Agribusiness and Agriculture (AAS)..... 66
- Automotive Technology (Cert., AAS) ..... 68
- Business (AAS, Cert.)..... 70
  - Banking ..... 70
  - Human Resources ..... 72
  - Management..... 74
  - Marketing ..... 76
- CDL Truck Driver Training (Cert.)  
(See Transportation) ..... 166
- Criminal Justice  
(Basic Cert., Adv. Cert., AAS) ..... 78
- Criminal Justice: Corrections  
(Cert., AAS) ..... 80
- Culinary Arts (Cert., AAS) ..... 82
- Drafting & Design Engineering  
(Basic Cert., Adv. Cert., AAS) ..... 84
- Early Childhood Education  
(Basic Cert., AAS)..... 86
- Emergency Medical Technology  
(Basic Cert., Adv. Cert., AAS) ..... 90
- Engineering Technology (Cert., AAS) ..... 92
  - BioFuels Technician ..... 92
  - BioProcess Operator ..... 94
  - CNC Technology Specialty ..... 96
  - Electrical Systems Specialty ..... 98
  - Facilities Management..... 100
  - Fluid Power Systems ..... 102
  - Instrumentation Systems ..... 104
  - Machine Repair..... 106
  - Manufacturing Engineering Technology ..... 108
  - Mechanical Systems Specialty ..... 110
  - Renewable Energy Specialty..... 112
  - Sequestration Specialty..... 114
  - Wind Energy Systems ..... 116
- Fire Science (Basic Cert., Adv. Cert., AAS) ..... 118
- Graphic Arts (Cert., AAS)..... 120
- Health Information Technology (Cert., AAS) ..... 122
- Heating, Ventilation, Air-Conditioning  
& Refrigeration (Cert., AAS) ..... 124
- Horticulture (Cert., AAS) ..... 126
- Hospitality Management (Cert., AAS) ..... 128
- Information Technology (Cert., AAS) ..... 130
  - Desktop Support Technician ..... 130
  - Network Technology ..... 132
  - Programmer/Analyst ..... 134
- Nurse Assistant (Cert.)..... 136
- Nursing (ADN, AAS) ..... 140
- Office Technology (Cert., AAS) ..... 144
  - Administrative Assistant – Accounting ..... 144
  - Administrative Assistant – General ..... 146
  - Administrative Assistant – Legal Office ..... 148
  - Medical Office Specialist – General ..... 150
  - Medical Office Specialist – Coding ..... 152
  - Medical Office Specialist – Transcription ..... 154
- Paraprofessional Educator (Teacher Assistant) (AAS) ..... 88
- Pharmacy Technology (Cert.) ..... 156
- Power Generation – Nuclear (Cert., AAS) ..... 158
- Practical Nursing (Cert., State Licensure) ..... 138
- Radiography (AAS) ..... 160
- Surgical Technology (AAS) ..... 162
- Teacher Assistant (See Paraprofessional Education) ..... 88
- Transportation (Basic Cert.) ..... 166
- Welding Technology (Cert., AAS) ..... 166

These are career and technical education training programs. Some of the courses may not transfer to four-year institutions.



# Accounting

**General description:** The Accounting AAS program prepares students for entry-level positions such as bookkeeper, accounting clerk, assistant auditor, or income tax preparer. These positions help companies manage their financial data. These positions exist in most companies, in bookkeeping and accounting firms, and in government organizations. In larger organizations, positions may be specialized such as payroll clerk, accounts receivable clerk, or accounts payable clerk.

**Sample of job titles with this degree:** Accounting Clerk, Accounting Assistant, Accounting Specialist, Bookkeeper.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ACCT 101	4
BUS 100	3
BUS 110 (or MATH 104)	3
CIS 110	3
ENGL 110 (or ENGL 101)	3

<u>Spring Semester</u>	
ACCT 211 (or ACCT 102)	4
IT 120	3
P REL 100	3
P REL 110	3
COMM 120 (or COMM 101)	3

<u>Fall Semester</u>	
ACCT 201	4
ACCT 210	3
BUS 200	3
BUS 231	3
ECON 231	3

<u>Spring Semester</u>	
ACCT 202	4
ACCT 205	3
ACCT 290 (or ACCT 295)	3
BUS 232	3
ECON 232	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.





Accounting Courses		Credit Hours	Accounting AAS 0040	Acct. Spec. Cert. C 035A	Adv. Acct. Cert. C 035B	Basic Acct. Cert. C 035C
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	3	X	X	X	
ACCT 211	Managerial Cost Accounting (or ACCT 102)	4	X	X	X	X
ACCT 290	Work Experience Practicum & Seminar (or ACCT 295)	3	X			
BUS 100	Business Fundamentals	3	X	X	X	
BUS 110	Business Mathematics (or MATH 104)	3	X	X	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		
CIS 110	Business Applications for Microcomputers	3	X	X	X	X
COMM 120	Business & Professional Speaking (or COMM 101)	3	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		
Total Hours			64	49	33	17



## Administrative Assistant (See Office Technology, page 138)

## Agribusiness & Agriculture

**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. Located literally in the middle of "America's Agribusiness Center," this program offers resources that are unique from those of any other college district. Also see Agribusiness Transfer degree, Horticulture, and Engineering Technology – Biofuels Technician.

**Sample of job titles with this degree:** Plant Manager (grain elevator, feed mill, processing plant), Sales Representative, Commodities Merchandiser/Broker, Animal Scientist/Nutritionist, Agricultural Economist, Agricultural Engineer, Agronomist, Transportation and Logistics Manager.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ACCT 100 (or ACCT 101)	3
BUS 100	3
BUS 110	3
CIS 110	2
ENGL 110 (or ENGL 101)	3

<u>Spring Semester</u>	
AGRIC 195	3
BUS 220	4
P REL 100	3
P REL 110	3
COMM 120 (or COMM 101)	2

<u>Fall Semester</u>	
AGRIC 251	3
BUS 231	3
BUS 240	3
BUS 250	3
ECON 231	3

<u>Spring Semester</u>	
AGRIC 232	3
AGRIC 290	2
BUS 225	3
BUS 232	3
ECON 232	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Agribusiness Courses		Credit Hours	Agribusiness AAS AAS 2063
ACCT 100	Accounting Fundamentals (or ACCT 101)	3	X
AGRIC 195	Contemporary Issues in Agribusiness	3	X
AGRIC 232	Agricultural Economics	3	X
AGRIC 251	Agricultural Commodities	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	4	X
BUS 225	Small Business Development	3	X
BUS 231	Business Law Principles	3	X
BUS 232	Business Law & Ethics	3	X
BUS 240	Marketing Fundamentals	3	X
BUS 250	Selling & Sales Management	3	X
CIS 110	Business Applications	3	X
COMM 120	Business & Professional Speaking (or COMM 101)	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
<b>Total Hours</b>			<b>61</b>



# Automotive Technology

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

The Automotive Technology Program has achieved master certification by the National Institute for Automotive Service Excellence (NATEF). Instruction is offered in all eight (8) 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.

A uniform shirt and an approved set of tools are required for this program. Contact the Business and Technology Division, (217) 875-7211, Ext. 475, for details.

**Sample of job titles with this degree:** Driveability Specialist, Transmission Specialist, HVAC Specialist, Driveline Specialist, Front End Specialist, Engine Rebuild Specialist, Line Technician.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
AUTO 101	3
AUTO 102	4
ENGL 110 (or ENGL 101)	3
MATH 104 (or MATH 110)	4
General Education Elective	3

<u>Spring Semester</u>	
AUTO 201	4
AUTO 207	4
CIS 110 (or PHYS 100)	3
COMM 120 (or COMM 101)	3

<u>Summer Semester</u>	
AUTO 202	4

<u>Fall Semester</u>	
AUTO 203	4
AUTO 204	4
AUTO 208	4
P REL 100 (or PSYCH 110)	3

<u>Spring Semester</u>	
AUTO 205	4
AUTO 206	4
AUTO 209	4
AUTO 290	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Automotive Courses		Credit Hours	AAS 0071	Sr. Tech Cert. C 0069	Perform Spec. Cert. C 071B	Brake Steer/ Susp Cert. C 071C	Trans/ Driveline Cert. C 071F	HVAC Cert. C 071D	Eng. Reb. Cert. C 071E	Serv Spec. Cert. C 071A
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	4	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 for Microcomputers (or PHYS 100)	3	X							
COMM 120	Business & Professional Speaking (or COMM 101)	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							
General Education Elective		3	X	X						
Total Hours			65	46	19	15	15	11	11	7



## Business

**General description:** The Business instructional area consists of an AAS degree in Business with a specialization in either Banking, Human Resources, Management, or Marketing. Students working to earn the Business AAS degree must complete the required business core courses, the required courses for the desired specialization, and specified general education requirements. A certificate is also available with a specialization in one of the following areas: Banking, Management, Marketing, or Entrepreneurship. Certificates are career and technical education programs. Some of the courses may not transfer to four-year institutions.

## Business – Banking Specialty

**General description:** This specialization focuses on the fundamentals of banking, including financial and customer service foundations. Both the Associate of Applied Science (AAS) and certificate are offered.

**Sample of job titles with this degree:** Teller, Customer Service Representative, Assistant Branch Manager, Branch Manager

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ACCT 101	4
BUS 100	3
BUS 110 (or MATH 104)	3
CIS 110	3
ENGL 110 (or ENGL 101)	3

<u>Spring Semester</u>	
ACCT 102 (or ACCT 211)	4
BUS 102	2
P REL 100	3
P REL 110	3
COMM 120 (or COMM 101)	3

<u>Fall Semester</u>	
BUS 200	3
BUS 231	3
BUS 240	3
BUS 250	3
ECON 231	3

<u>Spring Semester</u>	
BUS 221	3
BUS 232	3
BUS 255	3
BUS 283	3
BUS 290 (or BUS 295)	3
ECON 232	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



<b>Business – Banking Specialty Courses</b>		Credit Hours	Banking AAS 038C	Entrepreneur Cert. C 038H	Banking Spec. Cert C 038J
ACCT 101	Financial Accounting	4	X		
ACCT 102	Managerial Accounting (or ACCT 211)	4	X		
ACCT 205	Small Business Accounting	3		X	
BUS 100	Business Fundamentals	3	X		
BUS 102	Teller Fundamentals	2	X		X
BUS 110	Business Mathematics (or MATH 104)	3	X		X
BUS 200	Customer Service Fundamentals	3	X	X	X
BUS 220	Cost Management	4		X	
BUS 221	Security & Loss Prevention	3	X	X	
BUS 225	Small Business Development	3		X	
BUS 231	Business Law Principles	3	X		
BUS 232	Business Law & Ethics	3	X		
BUS 233	Business Law for Entrepreneurs	3		X	
BUS 240	Marketing Fundamentals	3	X		
BUS 245	Advertising and Sales Promotion	3			
BUS 250	Selling & Sales Management	3	X		X
BUS 255	Principles of Banking	3	X		X
BUS 280	Strategic Decision Making	3		X	
BUS 281	Strategic Performance for Productivity	3		X	
BUS 282	Strategic Tax Management	3		X	
BUS 283	Personal Finance	3	X	X	X
BUS 290	Work Experience Practicum & Seminar (or BUS 295)	3	X		
CIS 110	Business Applications for Microcomputers	3	X		X
COMM 120	Business & Professional Speaking (or COMM 101)	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		
<b>Total Hours</b>			64	31	20



## Business – Human Resources Specialty

**General Description:** This specialty introduces students to both specialty and technical core courses that apply to the AAS degree in Human Resource Management. The specialty prepares students to assume varied roles in organizations in a Human Resource Management Generalist capacity.

**Sample of Job Titles with this Degree:** Human Resource Management Generalist

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ACCT 101	4
BUS 100	3
BUS 110 (or MATH 104)	3
CIS 110	3
ENGL 110 (or ENGL 101)	3

<u>Spring Semester</u>	
ACCT 102 (or ACCT 211)	4
BUS 235	3
ECON 231	3
P REL 100	3
COMM 120 (or COMM 101)	3

<u>Fall Semester</u>	
BUS 200	3
BUS 231	3
BUS 236	3
BUS 238	3
Electives (Choose from list below)	3

<u>Spring Semester</u>	
BUS 237	3
BUS 232	3
BUS 290 (or BUS 295)	3
ECON 232	3
P REL 110	3

Electives: BUS 230; ENGT 105; L DEV 110; L DEV 111; SOCIO 110

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame..





Business – Human Resources Courses		Credit Hours	Human Resource Mgmt. AAS 038C	Entrepreneur Cert. C 038H
ACCT 101	Financial Accounting	4	X	
ACCT 102	Managerial Accounting (or ACCT 211)	4	X	
ACCT 205	Small Business Accounting	3		X
BUS 100	Business Fundamentals	3	X	
BUS 110	Business Mathematics (or MATH 104)	3	X	
BUS 200	Customer Service Fundamentals	3	X	X
BUS 220	Cost Management	3		X
BUS 221	Security & Loss Prevention	3		X
BUS 225	Small Business Development	3		X
BUS 231	Business Law Principles	3	X	
BUS 232	Business Law & Ethics	3	X	
BUS 233	Business Law for Entrepreneurs	3		X
BUS 235	Human Resource Management	3	X	
BUS 236	Recruitment, Selection & Training	3	X	
BUS 237	Benefits Administration	3	X	
BUS 238	Team Dynamics	3	X	
BUS 250	Selling & Sales Management	3		
BUS 255	Principles of Banking	3		
BUS 280	Strategic Decision Making	3		X
BUS 281	Strategic Performance for Productivity	3		X
BUS 282	Strategic Tax Management	3		X
BUS 283	Personal Finance	3		X
BUS 290	Work Experience Practicum & Seminar (or BUS 295)	3	X	
CIS 110	Business Applications for Microcomputers	3	X	
COMM 120	Business & Professional Speaking (or COMM 101)	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		X	
Electives: Choose from these courses: BUS 230; ENGT 105; L DEV 110; L DEV 111; SOCIO 110		3	X	
Total Hours			62	31



## Business – Management Specialty

**General description:** This specialization provides students with both specialty and technical core courses in management that apply to either the certification or the Associate of Applied Science (AAS) degree in management. Though the specialty is versatile in its use, most students seek entry-level supervisory and managerial positions in a variety of settings.

**Sample of job titles with this degree:** Foreman, Supervisor, Manager, Assistant Director

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ACCT 101	4
P REL 100	3
BUS 110 (or MATH 104)	3
CIS 110	3
ENGL 110 (or ENGL 101)	3

<u>Spring Semester</u>	
ACCT 102 (or ACCT 211)	4
ECON 231	3
BUS 100	3
P REL 110	3
COMM 120 (or COMM 101)	3

<u>Fall Semester</u>	
BUS 200	3
BUS 231	3
BUS 240	3
Electives (Choose from list below)	6

<u>Spring Semester</u>	
Electives (Choose from list below)	3
BUS 225	3
BUS 232	3
BUS 290 (or BUS 295)	3
ECON 232	3

Electives: BUS 228, 229, 230, 283; ENGT 105

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Business – Management Specialty Courses		Credit Hours	Management AAS 038C	Mgmt. Spec. Cert. C 038G	Entrepreneur Cert. C 038H
ACCT 101	Financial Accounting	4	X	X	
ACCT 102	Managerial Accounting (or ACCT 211)	4	X	X	
ACCT 205	Small Business Accounting	3			X
BUS 100	Business Fundamentals	3	X	X	
BUS 102	Teller Fundamentals	2			
BUS 110	Business Mathematics (or MATH 104)	3	X	X	
BUS 200	Customer Service Fundamentals	3	X	X	X
BUS 220	Cost Management	4			X
BUS 221	Security & Loss Prevention	3			X
BUS 225	Small Business Development	3	X	X	X
BUS 231	Business Law Principles	3	X	X	
BUS 232	Business Law & Ethics	3	X	X	
BUS 233	Business Law for Entrepreneurs	3			X
BUS 240	Marketing Fundamentals	3	X	X	
BUS 255	Principles of Banking	3			
BUS 280	Strategic Decision Making	3			X
BUS 281	Strategic Performance for Productivity	3			X
BUS 282	Strategic Tax Management	3			X
BUS 283	Personal Finance	3			X
BUS 290	Work Experience Practicum & Seminar (or BUS 295)	3	X		
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
CIS 110	Business Applications for Microcomputers	3	X	X	
ECON 231	Macroeconomics	3	X	X	
ECON 232	Microeconomics	3	X		
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X		
P REL 100	Human Relations	3	X	X	
P REL 110	Supervision	3	X	X	
Electives: Choose from these courses: BUS 228, 229, 230, 283; ENGT 105		9	X	X (6)	
<b>Total Hours</b>			<b>62</b>	<b>47</b>	<b>31</b>



## Business – Marketing Specialty

**General Description:** The marketing specialty provides students with course background in several facets of marketing – including product development, pricing, promotion, and distribution – which prepares them for a variety of job opportunities. Students often seek employment as marketing assistants, customer service representatives, manufacturer's representatives, and entry-level market researchers. Both a certificate and an Associate of Applied Science (AAS) degree are offered.

**Sample of Job Titles with this Degree:** Salesperson, Broker, Marketing Assistant, Agent, Customer Service Representative, Manufacturer's Representative

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ACCT 101	4
BUS 100	3
BUS 110 (or MATH 104)	3
CIS 110	3
ENGL 110 (or ENGL 101)	3

<u>Spring Semester</u>	
ACCT 102 (or ACCT 211)	4
BUS 283	3
P REL 100	3
BUS 240	3
COMM 120 (or COMM 101)	3

<u>Fall Semester</u>	
BUS 200	3
BUS 231	3
BUS 247	3
ECON 231	3
Electives (Choose from list below)	3

<u>Spring Semester</u>	
BUS 225	3
BUS 232	3
BUS 245	3
BUS 290 (or BUS 295)	3
ECON 232	3

Electives: ART 127; BUS 248, 250

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Business – Marketing Specialty Courses		Credit Hours	Marketing AAS 038C	Mkt. Spec. Cert. C 038I	Entrepreneur Cert. C 038H
ACCT 101	Financial Accounting	4	X	X	
ACCT 102	Managerial Accounting (or ACCT 211)	4	X	X	
ACCT 205	Small Business Accounting	3			X
BUS 100	Business Fundamentals	3	X	X	
BUS 102	Teller Fundamentals	2			
BUS 110	Business Mathematics (or MATH 104)	3	X	X	
BUS 200	Customer Service Fundamentals	3	X	X	X
BUS 220	Cost Management	4			X
BUS 221	Security & Loss Prevention	3			X
BUS 225	Small Business Development	3	X	X	X
BUS 231	Business Law Principles	3	X	X	
BUS 232	Business Law & Ethics	3	X	X	
BUS 233	Business Law for Entrepreneurs	3			X
BUS 240	Marketing Fundamentals	3	X	X	
BUS 245	Advertising and Sales Promotion	3	X	X	
BUS 247	Marketing Research	3	X	X	
BUS 280	Strategic Decision Making	3			X
BUS 281	Strategic Performance for Productivity	3			X
BUS 282	Strategic Tax Management	3			X
BUS 283	Personal Finance	3	X	X	X
BUS 290	Work Experience Practicum & Seminar (or BUS 295)	3	X		
CIS 110	Business Applications for Microcomputers	3	X	X	
COMM 120	Business & Professional Speaking (or COMM 101)	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	X	
P REL 110	Supervision	3		X	
Electives: Choose from these courses: ART 127; BUS 248, 250		3	X	X	
<b>Total Hours</b>			62	47	31



## Child Care and Education (See Early Childhood Education, page 86)

## Computer Integrated Manufacturing (See Engineering Technology, page 92)

## Computer Science (See AAS Programmer/Analyst Degree and also Area of Concentration Suggestions for AS Degree, page 128)

## 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 Richland 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.

**Sample of job titles with this degree:** K-9 Officer, Investigator, State Police Officer, Secretary of State Investigator, FBI, Secret Service, Border Patrol, Conservation Officer, Postal Inspector, Court Security, Crime Scene Investigator, Forensic Sciences, Private Investigator.

This is a career and technical education program. Some courses may not transfer to four-year institutions.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CRJ 110	3
CIS 110	3
ENGL 110	3
SOCIO 110	3
General Education Elective	3

<u>Spring Semester</u>	
*CRJ 125 (or CRJ 126 )	3
PSYCH 110	3
COMM 120	3
POL S 120	3
General Education Elective	3

<u>Fall Semester</u>	
CRJ 112	3
CRJ 114	3
CRJ 200	3
CRJ 210	3
General Education Elective	3

<u>Spring Semester</u>	
CRJ 113	3
CRJ 116	3
HLTH 120	3
SOCIO 130	3
CRJ 290 (or CRJ 295)	3

### Additional Program Information:

\* Students pursuing a career as a Patrol Officer should take CRJ 125.

\* Students pursuing a career as an Emergency Telecommunications Specialist should take CRJ 126.

Students who begin in Spring may not finish in a two-year time frame.

Students planning to transfer to a college or university should enroll in ENGL 101 or COMM 101.

CRJ 290 & 295 are offered during the summer as needed.



<b>Criminal Justice Courses</b>		<b>Credit Hours</b>	<b>Criminal Justice AAS 0020</b>	<b>Emer. Telecom. Spec. Adv. Cert. C 019A</b>	<b>Patrol Officer Adv. Cert. C 0019</b>	<b>Emer. Telecom. Specialist Cert. C 019C</b>	<b>Patrol Officer Cert. C 019F</b>	<b>Prob. and Par. Off. Cert. C 019E</b>
CIS 110	Business Applications	3	X	X	X	X	X	X
COMM 120	Business & Professional Speaking (or COMM 101)	3	X	X	X	X		
CRJ 110	Criminal Justice Fundamentals	3	X	X	X	X	X	X
CRJ 112	Investigative Report Writing	3	X	X	X	X	X	X
CRJ 113	Criminal Investigation	3	X	X	X	X	X	X
CRJ 114	Criminal Law	3	X	X	X		X	X
CRJ 116	Probation/Parole	3	X					X
*CRJ 125	Patrol Procedures (or CRJ 126)	3	X	X	X	X	X	
CRJ 200	Youth, the Law, & Police Intervention	3	X	X	X			
CRJ 210	Law Enforcement & Community Relations	3	X	X	X			
CRJ 290	Work Experience Practicum & Seminar (or CRJ 295)	3	X					
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X	X	X			
HLTH 120	Wellness & Healthful Living	3	X	X	X	X	X	X
POLS 120	Politics in States and Communities	3	X	X	X			
PSYCH 110	Introduction to Psychology	3	X	X	X			
SOCIO 110	Introduction to Sociology	3	X	X	X			
SOCIO 130	Criminology	3	X	X	X			
AAS Group Requirements/Electives to be selected from areas of Communications, Humanities, Fine Arts, Mathematics, and/or Natural/Life/Physical Science		9	X					
<b>Total Hours</b>			60	45	45	21	21	21



## Criminal Justice – Corrections

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CRJ 110	3
CRJ 128	3
ENGL 110	3
PSYCH 110	3
SOCIO 110	3

<u>Spring Semester</u>	
CIS 110	3
CRJ 113	3
POL S 120	3
PSYCH 210	3
SOCIO 130	3
COMM 120	3

<u>Fall Semester</u>	
CRJ 112	3
CRJ 114	3
CRJ 132	3
PSYCH 145	3
General Education Elective	3

<u>Spring Semester</u>	
CRJ 116	3
CRJ 134	3
CRJ 290 (or CRJ 295)	3
HLTH 120	3
General Education Elective	3

### Additional Program Information:

Students planning to transfer to a college or university should enroll in ENGL 101 or COMM 101

Students who begin in Spring may not finish in a two-year time frame.

CRJ 290 & 295 are offered during the summer as needed.





<b>Criminal Justice – Corrections Courses</b>		Credit Hours	CRJ Corr. AAS 0028	Corr. Officer Adv. Cert. C 019B	Correctional Officer Cert. C 019D
CIS 110	Business Applications	3	X	X	X
COMM 120	Business & Professional Speaking (or COMM 101)	3	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	
CRJ 114	Criminal Law	3	X	X	X
CRJ 116	Probation/Parole	3	X	X	
CRJ 128	Corrections Fundamentals	3	X	X	X
CRJ 132	Institutional Behavior in Corrections	3	X	X	X
CRJ 134	Correctional Counseling & Treatment	3	X	X	X
CRJ 290	Work Experience Practicum & Seminar (or CRJ 295)	3	X		
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X	X	
HLTH 120	Wellness & Healthful Living	3	X	X	X
POL S 120	Politics in States and Communities	3	X	X	
PSYCH 110	Introduction to Psychology	3	X	X	
PSYCH 145	Human Growth & Development	3	X		
PSYCH 210	Social Psychology	3	X		
SOCIO 110	Introduction to Sociology	3	X		
SOCIO 130	Criminology	3	X	X	
AAS Group Requirements/Electives to be selected from areas of Communications, Humanities, Fine Arts, Mathematics, and/or Natural/Life/Physical Science.		6	X		
<b>Total Hours</b>			63	45	21



## Culinary Arts

**General description:** The Culinary Arts Program prepares individuals for an exciting career as a chef, cook, and/or food preparation worker for a variety of hospitality industries, including hotels, restaurants, convention centers, hospitals, and corporate dining facilities. The curriculum covers all aspects of culinary preparation including meats, poultry, fish, vegetable, sauces, soups, bread and pastry baking, desserts, specialty cooking, and international cuisine. Hands-on experience in all facets of culinary preparation and presentation is emphasized throughout the curriculum. Further, coursework emphasizing the development of supervisory and managerial responsibilities such as sanitation, menu planning, management, cost control, purchasing, cooking, baking, and restaurant operations are also provided. Specific skills aimed at creating recipes; managing the kitchen; ordering supplies; measuring, mixing, and cooking ingredients according to specified recipes; familiarity with the various types of kitchen equipment and instruments; knife skills, cutting, chopping, slicing, and dicing; and directing the duties of other kitchen employees are developed throughout the entire program of study.

Individuals who are not interested in working for restaurants or food service kitchens may also benefit from this program. Personal chefs, for example, plan and prepare meals in private homes according to a client's personal preferences and dietary needs which is an emerging occupation. Further, research chefs combine culinary skills with specific skills in food science to test new formulas, develop recipes, experiment with flavors and presentation, and test new products for chain restaurants, food growers, and manufacturers.

Students may pursue an Associate of Applied Science Degree or several career-focused certificates such as food preparation worker, baking & pastry, chef assistant, and/or culinary management.

Culinary Arts students are required to buy uniforms and a knife kit, which total approximately \$400. These are purchased through the Culinary Arts Director during the first week of class.

**Sample of job titles with this degree:** Small Business Owner, Research Chef, Private Chef, Caterer, Executive Chef, Sous Chef, Food Stylist, Dietary Advisor.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CA 105	4
CA 150	2
CIS 110	3
ENGL 110 (or ENGL 101)	3
HOSP 110	1
COMM 120 (or COMM 101)	3

<u>Spring Semester</u>	
BUS 121	3
CA 115	4
CA 120	4
P REL 110	3
General Education Elective	3

<u>Fall Semester</u>	
BUS 220	4
BUS 260	3
CA 200	3
CA 220	3
General Education Elective	3

<u>Spring Semester</u>	
BUS 262	3
BUS 263	3
CA 210	3
CA 230	3
CA 290 (or CA 295)	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Culinary Arts Courses		Credit Hours	Culinary Arts AAS 2200	Culinary Management Cert. C 220A	Chef Assistant Cert. C 220B	Baking and Pastry Cert. C 220C	Food Preparation Cert. C 220D
BUS 121	Purchasing & Product Identification	3	X	X			
BUS 220	Cost Management	4	X	X		X	
BUS 260	Hospitality Nutrition	3	X	X			
BUS 262	Dining Room Management	3	X	X			
BUS 263	Catering & Banquet Management	3	X	X			
CA 105	Culinary Fundamentals	4	X	X	X	X	X
CA 115	Culinary Applications	4	X	X	X	X	X
CA 120	Baking Fundamentals	4	X	X	X	X	
CA 150	Culinary Math	2	X	X			
CA 200	Meat, Poultry, and Fish	3	X	X	X		
CA 210	Garde Manger	3	X	X	X		
CA 220	Pastry Fundamentals	3	X	X	X	X	
CA 230	International Cuisine	4	X	X	X		
CA 290	Work Experience Practicum & Seminar (or CA 295)	3	X				
CIS 110	Business Application for Microcomputers	3	X	X			
COMM 120	Business & Professional Speaking (or COMM 101)	3	X				
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X				
HOSP 110	Food Service Sanitation	1	X	X	X	X	X
P REL 110	Supervision	3	X				
General Education Electives		6	X				
<b>Total Hours</b>			65	47	26	20	9



## Desktop Support Technician (See Information Technology, page 124)

## 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 various manufacturing firms.

**Sample of job titles with this degree:** CAD Technician, CAD Specialist, Engineering Technician, Architectural Technician.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
DRAFT 101	4
DRAFT 215	3
ENGL 101	3
MATH 117 (or MATH 104)	3
COMM 101	3

<u>Spring Semester</u>	
DRAFT 102	4
DRAFT 110	3
DRAFT 130	4
DRAFT 220	3
CS 105	3

<u>Fall Semester</u>	
DRAFT 120	2
DRAFT 210	3
DRAFT 230	3
DRAFT 236	4
ENGR 110	3

<u>Spring Semester</u>	
DRAFT 290 (or DRAFT 295)	3
ENGT 252	3
PHYS 100	4
General Education Elective	3
Drafting Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Drafting & Design Engineering Courses		Credit Hours	AAS 0113	Certificate C0112	AutoCad Cert. 0114
COMM 101	Principles of Speech	3	X		
CS 105	Foundations of Information Technology	3	X		
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 231	Introduction to Surveying	3			
DRAFT 230	Advanced CAD	3	X		X
DRAFT 236	Pro-Engineer	4	X	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		
MATH 117	Trigonometry (or MATH 104)	3	X	X	
PHYS 100	Physics of the Modern World (or higher PHYS courses)	4	X		
Drafting Electives: (Select a minimum of 3 credit hours)			X	X	
DRAFT 235	Solid Modeling (3-D)	3			
DRAFT 242	Commercial Architecture	3			
DRAFT 243	Structural Steel Detailing	3			
DRAFT 244	Concrete Detailing	3			
DRAFT 245	Residential Architecture	3			
AAS Group Requirements/Electives (3) To be selected from areas of Communications, Humanities, Fine Arts, Mathematics, Natural/ Life/Physical Science, and/or Social Science.		3	X		
<b>Total Hours</b>			<b>64</b>	<b>35</b>	<b>13</b>



# 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.

**Sample of job titles with this degree:** ECE Child Care Center Director, ECE Child Care Center Assistant, ECE Teacher in a Child Care Center or Private School, ECE Assistant in Public Schools.

This is a career and technical education program. Some courses may not transfer to four-year institutions.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ECE 101	3
ECE 110	3
ECE 111	3
ECE 112	3
ECE 114	3

<u>Spring Semester</u>	
ECE 116	3
ECE 210	3
ENGL 101	3
COMM 101	3
PSYCH 110	3

<u>Fall Semester</u>	
ECE 113	3
ED 105	3
ED 220	3
BUS 110	3
PSYCH 150	3

<u>Spring Semester</u>	
ECE 102	2
ECE 103	2
ECE 203	3
ECE 221	3
ECE 290	2-3
Fine Arts Elective	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.

## Other Graduation Requirements:

Portfolio Development Met.



Early Childhood Education Courses		Credit Hours	ECE AAS 0011	ECE Basic Certificate - BC 0009
BUS 110	Business Math	3	X	
COMM 101	Principles of Speech	3	X	
ECE 101	Introduction to Early Childhood Education	3	X	X
ECE 102	School-Age Child Care	2	X	
ECE 103	Child Guidance	2	X	
ECE 110	Health, Nutrition, & Safety for Young Children	3	X	
ECE 111	Children's Literature	3	X	X
ECE 112	Math & Science for Young Children	3	X	X
ECE 113	Art, Music & Drama for Young Children	3	X	X
ECE 114	Play Activities for Young Children	3	X	X
ECE 116	Infant/Toddler Development	3	X	X
ECE 203	Child, Family & Community	3	X	
ECE 210	Curriculum Design/Early Childhood	3	X	X
ECE 221	Teaching Strategies for Special Needs	3	X	X
ECE 290	Observation/Clinical Experiences	2-3	X	
ED 105	Using Technology in the Classroom 1	3	X	
ED 220	The Exceptional Child	3	X	
ENGL 101	Composition 1	3	X	X
PSYCH 110	Introduction to Psychology	3	X	X
PSYCH 150	Child Psychology	3	X	
Directed Electives: Fine Arts (ART 100 or MUSIC 100 recommended)		3	X	
<b>Total Hours</b>			60	30



# Education

## Paraprofessional Education (Teacher Assistant)

**General description:** The Paraprofessional Educator (Teacher Assistant) program is designed to prepare individuals to assist a teacher in the regular classroom setting or in providing instruction and supervision to special student populations, such as bilingual/bicultural students, special education students, adult learners, and students learning English. The program will include regulations regarding teacher assistant responsibilities in general classroom supervision, discipline and behavior management, tutorial techniques, and carrying out related tasks. It is designed to satisfy state requirements for teacher assistants and to meet the skills required for assisting teachers in the classroom.

**Sample of job titles with this degree:** Classroom Aide, Teaching Assistant, Bilingual Aide, Computer Lab Assistant, Special Education Assistant, Library Assistant.

This is a career and technical education program. Some courses may not transfer to four-year institutions.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ED 100	3
ED 109	3
ENGL 101	3
PSYCH 110	3
COMM 101	3

<u>Spring Semester</u>	
ECE 113	3
ED 105	3
PSYCH 150	3
SOCIO 200	3
Math Elective	4

<u>Summer Semester</u>	
ED 108	3

<u>Fall Semester</u>	
ED 102	2
ED 107	3
ED 220	3
US History Elective	4

<u>Spring Semester</u>	
ECE 110	3
ED 111	3
ED 200	3
Fine Arts Elective	3
Physical Science Elective	4

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.

### Other Graduation Requirements:

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





Paraprofessional Education Courses		Credit Hours	Paraprofessional Ed. AAS 2125
COMM 101	Principles of Speech	3	X
ECE 110	Health, Nutrition, and Safety for Young Children	3	X
ECE 111	Children's Literature	3	X
ECE 113	Art, Music, and Drama for Young Children	3	X
ED 100	Introduction to Public Education	3	X
ED 102	Field Experience in Education	2	X
ED 105	Using Technology in the Classroom I	3	X
ED 107	Art for Elementary School Teachers	3	X
ED 108	The Multicultural Classroom	3	X
ED 109	Principles of Reading	3	X
ED 200	Educational Psychology	3	X
ED 220	The Exceptional Child	3	X
ENGL 101	Composition 1	3	X
PSYCH 110	Introduction to Psychology	3	X
PSYCH 150	Child Psychology	3	X
SOCIO 200	Marriage and Family	3	X
Directed Electives:			
Fine Arts (ART 100 or MUSIC 100 recommended)		3	X
Math (MATH 110 or 113 recommended)		4	X
Physical Science (Earth Science recommended)		4	X
U.S. History		4	X
<b>Total Hours</b>			<b>62</b>



## Electrician

**Description:** This is a 5-year Electrician's Apprenticeship and Training program for the area's Union Electrical Construction and Maintenance Industry. This is a restricted entry program operated by Midstate Electrical Training Center; sponsored by Illinois Chapter, National Electrical Contractors Association (NECA), Midstate Division located in Springfield, IL, and International Brotherhood of Electrical Workers (IBEW) Local 146 located in Decatur, IL. Once accepted into the program, an Apprentice Inside Wireman is required to complete a minimum of 8000 hours of On-the-Job Training (OJT) at jobsites through employment with electrical contractors, is required to complete a minimum of 900 hours of Related Classroom Training (RCT) at Midstate Electrical Training Center, and can pursue additional college-level requirements for an Associate in Applied Science degree from RCC. For further information, please contact Midstate Electrical Training Center at 217-875-3041, or go to [MidstateElectricalTrainingCenter.com](http://MidstateElectricalTrainingCenter.com).

## Electronics Systems (See Engineering Technology, page 92)

## Emergency Medical Services

**General description:** The Emergency Medical Services Program includes a series of emergency medical technology (EMT) courses that lead either to a basic or advanced certificate or to an associate's degree in Emergency Medical Services at the paramedic level. The curriculum meets the criteria established by the Illinois Department of Public Health, Division of Emergency Medical Services and Highway Safety. The program prepares individuals to provide emergency assistance and basic or advanced life support in out-of-the-hospital settings to critically ill and/or injured persons and to prepare the patient for transport to a medical facility. A combination of educational methods will be used including theory instruction and demonstration and practice of life-saving skills for simulated and real emergency situations. Physicians specializing in emergency medicine, paramedics, and registered nurses who have advanced education in medical and trauma management provide instruction. An EMT-B license is required to advance in the EMT program. Also required for employment is successful completion of the Illinois Department of Public Health State Licensure Examination.

**Sample of job titles with this degree:** Job opportunities for EMT Basic, EMT Intermediate, Paramedic include hospitals, ambulance services, and fire or police rescue squad departments.

This is a career and technical education program. Some courses may not transfer to four-year institutions.

### Suggested Full-Time Course Sequence:

#### Emergency Medical Services AAS

<u>First Semester</u>	<u>Credit Hours</u>
EMT 120	6
HLTH 140	3
MATH 106	2
<u>Second Semester</u>	
EMT 200	7
PSYCH 110	3
BIOL 101	4
<u>Third Semester</u>	
EMT 220	6
<u>Fourth Semester</u>	
EMT 240	9
ENGL 101	3
Directed Elective	3
<u>Fifth Semester</u>	
EMT 260	7
SOCIO 110	3
Humanities Elective	3
<u>Sixth Semester</u>	
EMT 290	5

### Additional Program Information:

Students must complete program courses with a "C" or better prior to or during the semester in which they are outlined.

Students are required to complete the Health Professions' Health and Immunization Record form to demonstrate current immunizations and physical ability to perform program requirements. Students must also submit to a FEE APP fingerprint based background check. More information about these requirements can be directed to the Health Professions Office.



Emergency Medical Services Courses		Credit Hours	EMS AAS 2071	EMT Advanced Cert. AC 2072	EMT Basic Cert. BC 2073
BIOL 101	Concepts of Biology 1	4	X		
Directed Elective: Choose One: P REL 100, 110; FIRE 270		3	X		
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		
ENGL 101	Composition 1 (or ENGL 110)	3	X		
HLTH 140	Medical Terminology	3	X	X	X
Humanities Elective		3	X		
MATH 106	Mathematics for Health Careers	2	X	X	X
PSYCH110	Introduction to Psychology	3	X		
SOCIO 110	Introduction to Sociology	3	X		
<b>Total Hours</b>			<b>64</b>	<b>22</b>	<b>11</b>



## 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 intended for AmerenIP employees. For further information, contact Marvin Morey at (217) 424-6414.

## 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/specialties), including Biofuels Technician, BioProcess Operator, CNC Technology, Electrical Systems, Facilities Maintenance, Fluid Power Systems, Instrumentation Systems, Machine Repair, Manufacturing Engineering Technology, Mechanical Systems, and Wind Energy Systems. While each concentration contains a unique set of courses overall, each contains the same general education and technical core courses.

The classrooms and laboratories are equipped with modern and commonly used industrial components, tools, machines, and systems. While attention is given to classroom theory, hands-on skills required for success in this rapidly growing field are especially emphasized. Upon successful completion of this program, the student will be ready to install, maintain, troubleshoot, and repair modern industrial systems. Major employers are automated industrial plants, processing plants, contractors, field service centers, technical sales, and training centers.

These are career and technical education programs. Some courses may not transfer to four-year institutions

## Engineering Technology – Biofuels Technician

**General description:** Biofuels curriculum is designed to provide individuals with an educational foundation, including those vital technical skills, to obtain employment in the biofuels industry, or to assist an individual with understanding biofuels manufacture components. Course work includes general education, alternative energy resource management, biochemistry, industrial safety and an array of course work specific to changing sectors of the biofuels industry. Graduates of the curriculum should qualify for numerous positions within the Biofuels industry and related industries in food bioprocessing. See also Agribusiness and Horticulture.

**Sample of job titles with this degree:** Plant Technician, Process Coordinator, Process Manager, Lab Technician, Sales Technician, Plant Manager, Fuel Purchase, Small Business Owner.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 100	3
ENGT 101	4
ENGT 103	3
COMM 120 (or COMM 101)	3
MATH 113	4

<u>Spring Semester</u>	
ENGT 102 (or DRAFT 101)	3
ENGT 105	3
ENGT 107	3
ENGT 111	4
ENGT 120	3
ENGT 125	2

<u>Fall Semester</u>	
ENGT 210	4
ENGT 220 (or ENGT 212)	3
ENGT 225	4
ENGT 260	3
ENGT 270	3

<u>Spring Semester</u>	
BIOL 210	4
ENGL 110 (or ENGL 101)	3
ENGT 231	2
ENGT 271	2
PHYS 100 (or PHYS 101)	4

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Biofuels Technician Specialty Courses		Credit Hours	ENGT Biofuels AAS 3000	BioFuels Technician Certificate C 300N	BioFuels Control Systems Technician Certificate C 300L
BIO 210	Environmental Biology	4	X		
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
ENGL 110	Communication in the Workplace (or ENGL 101)	3	X		
ENGT 100	Industrial Processes	3	X	X	
ENGT 101	Motor Control Fundamentals	4	X	X	X
ENGT 102	Blueprint Reading (or DRAFT 101)	3	X	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X	
ENGT 105	Occupational Safety	3	X	X	X
ENGT 107	BioFuel Manufacturing Fundamentals	3	X	X	X
ENGT 111	Motor Control Applications	4	X	X	X
ENGT 120	Process Control Fundamentals	3	X	X	X
ENGT 125	BioProcess Operation Fundamentals	2	X	X	
ENGT 210	PLC Fundamentals	4	X	X	X
ENGT 220	Process Control Applications (or ENGT 212)	3	X	X	X
ENGT 225	BioProcess Operation Applications	4	X	X	
ENGT 231	Piping Fundamentals	2	X	X	
ENGT 260	Quality Fundamentals	3	X	X	
ENGT 270	BioFuel Manufacturing Applications	3	X	X	
ENGT 271	BioFuel Manufacturing Techniques	3	X	X	
MATH 113	Introduction to Applied Statistics	4	X		
PHYS 100	Physics for the Modern World (or PHYS 101)	4	X		
<b>Total Hours</b>			68	50	27



## Engineering Technology – BioProcess Operator

**General description:** This career-laddering curriculum provides individuals with the essential skills needed to perform a variety of bioprocess operations tasks in existing and emerging biotechnology manufacturing environments. Course work includes developing the following skills: identifying vehicle and transportation hazards; employing physical and cyber security practices; using fire, rescue and emergency response equipment; operating environmental control equipment; handling potable water, fire water, service/utility water, waste water and cooling water; working with chemicals; maintaining auxiliary equipment; storing materials; operating and repairing steam turbines, heat exchangers, boilers, turbines, engines, separation equipment, reactors, solids handling equipment, steam generation and distribution systems, reaction systems, separation systems, extraction systems, distillation systems, stripping systems, dehydration systems, and filtration systems; employing techniques to optimize system economics; writing procedures; recognizing normal and abnormal system operation; employing strict procedural techniques for system startup and system shutdowns; and working as part of a team. Graduates will be qualified to attain entry-level process operator positions in biotechnology and bioscience production facilities, food processing plants, pharmaceutical process facilities, chemical manufacturing plants, pulp and paper manufacturing plants, and power generation facilities. See also Agribusiness and Biofuels.

**Sample of job titles with this degree:** Plant Technician, BioProcess Coordinator, BioProcess Manager, Lab Technician, Sales Technician, Bioproduct Purchaser, Small Business Owner.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
DRAFT 215 (or ENGT 102)	3
ENGT 100	3
ENGT 101	4
ENGT 103	3
MATH 104 (or MATH 110)	4

<u>Spring Semester</u>	
ENGT 105	3
ENGT 111	4
ENGT 120	3
ENGT 125	2
ENGT 130	4

<u>Fall Semester</u>	
ENGT 210	4
ENGT 220	3
ENGT 234	2
ENGT 260	3
ENGT 225	4

<u>Spring Semester</u>	
ENGL 110	3
ENGL 110 (or ENGL 101)	3
ENGT 226	3
ENGT 231	2
COMM 120 (or COMM 101)	3
Social Science Elective	3
General Ed Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – BioProcess Operator Specialty Courses		Credit Hours	Eng. Tech. BioProcess Operator AAS 3000	BioProcess Operator Certificate C 300M
COMM 120	Business & Professional Speaking (or COMM 101)	3	X	
DRAFT 215	AutoCAD (or ENGT 102)	3	X	X
ENGL 110	Communication in the Workplace (or ENGL 101)	3	X	
ENGT 100	Industrial Processes	3	X	X
ENGT 101	Motor Control Fundamentals	4	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X
ENGT 105	Occupational Safety	3	X	X
ENGT 111	Motor Control Applications	4	X	X
ENGT 120	Process Control Fundamentals	3	X	X
ENGT 125	BioProcess Operation Fundamentals	2	X	X
ENGT 130	Power Transmission Fundamentals	4	X	X
ENGT 210	PLC Fundamentals	4	X	X
ENGT 220	Process Control Applications	3	X	X
ENGT 225	BioProcess Operation Applications	4	X	X
ENGT 226	BioProcess Operation Systems	3	X	X
ENGT 231	Piping Fundamentals	2	X	X
ENGT 234	Pump Applications	2	X	X
ENGT 260	Quality Fundamentals	3	X	X
MATH 104	Technical Mathematics (or MATH 110)	4	X	
Social Science Elective (recommend ECON 231)		3	X	
General Education Elective (PHYS 100 recommended)		3	X	
<b>Total Hours</b>			<b>66</b>	<b>50</b>



## Engineering Technology – CNC Technology Specialty

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

**Sample of job titles with this degree:** CNC Operator, CNC Machinist, CNC Programmer, Machinist, Production Operator, Machine Operator, Metal Worker.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 100	3
ENGT 101	4
ENGT 103	3
ENGT 104	3
MATH 104	4

<u>Spring Semester</u>	
DRAFT 236 (or DRAFT 215)	4
ENGT 102	3
ENGT 105	3
ENGT 150	2
ENGT 151	2
ENGT 160	2

<u>Fall Semester</u>	
ENGT 200	3
ENGT 250	3
ENGT 251	3
ENGT 260	3
COMM 120 (or COMM 101)	3
Social Science Elective (ECON 231 recommended)	3

<u>Spring Semester</u>	
ENGL 110	3
ENGT 213	3
ENGT 252	3
ENGT 299	3
WELD 195	3
General Education Elective (PHYS 100 recommended)	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.





Engineering Technology – CNC Technology Specialty Courses		Credit Hours	AAS 3000	CNC Tech. Certificate C 300C	CNC Operator Certificate C 300A
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
DRAFT 236	Pro-Engineer (or Draft 215)	4	X	X	
ENGT 100	Industrial Processes	3	X	X	
ENGT 101	Motor Control Fundamentals	4	X	X	
ENGT 102	Blueprint Reading (or DRAFT 101)	3	X	X	X
ENGT 103	Fluid Power Fundamentals)	3	X	X	
ENGT 104	CNC Fundamentals	3	X	X	X
ENGT 105	Occupational Safety	3	X	X	X
ENGT 150	Machining Fundamentals	2	X	X	X
ENGT 151	Cutting & Workholding	2	X	X	X
ENGT 160	Metrology	2	X	X	X
ENGT 200	Industrial Materials	3	X	X	X
ENGT 213	Robotic Fundamentals	3	X	X	X
ENGT 250	CNC Turning	3	X	X	X
ENGT 251	CNC Milling	3	X	X	X
ENGT 252	CAM Applications	3	X	X	
ENGT 260	Quality Fundamentals	3	X	X	
ENGT 299	Systems Integration (or ENGT 290 or ENGT 295)	3	X		
ENGL 110	Communication in the Workplace (or ENGL 101)	3	X		
MATH 104	Technical Mathematics (or MATH 110)	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		
<b>Total Hours</b>			69 or 68	49	27



## Engineering Technology – Electrical Systems Specialty

**General description:** The Electrical Systems 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 technicians may travel to customer sites to maintain and/or repair equipment.

**Sample of job titles with this degree:** Industrial Electrician, Electrical Maintenance, Electrical Technician.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 100	3
ENGT 101	4
ENGT 103	3
ENGT 104	3
MATH 104 (or MATH 110)	4

<u>Spring Semester</u>	
DRAFT 215 (or ENGT 102)	3
ENGT 105	3
ENGT 111	3
ENGT 130	4
ENGL 110	3

<u>Fall Semester</u>	
ENGT 210	4
ENGT 212	4
ENGT 214	3
COMM 120 (or COMM 101)	3
Social Science Elective (ECON 231 recommended)	3

<u>Spring Semester</u>	
ENGL 211	3
ENGT 213	3
ENGT 215	3
ENGT 232	2
ENGT 299	3
General Education Elective (PHYS 100 recommended)	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Electrical Systems Specialty Courses		Credit Hours	AAS 3000	Electrical Systems Cert. C 300D	Ind. Main Cert. C 300B.
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
DRAFT 215	AutoCAD (or ENGT 102)	3	X	X	X
ENGT 100	Industrial Processes	3	X	X	X
ENGT 101	Motor Control Fundamentals	4	X	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X	X
ENGT 104	CNC Fundamentals	3	X	X	X
ENGT 105	Occupational Safety	3	X	X	X
ENGT 111	Motor Control Applications	4	X	X	X
ENGT 130	Power Transmission Fundamentals	4	X	X	X
ENGT 210	PLC Fundamentals	4	X	X	
ENGT 211	PLC Applications	3	X	X	
ENGT 212	Motor Control Systems	4	X	X	
ENGT 213	Robotic Fundamentals	3	X	X	
ENGT 214	Motion Control Applications	3	X	X	
ENGT 215	Motion Control Systems	3	X	X	
ENGT 232	Rigging & Cranes	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		
Social Science Elective (ECON 231 recommended)		3	X		
General Education Electives (PHYS 100 recommended)		3	X		
<b>Total Hours</b>			68	52	27



# Engineering Technology – Facilities Maintenance Specialty

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

**Sample of job titles with this degree:** Plant Maintenance, Facilities Maintenance, Building Maintenance.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 101	4
ENGT 103	3
ENGT 100	3
HVAC 102	3
MATH 104 (or MATH 110)	4

<u>Spring Semester</u>	
ENGT 105	3
ENGT 111	4
ENGT 120	3
HVAC 106	3
HVAC 140	3

<u>Fall Semester</u>	
ENGL 110 (or ENGL 101)	3
ENGT 212	4
HVAC 242	3
COMM 120 (or COMM 101)	3
Social Science Elective (ECON 231 recommended)	3

<u>Spring Semester</u>	
DRAFT 215	3
ENGT 232	2
ENGT 290	3
HVAC 250	3
HVAC 252	3
General Education Elective (PHYS 100 recommended)	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Facilities Maintenance Courses		Credit Hours	AAS 3000	Facilities Maintenance Tech. Certificate C 300K	Building Maintenance Certificate C 300J
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
DRAFT 215	AutoCAD (or ENGT 102)	3	X	X	
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X		
ENGT 101	Motor Control Fundamentals	4	X	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X	X
ENGT 105	Occupational Safety	3	X	X	X
ENGT 111	Motor Control Applications	4	X	X	X
ENGT 120	Process Control Fundamentals	3	X	X	
ENGT 212	Motor Control Systems	4	X	X	
ENGT 232	Rigging & Cranes	2	X	X	
ENGT 290	Work Experience Practicum & Seminar (or ENGT 295)	3	X	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		
Social Science Elective (ECON 231 recommended)		3	X		
General Education Elective (PHYS 100 recommended)		3	X		
<b>Total Hours</b>			66	50	26



## Engineering Technology – Fluid Power Systems Specialty

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

**Sample of job titles with this degree:** Electromechanical Technician, Fluid Power Technician, Mobile Hydraulics Technician.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 100	3
ENGT 101	4
ENGT 103	3
ENGT 104	3
MATH 104	4
Social Science Elective	3

<u>Spring Semester</u>	
DRAFT 215 (or ENGT 102)	3
ENGT 105	3
ENGT 111	4
ENGT 130	4
ENGT 240	3
General Education Elective	3

<u>Fall Semester</u>	
ENGL 110 (or ENGL 101)	3
ENGT 212	4
ENGT 233	2
ENGT 234	2
ENGT 241	3

<u>Spring Semester</u>	
ENGT 120	3
ENGT 231	2
ENGT 242	3
ENGT 299	3
COMM 120 (or COMM 101)	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Fluid Power Systems Specialty Courses		Credit Hours	AAS 3000	Fluid Power Systems Cert. C 300E	Ind. Maintenance Cert. C 300B
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
DRAFT 215	AutoCAD (or ENGT 102 )	3	X	X	X
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X		
ENGT 100	Industrial Processes	3	X	X	X
ENGT 101	Motor Control Fundamentals	4	X	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X	X
ENGT 104	CNC Fundamentals	3	X	X	X
ENGT 105	Occupational Safety	3	X	X	X
ENGT 111	Motor Control Applications	4	X	X	X
ENGT 120	Process Control Fundamentals	3	X	X	
ENGT 130	Power Transmission Fundamentals	4	X	X	X
ENGT 212	Motor Control Systems	4	X	X	
ENGT 231	Piping Fundamentals	2	X	X	
ENGT 233	Lubrication Systems	2	X	X	
ENGT 234	Pump Applications	2	X	X	
ENGT 240	Hydraulic Applications	3	X	X	
ENGT 241	Pneumatic Applications	3	X	X	
ENGT 242	Fluid Power Systems	3	X	X	
ENGT 299	Systems Integration (or ENGT 290 or ENGT 295)	3	X	X	
MATH 104	Technical Mathematics (or MATH 110)	4	X		
Social Science Elective (ECON 231 recommended)		3	X		
General Education Elective (PHYS 100 recommended)		3	X		
<b>Total Hours</b>			68	52	27



## Engineering Technology – Instrumentation Systems Specialty

**General description:** The Instrumentation Systems 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.

**Sample of job titles with this degree:** Instrumentation Technician, Process Controls Technician.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 100	3
ENGT 101	4
ENGT 103	3
ENGT 104	3
MATH 104 (or MATH 110)	4

<u>Spring Semester</u>	
DRAFT 215 (or ENGT 102)	3
ENGT 105	3
ENGT 111	4
ENGT 120	3
ENGT 130	4

<u>Fall Semester</u>	
ENGT 210	4
ENGT 212	4
ENGT 214	3
ENGT 220	3
Social Science Elective	3

<u>Spring Semester</u>	
ENGL 110 (or ENGL 101)	3
ENGT 211	3
ENGT 231	3
ENGT 299	3
COMM 120 (or COMM 101)	3
General Education Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.





Engineering Technology – Instrumentation Systems Specialty Courses		Credit Hours	AAS 3000	Instrumentation Certificate C 300F	Industrial Maint Certificate C 300B
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
DRAFT 215	AutoCAD (or ENGT 102)	3	X	X	X
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X		
ENGT 100	Industrial Processes	3	X	X	X
ENGT 101	Motor Control Fundamentals	4	X	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X	X
ENGT 104	CNC Fundamentals	3	X	X	X
ENGT 105	Occupational Safety	3	X	X	X
ENGT 111	Motor Control Applications	4	X	X	X
ENGT 120	Process Control Fundamentals	3	X	X	
ENGT 130	Power Transmission Fundamentals	4	X	X	X
ENGT 210	PLC Fundamentals	4	X	X	
ENGT 211	PLC Applications	3	X	X	
ENGT 212	Motor Control Systems	4	X	X	
ENGT 214	Motion Control Applications	3	X	X	
ENGT 220	Process Control Applications	3	X	X	
ENGT 231	Piping Fundamentals	2	X	X	
ENGT 299	Systems Integration (or ENGT 290 or ENGT 295)	3	X	X	
MATH 104	Technical Mathematics (or MATH 110)	4	X		
Social Science Elective (ECON 231 recommended)		3	X		
General Education Electives (PHYS 100 recommended)		3	X		
<b>Total Hours</b>			68	52	27



# Engineering Technology – Machine Repair Specialty

**General description:** The Machine Repair Specialty prepares students to maintain and repair machinery in a plant or factory. They are also responsible for situating and installing new machines. This concentration is suited for students who have an interest in monitoring, diagnosing, and repairing complex machine tools such as CNC machining centers, feedback control fabrication equipment, plastics molding equipment, and industrial robots. Machine repair technicians are skilled with hand tools and diagnostic instruments and consistently employ best maintenance practices.

**Sample of job titles with this degree:** Machine Tool Service Technician, Machine Repairman, Mechanic.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 100	3
ENGT 101	4
ENGT 103	3
ENGT 104	3
MATH 104	4

<u>Spring Semester</u>	
ENGL 110	3
DRAFT 215 (or ENGT 102)	3
ENGT 105	3
ENGT 111	4
ENGT 130	4

<u>Fall Semester</u>	
ENGT 214	3
ENGT 230	3
ENGT 233	2
COMM 120 (or COMM 101)	3
WELD 195	3
Social Science Elective	3

<u>Spring Semester</u>	
ENGT 215	3
ENGT 231	2
ENGT 232	2
ENGT 235	2
ENGT 242	3
ENGT 299 (or ENGT 290)	3
General Education Elective	3

## Additional Program Information

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Machine Repair Specialty Courses		Credit Hours	ENGT Machine Repair AAS 3000	Machine Repair Certificate C 300G	Ind. Maint. Certificate C 300B
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
DRAFT 215	AutoCAD (or ENGT 102)	3	X	X	X
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X		
ENGT 100	Industrial Processes	3	X	X	X
ENGT 101	Motor Control Fundamentals	4	X	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X	X
ENGT 104	CNC Fundamentals	3	X	X	X
ENGT 105	Occupational Safety	3	X	X	X
ENGT 111	Motor Control Applications	4	X	X	X
ENGT 130	Power Transmission Fundamentals	4	X	X	X
ENGT 214	Motion Control Applications	3	X	X	
ENGT 215	Motion Control Systems	3	X	X	
ENGT 230	Power Transmission Applications	3	X	X	
ENGT 231	Piping Fundamentals	2	X	X	
ENGT 232	Rigging & Cranes	2	X	X	
ENGT 233	Lubrication Systems	2	X	X	
ENGT 235	Industrial Machinery Repair	2	X	X	
ENGT 242	Fluid Power Systems	3	X	X	
ENGT 299	Systems Integration (or ENGT 290 or ENGT 295)	3	X	X	
MATH 104	Technical Mathematics (or MATH 110)	4	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		
<b>Total Hours</b>			69	53	27



# Engineering Technology – Manufacturing Engineering Technology Specialty

**General description:** The Manufacturing Engineering Technology Specialty prepares the students to work with engineers so that they may design, test, and assess products for purposes of making their company's products better, faster, safer, and less expensive. They make sketches and rough layouts, record data, make computations, analyze results, and write reports. Manufacturing Engineering Technicians work closely with production and engineering to set up, inspect, and troubleshoot production processes and machines. They identify and select materials based on production requirements and work closely with computer-aided design equipment (CAD/CAM). Further, they may conduct time studies, complete cost estimates, utilize computer software to aid in solving manufacturing problems, formulate plant layout requirements, understand management control systems, justify and select quality equipment and automated systems, and design a total product manufacturing system.

**Sample of job titles with this degree:** Manufacturing Engineer, Manufacturing Technician, Production Technician, Quality Technician, Robotics Technician, Systems Integrator, Industrial Technician.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 100	3
ENGT 101	4
ENGT 103	3
ENGT 104	3
MATH 104 (or MATH 110)	4

<u>Spring Semester</u>	
ENGT 102	3
ENGT 105	3
ENGT 111	4
ENGT 130	4
ENGT 160	2

<u>Fall Semester</u>	
DRAFT 236 (or DRAFT 215)	3
ENGL 110 (or ENGL 101)	3
ENGT 200	2
ENGT 260	2
COMM 120 (or COMM 101)	3
Social Science Elective	3

<u>Spring Semester</u>	
CIS 110	2
ENGT 252	2
ENGT 213	3
General Education Elective	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Manufacturing Engineering Tech. Specialty Courses		Credit Hours	Man. Eng. Tech. AAS 3000	Man. Eng. Tech. Cert. C 300H	Maintenance Certificate C 300B
CIS 110	Business Applications	3	X	X	
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
DRAFT 236	Pro-Engineer (or DRAFT 215)	4	X	X	X
ENGL 110	Communication in the Workplace (or ENGL 101)	3	X		
ENGT 100	Industrial Processes	3	X	X	X
ENGT 101	Motor Control Fundamentals	3	X	X	X
ENGT 102	Blueprint Reading (or DRAFT 101)	3	X	X	
ENGT 103	Fluid Power Fundamentals	3	X	X	X
ENGT 104	CNC Fundamentals	3	X	X	X
ENGT 105	Occupational Safety	3	X	X	X
ENGT 111	Motor Control Applications	4	X	X	X
ENGT 130	Power Transmissions Fundamentals	4	X	X	X
ENGT 160	Metrology	2	X	X	X
ENGT 200	Industrial Materials	3	X	X	
ENGT 213	Robotic Fundamentals	3	X	X	
ENGT 252	CAM Applications	3	X	X	
ENGT 260	Quality Fundamentals	3	X	X	
ENGT 290	Work Experience Practicum	3	X		
MATH 104	Technical Mathematics (or MATH 110)	4	X		
WELD 195	Industrial Welding Fundamentals	3	X		
Social Science Elective		3	X		
General Education Elective		3	X		
<b>Total Hours</b>			67 or 66	48 or 47	27



## 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.

**Sample of job titles with this degree:** Industrial Mechanic, Millwright, Technical Sales Representative, Field Service Repair Technician.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 100	3
ENGT 101	4
ENGT 103	3
ENGT 104	3
MATH 104 (or MATH 110)	4

<u>Spring Semester</u>	
DRAFT 215 (or ENGT 102)	3
ENGT 105	3
ENGT 111	4
ENGT 130	4
ENGT 150	2

<u>Fall Semester</u>	
ENGL 110 (or ENGL 101)	3
ENGT 230	3
ENGT 233	2
ENGT 234	2
WELD 195	3
Social Science Elective	3

<u>Spring Semester</u>	
ENGT 231	2
ENGT 232	2
ENGT 235	2
ENGT 242	3
ENGT 299 (or ENGT 290 or 295)	3
COMM 120 (or COMM 101)	3
General Education Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Mechanical Systems Specialty Courses		Credit Hours	Mechanical Systems AAS 3000	Mechanical Systems Cert. C 300I	Ind. Maintenance Cert. C 300B
DRAFT 215	AutoCad (or ENGT 102)	3	X	X	X
ENGT 100	Industrial Processes	3	X	X	X
ENGT 101	Motor Control Fundamentals	4	X	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X	X
ENGT 104	CNC Fundamentals	3	X	X	X
ENGT 105	Occupational Safety	3	X	X	X
ENGT 111	Motor Control Applications	4	X	X	X
ENGT 130	Power Transmission Fundamentals	4	X	X	X
ENGT 150	Machining Fundamentals	2	X	X	
ENGT 230	Power Transmission Applications	3	X	X	
ENGT 231	Piping Fundamentals	2	X	X	
ENGT 232	Rigging & Cranes	2	X	X	
ENGT 233	Lubrications Systems	2	X	X	
ENGT 234	Pump Applications	2	X	X	
ENGT 235	Industrial Machinery Repair	2	X	X	
ENGT 242	Fluid Power Systems	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		
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
WELD 195	Industrial Welding Fundamentals	3	X	X	
Social Science Elective (ECON 231 recommended)		3	X		
General Education Elective (PHYS 100 recommended)		3	X		
<b>Total Hours</b>			67 or 66	51	27



## Engineering Technology – Renewable Energy Specialty

**General description:** The Renewable Energy Systems Specialty is designed to provide students with the fundamental skills needed for an entry level technical career in the emerging industry of renewable energy. This career-laddering curriculum integrates a technical hands-on understanding of the mechanical, electrical, and computerized control systems with the theory and economics that are critical to the efficient operation of renewable energy systems. Renewable energy subjects include solar thermal, solar photovoltaic, biomass, and geothermal energy systems. Upon completion of the program, students will be able to perform tasks related to system operation, maintenance, and repair.

**Sample of job titles with this degree:** Plant Technician, Systems Operator, Maintenance Technician.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 101	4
ENGT 108	3
ENGL 110 (or ENGL 101)	3
MATH 104 (or MATH 110)	4

<u>Spring Semester</u>	
ENGT 102	3
ENGT 105	3
ENGT 111	4
ENGT 120	3
ENGT 231	2
ENGT 234	2

<u>Fall Semester</u>	
ENGT 201	3
ENGT 210	4
ENGT 212	4
General Education Elective	3

<u>Spring Semester</u>	
ENGT 202	2
ENGT 204	3
ENGT 211	3
ENGT 290	3
COMM 120 (or COMM 101)	3
General Education Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.





Engineering Technology – Renewable Energy Courses		Credit Hours	Renewable Energy AAS
COMM 120	Business & Professional Speaking (or COMM 101)	3	X
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X
ENGT 101	Motor Control Fundamentals	4	X
ENGT 102	Blueprint Reading	3	X
ENGT 103	Fluid Power Fundamentals	3	X
ENGT 105	Occupational Safety	3	X
ENGT 111	Motor Control Applications	4	X
ENGT 120	Process Control Fundamentals	3	X
ENGT 201	Fundamentals of Solar Power	3	X
ENGT 202	Fundamentals of Biomass Energy	2	X
ENGT 204	Fundamentals of Geothermal Energy	3	X
ENGT 210	PLC Fundamentals	4	X
ENGT 211	PLC Applications & Data Acquisition	3	X
ENGT 212	Motor Control Systems	4	X
ENGT 218	Wind Turbine Repair & Maintenance	2	X
ENGT 231	Piping Fundamentals	2	X
ENGT 234	Pump Applications	2	X
ENGT 290	Work Experience Practicum & Seminar	3	X
MATH 104	Technical Math (or MATH 110)	4	X
General Education Electives (ECON 231 and SOCIO 110 recommended)		6	X
<b>Total Hours</b>			<b>62</b>



## Engineering Technology – Sequestration Specialty

**General description:** The Sequestration Specialty provides students with an educational foundation in the skills required for a career in carbon capture, utilization, and storage (CCUS) technologies. Students will develop a broad understanding of basis chemistry, geologic concepts and formations, policy developments, and risk assessment related to capturing and storing carbon dioxide from major industrial sources, such as fossil fuel burning power plants. Student will examine carbon dioxide utilization, including enhanced oil recovery (EOR), enhanced coalbed methane recovery (ECBM), and terrestrial sequestration. Students will utilize a variety of data acquisition, monitoring, and analysis equipment for groundwater, soil, and atmospheric monitoring, seismic surveys, and well logs.

**Sample of job titles with this degree:** Monitoring, Verification, and Accounting (MVA) Technician, CCS Lab Technician, CCS Field Technician, Environmental Quality Technician.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 101	4
ENGT 103	3
ENGL 110 (or ENGL 101)	3
MATH 104 (or MATH 110)	4
CCS 115	3

<u>Spring Semester</u>	
ENGT 105	3
ENGT 111	4
ENGT 120	3
ENGT 130	4
MATH 113	4

<u>Fall Semester</u>	
BIOL 210	4
ENGT 210	4
ENGT 220	3
ENGT 234	2
ENGT 260	3

<u>Spring Semester</u>	
DRAFT 215 (or ENGT 102)	3
ENGT 231	2
EASCI 220	4
COMM 120 (or COMM 101)	3
CCS 275	4

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Sequestration Courses		Credit Hours	Sequestration AAS
BIOL 210	Environmental Biology	4	X
COMM 120	Business & Professional Speaking (or COMM 101)	3	X
CCS 115	Intro to Carbon Capture & Storage	3	X
CCS 275	Advanced Sequestration Applications	4	X
DRAFT 215	AutoCAD (or ENGT 102)	3	X
EASCI 220	Intro to Physical Geology	4	X
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X
ENGT 101	Motor Control Fundamentals	4	X
ENGT 103	Fluid Power Fundamentals	3	X
ENGT 105	Occupational Safety	3	X
ENGT 111	Motor Control Applications	4	X
ENGT 120	Process Control Fundamentals	3	X
ENGT 130	Power Transmission Fundamentals	4	X
ENGT 210	PLC Fundamentals	4	X
ENGT 220	Process Control Applications	3	X
ENGT 231	Piping Fundamentals	2	X
ENGT 234	Pump Applications	2	X
ENGT 260	Quality Fundamentals	3	X
MATH 104	Technical Math (or MATH 110)	4	X
MATH 113	Introduction to Applied Statistics	4	X
<b>Total Hours</b>			<b>67</b>



## Engineering Technology – Wind Energy Systems Specialty

**General description:** The Wind Energy Systems Specialty is designed to provide students with a background in the skills needed for a career in the wind energy generation field. This program ensures a broad understanding of the mechanical, electrical, and computerized control systems that work toward the efficient operation of a wind turbine. Upon completion of the program, students will be able to perform the tasks related to wind turbine operation, maintenance, and repair.

**Sample of job titles with this degree:** Production Assembler, Operating Engineer, Environmental Engineer.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGT 101	4
ENGT 103	3
ENGT 108	3
MATH 104 (or MATH 110)	4

<u>Spring Semester</u>	
ENGT 102	3
ENGT 105	3
ENGT 111	4
ENGT 114	4
ENGT 120	3

<u>Fall Semester</u>	
ENGT 118	3
ENGT 210	4
ENGT 212	4
ENGL 110 (or ENGL 101)	3
General Education Elective	3

<u>Spring Semester</u>	
ENGT 218	2
ENGT 211	3
ENGT 290	3
COMM 120 (or COMM 101)	3
General Education Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Engineering Technology – Wind Energy Systems Courses		Credit Hours	Wind Energy Systems AAS 3000	Wind Energy Systems Cert. C 300P
COMM 120	Business & Professional Speaking (or COMM 101)	3	X	
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X	
ENGT 101	Motor Control Fundamentals	4	X	X
ENGT 102	Blueprint Reading	3	X	X
ENGT 103	Fluid Power Fundamentals	3	X	X
ENGT 105	Occupational Safety	3	X	X
ENGT 108	Principles of Renewable Energy	3	X	X
ENGT 111	Motor Control Applications	4	X	X
ENGT 114	Wind Turbine Mechanical Systems	4	X	X
ENGT 118	Wind Turbine Electrical Systems	3	X	X
ENGT 120	Process Control Fundamentals	3	X	X
ENGT 210	PLC Fundamentals	4	X	X
ENGT 211	PLC Applications & Data Acquisition	3	X	X
ENGT 212	Motor Control Systems	4	X	
ENGT 218	Wind Turbine Repair & Maintenance	2	X	X
ENGT 290	Work Experience Practicum & Seminar	3	X	
MATH 104	Technical Math (or MATH 110)	4	X	
General Education Electives (ECON 231 and SOCIO 110 recommended)		6	X	
<b>Total Hours</b>			<b>62</b>	<b>39</b>



# Fire Science

**General description:** The Fire Science 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.

**Sample of job titles with this degree:** Firefighter, Fire Inspector, Arson Investigator, Arson/Bomb Investigator, Smoke Jumper, Fire Protection Engineer, Hazardous Materials Technician, Public Safety Officer, Fire Public Education Specialist.

This is a career and technical education program. Some courses may not transfer to four-year institutions.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
FIRE 110	4
FIRE 111	4
ENGL 110	3
PSYCH 100	3
CIS 110	3

<u>Spring Semester</u>	
FIRE 112	4
FIRE 113	3
FIRE 120	3
MATH 104 (or MATH 117)	4

<u>Fall Semester</u>	
FIRE 210	3
FIRE 170	3
FIRE 200	3
FIRE 270	3
SOCIO 110 (or SOCIO 100)	3

<u>Spring Semester</u>	
FIRE 230	4
FIRE 250	3
FIRE 280	3
COMM 101	3
Fire Elective	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Fire Science Courses		Credit Hours	Fire Science AAS 0017	Technology Spec. Adv. Cert. AC 017A	Fire Company Officer Cert. BC 017B	Fire Technician Cert. BC 017C	Fireground Com. Cert. BC 017E	Fire Inspector Cert BC 017D
ENGL 110	Communicating in the Workplace	3	X					
CIS 110	Business Applications for Microcomputers	3	X					
COMM 101	Public Speaking	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 140	Fire Service Instructor-Basic	3			X			
FIRE 170	Rescue/Roadway Extrication	3	X	X				
FIRE 200	Tactics and Strategy	3	X	X	X		X	
FIRE 210	Tactics and Strategy II	3	X	X			X	X
FIRE 230	Fire Service Hydraulics	4	X	X				
FIRE 250	Hazardous Materials	3	X	X				
FIRE 260	Fire Investigation	3		X				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					
PSYCH 100	Practical Psychology	3	X					
SOCIO 110	Introduction to Sociology (or SOCIO 100)	3	X					
Directed Electives (3 Hours) Select 3 credit hours for AAS from the following:			X					
FIRE 130	Fire Service Laws and Regulations	3						
FIRE 140	Fire Service Instructor-Basic	3						
FIRE 220	Fire Instructor II	3						
FIRE 260	Fire Investigation	3						
FIRE 285	Fire Science Management III	3						
FIRE 286	Fire Service Management IV	3						
FIRE 297	Fire Science Technologies	3						
<b>Total Hours</b>			62	43	15	15	9	9



# Graphic Arts

**General description:** Graphic designers plan, analyze, and create visual solutions to communications problems. They use a variety of print, electronic, and film media and technologies to execute a design that meet clients' communication needs. They consider cognitive, cultural, physical, and social factors in planning and executing designs appropriate for a given context. Graphic designers use computer software to develop the overall layout and production design of magazines, newspapers, journals, corporate reports, and other publications. They also produce promotional displays and marketing brochures for products and services, design distinctive logos for products and businesses, and develop signs and signage systems – called environmental graphics – for business and government. An increasing number of graphic designers are developing material for Internet Web pages, computer interfaces, and multimedia projects. Graphic designers also produce the credits that appear before and after television programs and movies.

**Sample of job titles with this degree:** Graphic Designer, Web Designer/Developer, Digital Artist, 3-D Modeler/Animator, Multimedia Designer, Production Artist.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ART 101	3
ART 117	3
ART 140	3
ART 240	3
ENGL 110 (or ENGL 101)	3

<u>Spring Semester</u>	
ART 111	3
ART 127	3
ART 151	3
ART 230	3
Directed Elective	3

<u>Fall Semester</u>	
ART 145	3
ART 152	3
ART 261	3
MATH 110 (or MATH 116)	4
Directed Elective	3

<u>Spring Semester</u>	
ART 217	3
ART 252	3
ART 290	3
COMM 120 (or COMM 101)	3
Directed Elective	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.





Graphic Arts Courses		Credit Hours	Print Design AAS 0122	Desktop Pub. Specialty Cert. C 2123	Multimedia Specialty Cert. C 2124	Graphic Arts Certificate C 2122
ART 101	Introduction to Drawing	3	X	X	X	X
ART 111	Design 1	3	X	X	X	X
ART 117	Painting 1	3	X			
ART 125	Photography: Black and White	3	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	
ART 217	Digital Painting	3	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	
ART 252	Graphics Arts 4: Self-Promotion/Portfolio Prep.	3	X			
ART 261	Illustration	3	X			
ART 290	Work Experience/Internship	3	X			
COMM 120	Business & Professional Speaking (or COMM 101)	3	X			
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X			
MATH 110	Concepts of Mathematics (or MATH 116)	4	X			
Directed Electives (6 hours) Choose two courses from the following:			X			
ART 102	Introduction to Drawing 2	3				
ART 112	Design 2	3				
ART 113	Figure Drawing 1	3				
Other Directed Elective (3 hours) Choose one course from the following:			X			
BUS 100	Introduction to Business	3				
BUS 225	Small Business Development	3				
BUS 240	Marketing Fundamentals	3				
BUS 245	Advertising and Sales Promotion	3				
<b>Total Hours</b>			<b>61</b>	<b>27</b>	<b>27</b>	<b>15</b>



# Health Information Technology

**General description:** The Health Information Technology associate in science degree program prepares students for a career in Health Information Technology (H.I.T.). The curriculum combines the disciplines of medicine, information management, and computer technology into one program of study. Students will learn how to perform a variety of technical health information functions, including the following: analyzing and evaluating health information for accuracy; compiling administrative and health statistics; coding diagnoses as well as procedures for reimbursement and databases; and utilizing electronic health record (E.H.R.) software.

The Health Information Technology degree program is In Candidacy Status, pending accreditation review by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Students completing the AAS degree will be eligible to sit for the national RHIT exam through the American Health Information Management Association.

**Sample of job titles with this degree:** Health Information Supervisor; Insurance Claims Specialist; Patient Information and Disclosure Specialist; Health Data Analyst; Quality Improvement Specialist; Physician Practice Manager; Clinical Coding Specialist; Electronic Health Record Coordinator.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CIS 110	3
COMM 101	3
ENGL 101	3
HIT 101	3
OT 140 (or HLTH 140)	3

<u>Spring Semester</u>	
HIT 115	3
OT 141	3
OT 143	3
OT 248	3
OT 243	3

<u>Summer Semester</u>	
HIT 190 (or HIT 195)	2
General Education Elective	3

<u>Fall Semester</u>	
HIT 210	3
HIT 220	3
HIT 215	3
OT 240	3
OT 245	3

<u>Spring Semester</u>	
HIT 240	3
HIT 245	3
HIT 290	3
P REL 100	3
General Education Selective	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Health Information Technology		Credit Hours	Health Information Technology AAS 2300	Coding Specialist Certificate 230A
CIS 110	Business Applications for Microcomputers	3	X	X
COMM 101	Public Speaking	3	X	
ENGL 101	Composition 1	3	X	
HIT 101	Introduction to Health Information Technology	3	X	X
HIT 115	Computers in Healthcare	3	X	X
HIT 190	Coding Professional Practice Experience (or HIT 195)	2	X	X
HIT 210	Advanced ICD-10 Coding	3	X	X
HIT 215	Electronic Health Records	3	X	
HIT 220	Classification & Indexing Systems	3	X	X
HIT 240	Quality Improvement In Healthcare	3	X	
HIT 245	Health Information Law & Ethics	3	X	
HIT 290	Professional Practice Experience	3	X	
OT 140	Medical Terminology (or HLTH 140)	3	X	X
OT 141	Anatomy & Physiology Fundamentals	3	X	X
OT 143	Basic ICD-10 Coding	3	X	X
OT 240	Pharmacology Fundamentals	3	X	X
OT 243	Basic CPT Coding	3	X	X
OT 244	Interpreting Healthcare Records	3		X
OT 245	Reimbursement Principles in Healthcare	3	X	X
OT 248	Pathophysiology	3	X	X
P REL 100	Human Relations	3	X	
General Education Electives		6	X	
<b>Total Hours</b>			65	41



# Heating, Ventilation, Air Conditioning & Refrigeration

**General description:** The HVAC&R 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" HVAC&R theory with a large amount of practical, hands-on experiences for the purpose of developing confident, professional HVAC&R technicians/installers. In addition, this program is ideal for existing technicians/installers who need a thorough review of HVAC&R 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.

**Sample of job titles with this degree:** Commercial Heating & AC Technician, Residential Heating & AC Technician, Commercial Refrigeration Technician, Heating & AC Estimator, HVAC&R Counter Salesperson, HVAC&R Outside Salesperson.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CIS 110	3
HVAC 100	3
HVAC 102	3
HVAC 130	3
MATH 104	4

<u>Spring Semester</u>	
ENGL 110 (or ENGL 101)	3
HVAC 106	3
HVAC 132	3
HVAC 140	3
General Education Electives	6

<u>Fall Semester</u>	
HVAC 202	3
HVAC 230	3
HVAC 240	3
HVAC 242	3
COMM 120 (or COMM 101)	3

<u>Spring Semester</u>	
HVAC 204	3
HVAC 206	3
HVAC 250	3
HVAC 252	3
HVAC 290 (or HVAC 295)	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



HVAC&R Courses		Credit Hours	HVAC AAS 058A	Refrigeration Cert. C 058D	Commercial HVAC Cert. C 058B	Residential HVAC Cert. C 058C
CIS 110	Business Applications for Microcomputers	3	X			
COMM 120	Business & Professional Speaking (or COMM 101)	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	3	X	X	X	X
HVAC 130	Electricity Fundamentals	3	X	X	X	X
HVAC 132	Control Applications	3	X	X	X	X
HVAC 140	Troubleshooting Air Conditioning Systems	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	3	X	X		
HVAC 230	Motors & Controls	3	X	X	X	X
HVAC 240	Residential Air Conditioning	3	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	
HVAC 290	Work Experience & Seminar (or HVAC 295)	3	X			
MATH 104	Technical Mathematics	4	X			
General Education Elective		6	X			
<b>Total Hours</b>			64	30	27	27



# Horticulture

**General description:** The Horticulture 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 interiorscapes, and sustainability agriculture. See also Agribusiness and Engineering Technology – Biofuels Technician.

## Horticulture – Sustainability Agriculture Specialty

**General description:** Interest in local food systems including farmers' markets, community-supported agriculture and direct sales from the farm has created a need for more local production of sustainable horticultural food crops. This field of study is designed to provide the entrepreneurial and technical skills necessary to manage a profitable, environmentally sound, community-based small farm or agricultural business. Students will learn the fundamentals of sustainable agriculture, focusing on crop production, sustainable livestock production and farm business with an emphasis on practical field training on the student farm located on the Richland campus.

**Sample of job titles with this degree:** Farm Manager, Urban Farm Assistant, Market Manager, Farm Educator, Crop Consultant, Animal Caretaker.

## Horticulture – Ornamental Specialty

**General description:** Ornamental Horticulture is a profession that combines the creativity of design with the knowledge of science and the practical experience of making projects successful. Students will gain a thorough knowledge and practical experience in landscape design, landscape maintenance, greenhouse production, integrated pest management, tree and shrub maintenance, mechanics, and landscape construction.

**Sample of job titles with this degree:** Landscape Designer, Landscape Construction Foreman, Golf Course Superintendent, Estate Gardener, Greenhouse Grower, Pesticide Applicator,

## Horticulture – Floriculture Specialty

**General description:** The floriculture specialty is designed for those individuals seeking careers in the floral industry. The floral program courses include floral design principles, contemporary floral design, sympathy design and wedding flower design as well as general ornamental horticulture classes. Practical hands-on training takes place in the classroom and the on-campus flower shop.

**Sample of job titles with this degree:** Floral Designer, Floral Department Manager, Sales Manager.

This is a career and technical education program. Some courses may not transfer to four-year institution

## Suggested Full-Time Course Sequence:

### Sustainable Agriculture

<u>Fall Semester</u>	<u>Credit Hours</u>
CIS 110	3
ENGL 110 (or ENGL 101)	3
HORT 100	4
HORT 115	3
HORT 120	3

<u>Spring Semester</u>	
HORT 125	3
HORT 126	3
HORT 202	3
MATH 104	4
General Education Elective	3

<u>Summer Semester</u>	
HORT 290 (or HORT 295)	3

<u>Fall Semester</u>	
HORT 230	3
HORT 226	3
HORT 128	3
COMM 120 (or COMM 101)	3
General Education Elective	3

<u>Spring Semester</u>	
HORT 200	3
HORT 211	3
HORT 231	3
HORT 235	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.

HORT 290 & 295 are offered during the summer as needed.



Horticulture Courses		Credit Hours	Floriculture AAS 0108	Ornamental AAS 0108	Sustainable Ag 0108	Landscape & Turf Certificate C 108C	Floral Design C 108A	Greenhouse Cert. C 108B
CIS 110	Business Applications	3	X	X	X			
COMM 120	Business & Professional Speaking (or COMM 101)	3	X	X	X			
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X	X	X			
HORT 100	Horticulture Science	4	X	X	X			
HORT 110	Turf Management	3	X	X		X		
HORT 115	Soils & Fertility	3		X	X	X		X
HORT 116	Sustainable Agriculture Fundamentals	3			X			
HORT 120	Landscape Plant Identification	3	X	X		X		
HORT 121	Landscape Design Principles	3	X	X		X		
HORT 125	Integrated Pest Management	3	X	X	X	X		X
HORT 126	Small Scale Livestock Management	3			X			
HORT 128	Small Farm Equipment	3			X			
HORT 145	Floral Design Principles	3	X				X	
HORT 146	Contemporary Floral Design	3	X				X	
HORT 200	Perennial Plant Material	3	X	X	X			X
HORT 202	Vegetable Crop Production	3			X			
HORT 211	Horticulture Mechanics	3		X	X	X		
HORT 215	Landscape Design Applications	3	X	X		X		
HORT 221	Landscape Construction	3		X		X		
HORT 225	Tree & Shrub Maintenance	3		X				
HORT 226*	Fruit Production	3			X			
HORT 230	Greenhouse Operations	3	X	X	X			X
HORT 231	Bedding & Plant Production	3	X	X	X			X
HORT 235	Small Farm Business Management	3	X	X	X			X
HORT 245	Sympathy Design Techniques	3	X				X	
HORT 246	Wedding Flowers	3	X				X	
HORT 290	Work Experience Practicum & Seminar (or HORT 295)	3	X	X	X	X		X
MATH 104	Technical Mathematics	4	X	X	X			
General Education Electives		6	X	X	X			
<b>Total Hours</b>			65	65	62	27	12	21



# Hospitality Management

**General description:** The Hospitality Management Program prepares students for career-track positions in the restaurant, catering, and institutional food service fields. Courses are offered in five areas: risk management, cost control and revenue management, human resources, marketing management, and operations management.

**Sample of job titles with this degree:** General Manager, Assistant Manager, Bake Shop Manager, Kitchen Manager, Catering Manager, Banquet Manager, Dining Room Manager.

This is a career and technical education program. Some courses may not transfer to four-year institutions.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ACCT 100 (or ACCT 101)	3
BUS 100	3
BUS 110	3
CIS 110	3
ENGL 110 (or ENGL 101)	3

<u>Spring Semester</u>	
BUS 101	3
BUS 121	3
HOSP 110	1
P REL 100	3
P REL 110	3
COMM 120 (or COMM 101)	3

<u>Fall Semester</u>	
BUS 200	3
BUS 231	3
BUS 240	3
BUS 260	3
ECON 231	

<u>Spring Semester</u>	
BUS 220	4
BUS 261	3
BUS 262	3
BUS 263	3
BUS 290 (or BUS 295)	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.





Hospitality Management Courses		Credit Hours	Hosp. Mgmt. AAS 0121	Food Service Mgmt Cert. C 012C	Hosp. Mgmt. Fund Cert. C 012A	Hosp Oper. Mgmt Cert. C 012B
ACCT 100	Accounting Fundamentals (or ACCT 101)	3	X		X	
BUS 100	Business Fundamentals	3	X		X	
BUS 101	Hospitality & Tourism	3	X		X	
BUS 110	Business Mathematics	3	X		X	
BUS 121	Purchasing and Product Identification	3	X			X
BUS 200	Customer Service Fundamentals	3	X	X		
BUS 220	Cost Management	4	X	X		X
BUS 231	Business Law Principles	3	X			X
BUS 240	Marketing Fundamentals	3	X			X
BUS 260	Hospitality Nutrition	3	X	X		
BUS 261	Bar & Beverage Management	3	X	X		
BUS 262	Dining Room Management	3	X	X		
BUS 263	Catering & Banquet Management	3	X	X		
BUS 290	Work Experience Practicum (or BUS 295)	3	X	X		
CIS 110	Business Applications for Microcomputers	3	X		X	
COMM 120	Business & Professional Speaking (or COMM 101)	3	X			
ECON 231	Macroeconomics	3	X			
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X			
HOSP 110	Food Service Sanitation	1	X			X
P REL 100	Human Relations	3	X			X
P REL 110	Supervision		X		X	
<b>Total Hours</b>			62	22	18	17



## Human Resource Management (See Business, page 70)

## 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. See below for detailed descriptions of each.

These are career and technical education programs. Some courses may not transfer to four-year institutions.

## Desktop Support Technician

**General description:** The AAS in IT Desktop Support Technician degree is designed to prepare students for application software and microcomputer workstation technical support of end users, where expert direct knowledge in the use of microcomputer workstations and their associated applications software and peripheral hardware is critical to the success of the organization.

**Sample of job titles with this degree:** Microcomputer Application Support Specialist, Help Desk Specialist, Technical Support Specialist, Hardware Support Technician, Troubleshooter, Systems Support Technician, Systems Maintenance Technician, IT Consultant.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CIS 110	3
CS 105	3
ENGL 110 (or ENGL 101)	3
IT 131	3
IT 173	4

<u>Spring Semester</u>	
IT 116	3
IT 130	3
IT 141	4
IT 220	3
MATH 104	4

<u>Fall Semester</u>	
IT 120	3
IT 151	3
IT 205	3
IT 210	3
IT 221	3
General Education Elective	3

<u>Spring Semester</u>	
IT 230	3
IT 285	4
IT 290 (or IT 295 or IT297)	3
P REL 100	3
COMM 120 (or COMM 101)	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Desktop Support Technician Courses		Credit Hours	Desktop Support Technician AAS 0111	Desktop Support Spec. Cert. C 011H	Microsoft Office Spec. Prep Cert. C 011F	Computer Literacy Cert. C 011M
CIS 101	Computer Literacy	1				X
CIS 110	Business Applications for Microcomputers	3	X	X		X
COMM 120	Business & Professional Speaking (or COMM 101)	3	X			
CS 105	Foundations of Information Technology	3	X	X		X
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	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 131	Programming Logic	3	X	X		
IT 141	Networking Fundamentals	4	X	X		
IT 151	Internet Technologies	3	X	X		
IT 173	A+ Computer Technologies	4	X	X		
IT 205	Help Desk Techniques	3	X	X		
IT 210	Presentation Graphics Applications	3	X	X	X	
IT 220	Data Management Applications	3	X	X	X	
IT 221	Database Design Using SQL	3	X			
IT 230	Project Management	3	X	X	X	
IT 285	Systems Analysis & Design	4	X	X		
IT 290	Work Experience Practicum (or IT 295 or IT 297)	3	X	X		
MATH 104	Technical Mathematics	4	X			
P REL 100	Human Relations	3	X			
General Education Elective		3	X	X		
Total Hours			67	45	15	10



# Network Technology

**General description:** The AAS in IT Network Technology degree focuses on the use of computer technology and information management methods to solve business problems. Students will learn the hardware configuration and management of physical networks, the installation and configuration of the network system software, and the system management and security protocols for optimum performance. The knowledge base of this degree program will prepare students for the Cisco CCNA, Microsoft's MCP, Security+ and Network+ certifications.

**Sample of job titles with this degree:** Network Administrator, IT User Support, Computer Systems Administrator, Information Systems Support Specialist, Information Systems Technical Support, Network Security Specialist, Network Designer.

## Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CS 105	3
ENGL 110 (or ENGL 101)	3
IT 116	3
IT 131	3
IT 173	4

<u>Spring Semester</u>	
IT 141	4
IT 271	3
COMM 120 (or COMM 101)	3
MATH 104 (or MATH 116)	4
General Elective	3

<u>Fall Semester</u>	
IT 221	3
IT 241	4
IT 242	3
IT 243	4
IT 273	3

<u>Spring Semester</u>	
IT 246	3
IT 245	3
IT 285	4
IT 290 (or IT 295 or IT 297)	3
P REL 100	3

## Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Networking Technology Courses		Credit Hours	Network Technology AAS 2076	Network Spec. Cert. C 011K	COMPTIA Network+ Prep Cert. C 011C	COMPTIA Security+ Prep Cert. C 011N	CCNA Prep Cert. C 011B	MCTS Prep Cert. C 011T
CS 105	Foundations of Information Technology	3	X	X				
COMM 120	Business & Professional Speaking (or COMM 101)	3	X					
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X					
IT 116	Windows Client Operating Systems	3	X	X				X
IT 131	Programming Logic	3	X					
IT 141	Networking Fundamentals	4	X	X	X	X	X	
IT 173	A+ Computer Technologies	4	X	X	X			X
IT 221	Database Design Using SQL	3	X	X				
IT 241	Network Routing Technologies	4	X	X	X	X	X	
IT 242	Wireless Networking	3	X	X	X	X		
IT 243	Networking Switching Technologies	4	X	X	X	X	X	
IT 244	Wide Area Networks	4					X	
IT 245	Network Security	3	X	X		X		
IT 246	Voice Over IP	3	X	X				
IT 271	Windows Server Operating Systems	3	X	X	X			X
IT 273	Managing Windows Networks	3	X	X				X
IT 285	Systems Analysis & Design	4	X	X				
IT 290	Work Experience Practicum (or IT 295 or IT 297)	3	X	X				
MATH 104	Technical Mathematics (or MATH 116)	4	X					
P REL 100	Human Relations	3	X					
General Education Elective		3	X					
<b>Total Hours</b>			66	47	22	18	16	13



## Programmer/Analyst

**General description:** The AAS in IT Programmer/Analyst degree is designed to prepare students for designing, writing, testing, debugging, and implementing software, according to user/customer specifications, in process-oriented, data-oriented, and object-oriented coding environments.

**Sample of Job Titles for This Degree:** Programmer, Programmer/Analyst, Data Modeler, Database Designer, Systems Analyst, Website Designer, Web Consultant, Web Applications Developer.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
CS 105	3
ENGL 110 (or ENGL 101)	3
IT 116	3
IT 131	3
MATH 116	4

<u>Spring Semester</u>	
CS 161	4
CS 251	4
IT 153	3
IT 141(or IT 173)	4
COMM 120 (or COMM 101)	3

<u>Fall Semester</u>	
CS 230	3
CS 281	4
IT 221	3
IT 282	3
General Education Elective	3

<u>Spring Semester</u>	
IT 280	4
IT 284	3
IT 285	4
IT 290 (or IT 295 or IT 297)	3
P REL 100	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Programmer/Analyst Courses		Credit Hours	Programmer/Analyst AAS 0098	Prog. Spec. Cert. C 011G	Obj. Oriented Prog. Cert. C 011R	Syst. Prog. Cert. C 011U	Web Prog. Cert. C 011S
COMM 120	Business & Professional Speaking (or COMM 101)	3	X				
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	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 Operation Systems	3	X	X	X	X	X
IT 131	Programming Logic	3	X	X	X	X	X
IT 141	Networking Fundamentals (or IT 173)	4	X				
IT 151	Internet Technologies	3					X
IT 153	Web Development	3	X	X			X
IT 221	Database Design Using SQL	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 (or IT 295 or IT 297)	3	X	X			
CS or IT elective		3	X	X	X	X	
MATH 116	College Algebra	4	X				
P REL 100	Human Relations	3	X				
General Education Elective		3	X				
<b>Total Hours</b>			67	50	26	26	24



## Machine Tool Processes (See Engineering Technology, page 92)

## Medical Office Specialist (See Office Technology, page 138)

## Network Technology (See Information Technology, page 126)

## Nursing – Nurse Assistant

**General description:** HLTH 141 Nurse Assistant Training is approved by the Illinois Department of Public Health (IDPH) to provide instruction in basic nursing skills in theory, laboratory, and clinical settings. Upon successful completion of all course requirements, which includes meeting the Health Care Worker Background Check Act criteria, students are eligible to apply for the Competency Evaluation Exam. Students who successfully pass the Competency Evaluation Exam are added to the IDPH Health Care Worker Registry and are eligible to work as Certified Nurse Assistants (CNAs).

**Sample of Job Titles with this Certificate:** Patient Care Attendant, Certified Nurse Aide, Home Health Aide, Nursing Assistant, Orderly, Health Care Technician, Ward Attendant, or Patient Care Technician. These work under the direct supervision of a licensed nurse and function as members of the health care team in a long-term care facility, hospital, clinic or home care setting.

**Admission Criteria:** Meet eligibility requirements for admission to the College, be at least 16 years of age, and successfully complete Nurse Assistant reading pre-test.

**Please Note:** Students must have a background clear of any disqualifying convictions as verified by a fingerprint-based background check or obtain a waiver from the Illinois Department of Public Health before attending clinical.

This is a career and technical education program. This course may not transfer to four-year institutions.

**Certification:** Students must complete all course requirements and meet the Health Care Worker Background Check criteria to be eligible to apply for the State Competency Evaluation Exam. Students who pass the exam are placed on the State of Illinois Health Care Worker Registry as CNAs. Employers verify students' certification through the Health Care Worker Registry; the state does not issue credentials, certificates, or licenses to CNAs.

HLTH 040 Nurse Assistant Competency Skills Assessment is designed for Nurse Assistants who were previously certified but have not worked a minimum of 8 paid hours during the previous 24 months. Students must demonstrate completion of an approved Basic Nurse Assistant Training program and be listed on the Illinois Health Care Worker Registry.

### Suggested Full-Time Course Sequence:

First Semester	Credit Hours
HLTH 141	8





Nurse Assistant Courses		Credit Hours	Nurse Assistant BC 0053
HLTH 141	Nurse Assistant Training	8	X
Total Hours			8



## Practical Nursing

**General description:** This is a career and technical education program. Upon successful completion of all program requirements, students (a) receive a Certificate in Practical Nursing and (b) are eligible to write the National Council Licensing Examination for Practical Nurses (NCLEX-PN). Graduates who successfully complete the examination and meet all other state requirements (including a criminal background check) are able to work as licensed practical nurses. Some program courses may not transfer to a four-year institution, but the PN curriculum is structured so that the graduate may choose courses that allow for continued study in Richland Community College's Associate Degree Nursing Program.

The Practical Nursing program is approved by the Illinois Department of Financial and Professional Regulation and prepares entry-level students to provide nursing care to clients with normal and common health problems through the use of basic skills under the direction of a registered nurse or licensed physician. The program consists of classroom instruction, laboratory, and clinical experiences in hospitals, nursing homes, and community health settings.

Unlike many academic and career and technical education programs at Richland, admission into Practical Nursing (PN) Program is selective and competitive. Admission to Richland Community College does not guarantee acceptance to the program.

Students must meet the minimum admission criteria to be eligible to apply. Once the criteria have been met, students are scored on a rubric and the students with the highest scores are offered conditional admission.

The PN Program follows the Health Professions' selective admissions process. Students use the online Pre-Advisement Plan on myRichland to submit an application during the designated application period. Applications are accepted January 4 through March 1. Late and out-of-district applicants are considered for the program when space is available. The PN Program admits to the summer semester. PN core courses begin in the fall.

**Sample of job titles with this degree:** Job opportunities for LPNs include a variety of nursing positions in hospitals, agencies, physician's offices, and extended care facilities

### Prerequisites:

1. Eligibility for ENGL 101.
2. Eligibility for MATH 098 or successful completion with a "C" or better of MATH 091 (or equivalent) and MATH 106.
3. Complete two years of high school biology and 1 year of high school chemistry or physics with a "B" or better within the last 3 years or complete BIOL 101 with a "C" or better. Students who have completed BIOL 201 or 202 must have completed one within the last 5 years.
4. Complete the Nelson Denny Reading Test with a composite score of 120 or greater.
5. Have a "C" or better in all prerequisites and program courses and maintain a minimum 2.5 Program GPA. For admission, the Program GPA is calculated using grades and credits earned in completed PN program courses. Program courses that can be completed prior to admission include: BIOL 201, BIOL 202, ENGL 101, HLTH 197, HLTH 220, NURS 154, and PSYCH 145. Transfer and Richland credits are used in calculating the Program GPA.
6. Listed in good standing on the IDPH Health Care Worker Registry as an active CNA or provide evidence of current enrollment in a CNA training program with a test date prior to the start of the semester for which the student is applying.

### Graduation Requirements:

- Have a grade of "C" or better in all prerequisite and program courses
- Maintain a minimum 2.5 Program GPA
- Complete all nursing psychomotor competencies with 76% of the designated skills performed in the clinical setting at or above the expected level of competency
- Attain  $\geq 76\%$  on the exit exam
- Obtain a satisfactory clinical progress and performance rating
- Meet standards of the NLN Code of Ethics and the Professional Integrity Policy

### Suggested Full-Time Course Sequence:

First Semester	Credit Hours
BIOL 201	4
PSYCH 145	3
HLTH 220	3

Second Semester	
PN 101A	1
BIOL 202	4
PN 102A	6
PN 103A	4
NURS 154	3

Third Semester	
PN 104A	1
PN 105	7
PN 106	6
PN 113	1
ENGL 101	3
HLTH 197/297	1

### Additional Program Information:

Students must complete program courses with a "C" or better prior to or during the semester in which they are outlined.



Practical Nursing Courses		Credit Hours	Practical Nursing C050A
BIOL 201	Human Anatomy & Physiology 1	4	X
BIOL 202	Human Anatomy & Physiology 2	4	X
ENGL 101	Composition 1	3	X
HLTH 197/297	Special Topics in Healthcare	1	X
HLTH 220	Nutrition and Diet Therapy	3	X
NURS 154	Pharmacological Principles for Nursing Practice	3	X
PN 101A	Transitions I	1	X
PN 102A	Wellness Across the Lifespan I	6	X
PN 103A	Wellness Across the Lifespan II	4	X
PN 104A	Transitions II Trends and Issues	1	X
PN 105	Alterations Across the Lifespan I	7	X
PN 106	Alterations Across the Lifespan II	6	X
PN 113	PN Transition/Licensure Preparation	1	X
PSYCH 145	Human Growth and Development	3	X
<b>Total Hours</b>			<b>47</b>



## Associate Degree Nursing

**General description:** This is a career and technical education program. Upon successful completion of all program requirements, students receive an Associate of Applied Science in Nursing and are eligible to write the National Council Licensing Examination for Registered Nurses (NCLEX-RN). Graduates who successfully complete the examination and meet all other state requirements (including a criminal background check) are able to work as registered nurses. Some courses may not transfer to four-year institutions, but transfer opportunities exist for students wanting a Bachelor of Science in Nursing (BSN).

The Program's mission is to prepare nurses to work in a multicultural, multiracial, diversified metropolitan industrial area that is surrounded by rural communities. The purpose of the ADN Program at Richland Community College is to prepare competent, caring, and critically thinking graduates for entry level positions in a variety of health care settings and to encourage commitment to personal and professional growth.

Richland's ADN Program is approved by the Illinois Department of Financial and Professional Regulation Commission, (217) 785-0800 or (312) 814-4500, and accredited by the National League of Nursing Accrediting Commission (NLNAC), 3343 Peachtree Rd. NE, Suite 850, Atlanta, GA 30326, (404) 975-5000.

Unlike many academic and career and technical education programs at Richland, admission into the Associate Degree Nursing (ADN) Program is selective and competitive. Admission to Richland Community College does not guarantee acceptance to the program.

Students must meet the minimum admission criteria to be eligible to apply. Once the criteria have been met, students are scored on a rubric, and the students with the highest scores are offered conditional admission.

The ADN Program follows the Health Professions' selective admissions process. Students use the online Pre-Advisement Plan on myRichland to submit an application during the designated application period. For spring admission, applications are accepted between August 1 and October 1. For fall admission, applications are accepted between February 1 and April 1. Late and out-of-district applicants are considered for the program when space is available.

**Sample of job titles with this degree:** Nursing positions are available throughout the United States as well as internationally. Nurses care for people in hospitals, schools, clinics, corporations, homes, wellness centers, or anywhere people need health care services. Areas of nursing practice include pediatric, geriatric, obstetrics, intensive care, emergency care, mental health, oncology, orthopedic, and medical-surgical.

### Prerequisites to Apply

1. Eligibility for ENGL 101 Composition I.
2. Eligibility for MATH 098 Intermediate Algebra or successful completion with a "C" or better of MATH 091 (or equivalent) and MATH 106.
3. Complete two years of high school biology and 1 year of high school chemistry or physics with a "B" or better within the last 3 years or successfully complete BIOL 101 with a "C" or better. Students who have completed BIOL 201, 202 or 220 must have completed one within the last 5 years.
4. Complete the Nelson Denny Reading Test with score of 120 or greater in each area (vocabulary, reading, and composite).
5. Have a high school GPA or at least 2.5 and ACT scores (within the last 3 years) with composite 21, science reasoning 20, and no score below 15 or have completed (or be in progress of completing) 15 credit hours of ADN program courses.
6. Have a "C" or better in all prerequisites and program courses and maintain a minimum 2.5 Program GPA. For admission, the Program GPA is calculated using grades and credits earned in completed ADN program courses. Program courses that can be completed prior to admission include: BIOL 201, 202, 220, ENGL 101, Fine Art Elective, HLTH 197, NURS 154, PSYCH 110, 145, and SOCIO 110. Transfer and Richland credits are used in calculating the Program GPA.
7. Listed in good standing on the IDPH Health Care Worker Registry as an active CNA or provide evidence of current enrollment in a CNA training program with a test date prior to the start of the semester for which the student is applying.

### Transfer Students

Students who have completed nursing core courses at another institution may be eligible to transfer into the ADN program. Transfer credit for nursing core courses is based upon successful results of the standardized tests for the appropriate course and available space. All admission and graduation requirements must be met in order to graduate from the ADN Program including a minimum of two semesters of core nursing courses completed at Richland. Students are responsible for the costs of the standardized tests.

### Other Graduation Requirements:

- Obtain a grade of "C" or better in all prerequisites and program courses
- Maintain a minimum 2.5 Program GPA
- Earn a minimum score of 850 or greater on the required HESI Exit Exam
- Complete all nursing psychomotor competencies with 76% of the designated skills performed in the clinical setting, at or above the expected level of competency
- Meet standards of the ANA Code of Ethics and the Integrity Policy

### Advanced Placement Program for LPN

A graduate of a State-approved Practical Nursing Program who has a license or is eligible for licensure in the State of Illinois can be placed into the third semester of the ADN program by meeting admission requirements and passing the Bridge course (NURS 203) with a grade of "C" or better. Bridge students are admitted on a space available basis using the same student selection process as basic students. Availability of faculty clinical space also impacts the entry decision.

Please refer to LPN to ADN Bridge Program prerequisites and admission criteria.

**Suggested Full-Time Course Sequence:**

First Semester	Credit Hours
NURS 111	1
NURS 112	9
PSYCH 110	3
BIOL 201	4
ENGL 101	3

Second Semester	
NURS 152	4
NURS 154	3
NURS 155	5
PSYCH 145	3
BIOL 202	4

Third Semester	
NURS 206	6
NURS 250	5
SOCIO 110	3
BIOL 220	4

Fourth Semester	
NURS 252	5
NURS 254	6
HLTH 197/297	1
Fine Arts Elective	3

**Additional Program Information:**

Students must earn a grade of "C" or better in the program prerequisites, core curriculum courses, and general education courses.

Associate Degree Nursing Courses		Credit Hours	Associate Degree Nursing 0050
BIOL 201	Human Anatomy & Physiology 1	4	X
BIOL 202	Human Anatomy & Physiology 2	4	X
BIOL 220	Microbiology	4	X
ENGL 101	Composition 1	3	X
HLTH 197/297	Special Topics in Healthcare	1	X
NURS 111	Introduction to Nursing	1	X
NURS 112	Medical-Surgical Nursing 1	9	X
NURS 152	Psychiatric Mental Health Nursing	4	X
NURS 154	Pharmacological Principles for Nursing Practice	3	X
NURS 155	Medical-Surgical 2 Chronically Ill Client	5	X
NURS 206	Family Health Nursing	6	X
NURS 250	Medical-Surgical Nursing 3 Surgical Client	5	X
NURS 252	Medical-Surgical Nursing 4 Acutely Ill Client	5	X
NURS 254	Transition from Education to Practice	6	X
PSYCH 110	Introduction to Psychology	3	X
PSYCH 145	Human Growth and Development	3	X
SOCIO 110	Introduction to Sociology	3	X
Fine Arts Elective		3	X
<b>Total Hours</b>			<b>72</b>



## LPN to ADN Bridge Program (Bridge Program)

**General description:** This is a career and technical education program. The Bridge program facilitates educational advancement for LPNs who desire to become Registered Nurses. A graduate of a state-approved Practical Nursing Program who has a license or is eligible for LPN licensure in the State of Illinois may be eligible for this program. Students who successfully complete the LPN Bridge course (NURS 203) are placed into the third semester of the ADN Program. Upon successful completion of all program requirements, students receive an Associate of Applied Science in Nursing and are eligible to write the National Council Licensing Examination for Registered Nurses (NCLEX-RN). Graduates who successfully complete the examination and meet all other state requirements are able to work as registered nurses. Some courses may not transfer to four-year institutions, but transfer opportunities exist for students wanting a Bachelor of Science in Nursing (BSN).

Unlike many academic and career and technical education programs at Richland, admission into the Bridge Program is selective and competitive. Admission to Richland Community College does not guarantee acceptance to the program.

Students must meet the minimum admission criteria to be eligible to apply. Once the criteria have been met, students are scored on a rubric and those with the highest scores are offered conditional admission. Availability of faculty clinical space may impact the entry decision.

The Bridge Program follows the Health Professions' selective admissions process. Students use the online Pre-Advisement Plan on myRichland to submit an application during the designated application period. For spring admission, applications are accepted between August 1 and October 1. For fall admission, applications are accepted between February 1 and April 1. Late and out-of-district applicants are considered for the program when space is available.

### Prerequisites to Apply:

1. Graduate of a State-approved Practical Nursing Program
2. Current Illinois LPN license or eligibility to be licensed before program begins
3. Eligibility for ENGL 101 Composition I
4. Eligibility for MATH 098 Intermediate Algebra or successful completion with a "C" or better of MATH 091 (or equivalent) and MATH 106
5. Complete the Nelson Denny Reading Test with score of 120 or greater in each area (vocabulary, reading, and composite)
6. Complete BIOL 201 with a "C" or better. Students who have completed BIOL 201, 202 or 220 must have completed one within the last 5 years
7. Complete (or be in progress) with a "C" or better the following program courses: BIOL 201, BIOL 202, ENGL 101, PSYCH 110, and PSYCH 145
8. Have a "C" or better in all prerequisites and program courses and maintain a minimum 2.5 Program GPA. For admission, the Program GPA is calculated using grades and credits earned in any completed Bridge program course. Program courses that can be taken prior to admission include: BIOL 201, 202, 220, ENGL 101, Fine Art Elective, HLTH 197, NURS 154, PSYCH 110, 145, and SOCIO 110. Transfer and Richland credits are used in calculating the Program GPA.

To receive transfer credit for courses completed at another institution, official transcripts must be submitted to the Student Records office.

On successful completion of NURS 203 with a "C" or better, and payment of the appropriate fees, 12 advanced placement credit hours are posted to the student's academic record, for a total of 72 credits for the AAS Degree. Note: NURS 203 (6 cr) and the advanced placement credit (12 cr) is the equivalent of NURS 112, 152, and 155. NURS 203 is not factored into the Program GPA.

### Other Graduation Requirements:

Please refer to the Associate Degree Nursing graduation requirements.

### Suggested Part-Time Course Sequence:

First Semester	Credit Hours
NURS 111	1
NURS 203	6
NURS 154	3
<b>Second Semester</b>	
NURS 206	6
SOCIO 110	3
<b>Third Semester</b>	
NURS 250	5
Fine Arts Elective	3
<b>Fourth Semester</b>	
NURS 252	5
Special Topics	1
<b>Fifth Semester</b>	
NURS 254	6

### Suggested Full-Time Course Sequence

First Semester	Credit Hours
NURS 111	1
NURS 154	3
NURS 203	6
<b>Second Semester</b>	
BIOL 220	4
NURS 206	6
NURS 250	5
SOCIO 110	3
<b>Third Semester</b>	
NURS 252	5
NURS 254	6
Fine Arts Elective	3
HLTH 197/297	1

### Additional Program Information:

Students must complete program courses with a "C" or better prior to or during the semester in which they are outlined.



LPN Bridge to ADN Courses		Credit Hours	LPN Bridge to RN AAS 0050
BIOL 220	Microbiology	4	X
HLTH 197/297	Special Topics in Health Care	1	X
NURS 111	Introduction to Nursing	1	X
NURS 154	Pharmacological Principles for Nursing Practice	3	X
NURS 203	LPN Bridge Course	6	X
NURS 206	Family Health Nursing	6	X
NURS 250	Medical-Surgical Nursing 3 Surgical Client	5	X
NURS 252	Medical-Surgical Nursing 4 Acutely Ill Client	5	X
NURS 254	Transition from Education to Practice	6	X
SOCIO 110	Introduction to Sociology	3	X
Fine Arts Elective		3	X
<b>Total Hours</b>			43



## Office Technology

**General description:** The Office Technology Instructional Area offers two AAS degrees – one in Administrative Assistant and one in Medical Office Specialist. See below for detailed descriptions of each degree.

These are career and technical education programs. Some courses may not transfer to four-year institutions.

## Administrative Assistant

**General description:** 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

**General description:** The Accounting Specialty is designed for students interested in a concentrated program in the accounting office assistant field. Students learn to use basic accounting systems; to process payroll; to produce business communications; to use technologically-advanced equipment, manage records, manage projects, plan meetings, and develop skills in software applications including word processing, databases, spreadsheets, and presentations.

**Sample of job titles with this degree:** Accounting Clerk, Account Payable Clerk, Account Receivable Clerk, Accounting Administrative Assistant.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
BUS 110	3
OT 114	3
OT 116	3
OT 119	3
OT 170	3

<u>Spring Semester</u>	
IT 120	3
IT 130	3
OT 113	3
OT 120	3
OT 150	3
OT 160	3

<u>Fall Semester</u>	
OT 215	3
P REL 100	3
COMM 120 (or COMM 101)	3
General Education Electives	6

<u>Spring Semester</u>	
ACCT 205	3
OT 210	3
OT 290 or OT 295)	3
General Education Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.





Administrative Assistant – Accounting Specialty Courses		Credit Hours	Admin. Asst. Acct. AAS 0044	Adv. Acct. Office Spec. Cert. C 044E	Acct. Office Clerk Cert. C 044D	Receptionist Cert. C 044G
ACCT 205	Small Business Accounting	3	X	X	X	
COMM 120	Business & Professional Speaking (or COMM 101)	3	X			
BUS 110	Business Mathematics	3	X	X	X	X
IT 120	Spreadsheet Applications	3	X	X		
IT 130	Word Processor Applications	3	X	X		
OT 113	Editing and Proofreading	3	X	X	X	
OT 114	Word Processing & Presentation	3	X	X	X	X
OT 116	Database Applications	3	X	X	X	X
OT 119	Business English	3	X	X	X	X
OT 120	Business Communications	3	X	X		X*
OT 150	Records Management	3	X	X	X	
OT 160	Office Accounting	3	X	X	X	
OT 170	Professional Office Procedures	3	X	X	X	X
OT 210	Statistical Keyboard Entry	3	X	X	X	
OT 215	Document Production	3	X	X		
OT 290	Work Experience Practicum & Seminar (or OT 295)	3	X			
P REL 100	Human Relations	3	X			
General Education Electives		9	X			
<b>Total Hours</b>			60	42	30	16-18

\*or OTK 100 or 101 (for Receptionist Certificate only)



## Administrative Assistant – General Specialty

**General description:** The AAS Administrative Assistant – General Specialty is designed to prepare students for employment as administrative assistants and office support professionals. With today's technology, the role of the administrative assistant has broadened to include not only running an office efficiently but also to possessing a solid background in the use of the technology that supports the office. The Administrative Assistant – General Specialty prepares students to produce business communications, use technologically-advanced equipment, manage records, manage projects, plan meetings, and develop skills in software applications including word processing, databases, spreadsheets, and presentations.

**Sample of job titles with this degree:** Administrative Assistant, Executive Assistant, Office/Facilities Manager, Human Resources Assistant, Sales Assistant, Marketing Assistant, Front Desk Coordinator, Data Entry Specialist, Customer Service Representative.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
BUS 110	3
OT 114	3
OT 116	3
OT 119	3
OT 170	3

<u>Spring Semester</u>	
IT 120	3
IT 130	3
OT 113	3
OT 120	3
OT 150	3
OT 160	3

<u>Fall Semester</u>	
OT 205	3
OT 215	3
COMM 120 (or COMM 101)	3
General Education Elective	3

<u>Spring Semester</u>	
OT 210	3
OT 290 (or OT 295)	3
P REL 100	3
General Education Electives	6

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Administrative Assistant – General Specialty Courses		Credit Hours	Admin. Asst. Gen. AAS 0044	Bus. Office Spec. Cert. C 044C	Office Asst. Cert. C 044H	Receptionist Cert. C 044G
BUS 110	Business Mathematics	3	X	X	X	X
COMM 120	Business & Professional Speaking (or COMM 10)	3	X			
IT 120	Spreadsheet Applications	3	X	X	X	
IT 130	Word Processor Applications	3	X	X	X	
OT 113	Editing and Proofreading	3	X	X	X	
OT 114	Word Processing & Presentation	3	X	X	X	X
OT 116	Database Applications	3	X	X	X	X
OT 119	Business English	3	X	X	X	X
OT 120	Business Communications	3	X	X	X	X*
OT 150	Records Management	3	X	X	X	
OT 160	Office Accounting	3	X	X	X	
OT 170	Professional Office Procedures	3	X	X	X	X
OT 205	Voicing & Transcription	3	X	X		
OT 210	Statistical Keyboard Entry	3	X	X	X	
OT 215	Document Production	3	X	X		
OT 290	Work Experience Practicum & Seminar (or OT 295)	3	X			
P REL 100	Human Relations	3	X			
General Education Electives		9				
<b>Total Hours</b>			60	42	36	16-18



## Administrative Assistant – Legal Office Specialty

**General description:** The Legal Office Specialty is designed for students interested in a concentrated program in the legal office assistant field. Lawyers must rely on competent, skillful assistants who are flexible, resourceful, and responsible. Legal office assistants are indispensable assets to the legal profession. Students learn the responsibilities of the legal office assistant, including a complete introduction to the law, legal procedures, and court systems; to produce business communications including legal documents; to use technologically-advanced equipment, manage records, manage projects, plan meetings, and develop skills in software applications including word processing, databases, spreadsheets, and presentations.

**Sample of job titles with this degree:** Legal Secretary, Legal Document Assistant, Legal Administrative Assistant.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
BUS 110	3
OT 114	3
OT 116	3
OT 119	3
OT 170	3

<u>Spring Semester</u>	
IT 120	3
IT 130	3
OT 113	3
OT 120	3
OT 150	3
OT 16	3

<u>Fall Semester</u>	
BUS 231	3
OT 205	3
COMM 120 (or COMM 101)	3
General Education Elective	3

<u>Spring Semester</u>	
OT 230	3
OT 232	3
OT 290 (or OT 295)	3
P REL 100	3
General Education Elective	6

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Administrative Assistant – Legal Specialty Courses		Credit Hours	Admin. Asst. Legal. AAS 0044	Legal Office Spec. Cert. C 044F	Receptionist Cert. C 044G
BUS 110	Business Mathematics	3	X	X	X
BUS 231	Business Law Principles	3	X	X	
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
IT 120	Spreadsheet Applications	3	X	X	
IT 130	Word Processor Applications	3	X	X	
OT 113	Editing and Proofreading	3	X	X	
OT 114	Word Processing & Presentation	3	X	X	X
OT 116	Database Applications	3	X	X	X
OT 119	Business English	3	X	X	X
OT 120	Business Communications	3	X	X	X*
OT 150	Records Management	3	X	X	
OT 160	Office Accounting	3	X	X	
OT 170	Professional Office Procedures	3	X	X	X
OT 205	Voicing & Transcription	3	X	X	
OT 210	Statistical Keyboard Entry	3			
OT 215	Document Production	3			
OT 230	Legal Terminology & Writing	3	X	X	
OT 232	Legal Procedures	3	X	X	
OT 290	Work Experience Practicum & Seminar (or OT 295)	3	X		
P REL 100	Human Relations	3	X		
General Education Electives		9	X		
<b>Total Hours</b>			63	45	16-18

\*or OTK 100 or 101 (for Receptionist Certificate only)



# Medical Office Specialist

**General description:** The Medical Office Specialist Degree has three areas of concentration, including General, Coding, and Transcription. Students should choose one area of concentration to obtain their degree. Students may pursue more than one specialty, but only one degree will be given. However, the student will be given all certificate options earned.

## Medical Office Specialist – General Specialty

**General description:** The General Medical Office Specialty certificate and associate degree programs provide students with the foundational skills in order to work in a medical office or hospital environment. Students pursuing the associate's degree are given the opportunity to work on the job in a hospital, doctor's office, or clinic and receive more hands-on experience in the medical office.

Recognizing the demands placed on today's working adult student, Richland provides online, hybrid, and traditional site-based instruction to allow maximum flexibility to complete coursework and fulfill personal responsibilities. Employment opportunities exist in a variety of healthcare settings, including hospitals, clinics, and physician's offices. At the completion of the certificate or degree, students are ready for entry-level employment in the work environment of their choice.

**Sample of job titles with this degree:** Medical Secretary/Receptionist, Health Unit Coordinator.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
BUS 110	3
OT 140 (or HLTH 140)	3
OT 114	3
OT 119	3
OT 170	3

<u>Spring Semester</u>	
OT 116	3
OT 113	3
OT 120	3
OT 141	3
OT 150	3

<u>Fall Semester</u>	
OT 205	3
OT 240	3
P REL 100	3
General Education Electives	6

<u>Spring Semester</u>	
OT 245	3
OT 290 (or OT 295)	3
OT 244	3
COMM 120 (or COMM 101)	3
General Education Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Medical Office Specialist – General Specialty Courses		Credit Hours	Med. Office Spec. General AAS 045D	Med. Office Spec. Cert. C 045C	Receptionist Cert. C 044G
BUS 110	Business Mathematics	3	X	X	X
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
OT 113	Editing and Proofreading	3	X	X	
OT 114	Word Processing & Presentation	3	X	X	X
OT 116	Database Applications	3	X	X	X
OT 119	Business English	3	X	X	X
OT 120	Business Communications	3	X	X	X*
OT 140	Medical Terminology (or HLTH 140)	3	X	X	
OT 141	Anatomy and Physiology Fundamentals	3	X	X	
OT 150	Records Management	3	X	X	
OT 170	Professional Office Procedures	3	X	X	X
OT 205	Voicing & Transcription	3	X	X	
OT 240	Pharmacology Fundamentals	3	X	X	
OT 244	Interpreting Healthcare Records	3	X	X	
OT 245	Reimbursement Principles in Healthcare	3	X	X	
OT 290	Work Experience Practicum & Seminar (or OT 295)	3	X		
P REL 100	Human Relations	3	X		
General Education Electives		9	X		
<b>Total Hours</b>			60	42	16 or 18

\*or OTK 100 or 101 (for Receptionist Certificate only)



## Medical Office Specialist – Coding Specialty

The AAS Medical Office Specialist--Coding Specialty and the related Coding Certificate are suspended. Richland will not admit new students into this program. Students enrolled in the program prior to Fall 2012 will have until August 2015 to complete all program requirements. Interested students are encouraged to enroll in the Health Information Technology Program.

**General description:** The Medical Coding certificate and associate degree programs provide students with the foundational skills in order to accurately code medical reports. Coursework focuses on the skills needed to code healthcare records accurately. Students pursuing the associate's degree are given the opportunity to work on the job in a hospital, doctor's office, or clinic and receive more hands-on experience in the medical coding field.

Recognizing the demands placed on today's working adult student, Richland provides online, hybrid, and traditional site-based instruction to allow maximum flexibility to complete coursework and fulfill personal responsibilities. Employment opportunities exist in a variety of healthcare settings, including hospitals, clinics, and physician's offices. At the completion of the certificate or degree, students are ready for entry-level employment in the work environment of their choice.

**Sample of job titles with this degree:** Coder, Biller.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
BUS 110	3
OT 140 (or HLTH 140)	3
OT 114	3
OT 119	3
OT 170	3

<u>Spring Semester</u>	
IT 130 (or OT 116)	3
OT 113	3
OT 120	3
OT 141	3
OT 143	3

<u>Fall Semester</u>	
OT 205	3
OT 240	3
OT 243	3
P REL 100	3
General Education Electives	6

<u>Spring Semester</u>	
OT 245	3
OT 290 (or OT 295)	3
COMM 120 (or COMM 101)	3
OT 244	3
General Education Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.





Medical Office Specialist – Coding Specialty Courses		Credit Hours	Med. Office Spec. Coding AAS 045D	Coding Cert. C 045B	Receptionist Cert. C 044G
BUS 110	Business Mathematics	3	X		X
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
HIT 101	Introduction to Health Information Technology	3		X	
IT 130	Word Processor Applications (or OT 116)	3	X		
OT 113	Editing and Proofreading	3	X		
OT 114	Word Processing & Presentation	3	X		X
OT 116	Database Applications	3			X
OT 119	Business English	3	X		X
OT 120	Business Communications	3	X		X*
OT 140	Medical Terminology (or HLTH 140)	3	X	X	
OT 141	Anatomy and Physiology Fundamentals	3	X	X	
OT 143	Basic ICD-9 Coding	3	X	X	
OT 170	Professional Office Procedures	3	X		X
OT 205	Voicing & Transcription	3	X		
OT 240	Pharmacology Fundamentals	3	X	X	
OT 243	Basic CPT Coding	3	X	X	
OT 244	Interpreting Healthcare Records	3	X	X	
OT 245	Reimbursement Principles in Health Care	3	X	X	
OT 290	Work Experience Practicum & Seminar (or OT 295)	3	X		
P REL 100	Human Relations	3	X		
General Education Electives		9	X		
<b>Total Hours</b>			63	24	16 or 18

\*or OTK 100 or 101 (for Receptionist Certificate only)



## Medical Office Specialist – Transcription Specialty

**General description:** The Medical Transcription certificate and associate degree programs provide students with the foundational skills and hands-on experience to translate medical dictation into printed formats. Coursework focuses on the skills needed to transcribe healthcare records accurately, including history and physicals, consultations, operative reports, discharge summaries, radiology reports, pathology reports, and chart notes. Students pursuing the associate's degree are given the opportunity to work on the job in a hospital, doctor's office, or transcription company and receive more hands-on experience in the medical transcription field.

Recognizing the demands placed on today's working adult student, Richland provides online, hybrid, and traditional site-based instruction to allow maximum flexibility to complete coursework and fulfill personal responsibilities. Employment opportunities exist in a variety of healthcare settings, including hospitals, clinics, doctors' offices, and medical transcription companies. At the completion of the certificate or degree, students are ready for employment in the work environment of their choice.

The Richland Community College comprehensive medical transcription program is approved by the Approval Committee for Certificate Programs (ACCP), a joint committee established by AHIMA (American Health Information Management Association) and AHDI (Association for Healthcare Documentation Integrity) to approve medical transcription education certificate programs. AHIMA and AHDI acknowledge the ACCP approval committee as the process to identify quality medical transcription education programs that have been evaluated by a peer review process against a minimum set of standards for entry-level medical transcription professionals. This process allows academic institutions, healthcare organizations, and private companies to be acknowledged as offering an AHDI Approved Medical Transcription Certificate Program.

**Sample of job titles with this degree:** Medical Transcriptionist.

### Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
BUS 110	3
OT 140 (or HLTH 140)	3
OT 118	3
OT 119	3
OT 170	3

<u>Spring Semester</u>	
OT 113	3
OT 141	3
OT 142	3
General Education Elective	3

<u>Fall Semester</u>	
OT 205	3
OT 240	3
OT 242	3
OT 248	3
P REL 100	3
General Education Elective	3

<u>Spring Semester</u>	
OT 245	3
OT 290 (or OT 295)	3
OT 244	3
COMM 120 (or COMM 101)	3
General Education Elective	3

### Additional Program Information:

Students who begin in Spring may not finish in a two-year time frame.



Medical Office Specialist – Transcription Specialty Courses		Credit Hours	Med. Office Spec. Trans. AAS 045D	Trans. Cert. C 045A	Receptionist Cert. C 044G
BUS 110	Business Mathematics	3	X		X
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
IT 130	Word Processor Applications (or OT 116)	3	X		
OT 113	Editing and Proofreading	3	X		
OT 118	Introduction to Medical Transcription	3	X	X	
OT 116	Database Applications	3			X
OT 119	Business English	3	X		X
OT 120	Business Communications	3	X		X*
OT 140	Medical Terminology (or HLTH 140)	3	X	X	
OT 141	Anatomy and Physiology Fundamentals	3	X	X	
OT 142	Medical Transcription 1	3	X	X	
OT 170	Professional Office Procedures	3	X		X
OT 205	Voicing & Transcription	3	X		
OT 240	Pharmacology Fundamentals	3	X	X	
OT 242	Medical Transcription 2	3	X	X	
OT 244	Interpreting Healthcare Records	3	X	X	
OT 245	Reimbursement Principles in Healthcare	3	X		
OT 248	Pathophysiology	3	X	X	
OT 290	Work Experience Practicum & Seminar (or OT 295)	3	X		
P REL 100	Human Relations	3	X		
General Education Electives		9	X		
<b>Total Hours</b>			60	24	16 or 18

\*or OTK 100 or 101 (for Receptionist Certificate only)



## Pharmacy Technology

**General description:** This is a career and technical education program. Students in the Pharmacy Technology Program learn the basic skills and knowledge required to begin working as a pharmacy technician. Pharmacy technicians perform a variety of duties under the supervision of licensed pharmacists, including but not limited to preparing and distributing medications, replenishing drugs and pharmaceutical supplies in the pharmacy and patient care areas, mixing and adding medications to intravenous solutions (with some limitations), pricing and ordering drugs, and maintaining records required in the operation of the pharmacy. Program courses may not transfer to four-year institutions.

Unlike many academic and career and technical education programs at Richland, admission into the Pharmacy Technology Program is by application. Admission to Richland Community College does not guarantee acceptance to the program.

Students must meet minimum admission criteria to be eligible to apply. Students use the online Pre-Advisement Plan on myRichland to submit an application during the designated application period. The application period is from January 4 through April 1 for fall admission. Eligible applicants are accepted on a first-come, first-served basis. Late and out-of-district applications are accepted and reviewed until class enrollment is full. The Pharmacy Technology Program admits twelve students to the fall semester.

**Sample of job titles with this degree:** Pharmacy Technology job opportunities include retail, hospital, and mail order pharmacies as well as home health agencies

### Prerequisites to Apply:

- At least 16 years of age and provide evidence of attending or have graduated from an accredited high school or comparable school or educational institution or received a GED (per state requirements)
- Eligibility for ENGL 101 and MATH 091

**Licensure/Certification:** Students must obtain licensure with the Illinois Department of Financial and Professional Regulation (IDFPR) prior to beginning the program's clinical component. During the last semester of the program, students apply to take the Pharmacy Technical Certification Board (PTCB) examination. Students should research the applicable IDFPR and PTCB procedures and requirements of the profession to ensure that they are eligible for licensure and certification.

### Suggested Full-Time Course Sequence:

<u>First Semester</u>	<u>Credit Hours</u>
PHRMT 150	4
PHRMT 152	2
MATH 106	2
<u>Second Semester</u>	
PHRMT 155	6
PHRMT 156	2
PHRMT 157	1

### Additional Program Information:

Students must earn a "C" or better in all program courses and maintain a 2.0 Program GPA.



Pharmacy Technology Courses		Credit Hours	Pharmacy Technology BC 2074
MATH 106	Mathematics for Health Careers	2	X
PHRMT 150	Pharmacology	4	X
PHRMT 152	Pharmacy Calculations	2	X
PHRMT 155	The Pharmacy Technician	6	X
PHRMT 156	Pharmacy Technician Work Experience	2	X
PHRMT 157	Pharmacy Technician Certification Review	1	X
<b>Total Hours</b>			17



## Power Generation – Nuclear

**General description:** The Power Generation – Nuclear Program is designed to educate and train various levels of operators and technicians for the nuclear power generation facilities. The program stresses mathematics, science, physics, and nuclear specialty courses as well as fundamentals of power generation.

**Sample of job titles with this degree:** Control Room Operator, Auxiliary Operator, Health Physicist, Radiation Technician, and Technical Specialist.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

**Suggested Full-Time Course Sequence:**

<u>Fall Semester</u>	<u>Credit Hours</u>
CHEM 131	4
MATH 117	3
PHYS 101	4
COMM 120 (or COMM 101)	3

<u>Spring Semester</u>	
CHEM 132	5
PHYS 102	4
P GEN 101	3
ENGL 110	3
General Education Elective	3

<u>Fall Semester</u>	
ENGT 105	3
PHYS 221	4
P GEN 102	3
P GEN 104	4

<u>Spring Semester</u>	
PHYS 222	4
P GEN 103	3
P GEN 202	3
P GEN 210	3

**Additional Program Information:**

Students who begin in Spring may not finish in a two-year time frame.



Power Generation – Nuclear Courses		Credit Hours	P GEN AAS 0080	P GEN Advanced Cert. C 0079	P GEN Basic Cert. C 0078
CHEM 131	General Chemistry 1	4	X		
CHEM 132	General Chemistry 2	5	X		
COMM 120	Business & Professional Speaking (or COMM 101)	3	X		
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X		
ENGT 105	Occupational Safety	3	X	X	X
MATH 117	Trigonometry	3	X	X	X
P GEN 101	Introduction to Power Plant Systems 1	4	X	X	X
P GEN 102	Introduction to Power Plant Systems 2	4	X	X	
P GEN 103	Introduction to Power Plant Systems 3	3	X	X	
P GEN 104	Introduction to Radiation Protection 1	4	X	X	X
P GEN 202	Introduction to Radiation Protection 2	3	X	X	
P GEN 210	Nuclear Codes, Standards, and Regulations	3	X	X	
PHYS 101	Introduction to Physics 1	4	X	X	X
PHYS 102	Introduction to Physics 2	4	X	X	
PHYS 221	Reactor Physics 1	4	X	X	
PHYS 222	Reactor Physics 2	4	X	X	
General Education Elective		3	X		
<b>Total Hours</b>			61	43	18



## Programmer/Analyst (See Information Technology, page 124)

### Radiography

**General description:** This is a career and technical education program. 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 high-quality radiographs. The program prepares students to use ionizing radiation safely 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 images, evaluating radiologic equipment, managing a radiographic quality assurance program, and providing relevant patient education. Some of the program courses may not transfer to four-year institutions.

Unlike many academic and career and technical education programs at Richland, admission into the Radiography Program is selective and competitive. Admission to Richland Community College does not guarantee acceptance to the program.

Students must meet the minimum admission criteria to be eligible to apply. Once the criteria have been met, students are scored on a rubric and the students with the highest scores are offered conditional admission.

The Radiography Program follows the Health Professions' selective admissions process. Students use the online Pre-Advisement Plan on myRichland to submit an application during the designated application period. Applications are accepted October 1-February 1. Late and out-of-district applicants are considered for the program when space is available. The Radiography Programs admits to the summer semester.

**Sample of job titles with this degree:** To gain employment as a radiographer, most employers require certification of RT(R) by the American Registry of Radiologic Technologists (ARRT), and many states have licensure, including Illinois. Once the RT(R) is obtained, graduates may work in hospitals, clinics, imaging centers, doctor's offices, and surgery centers as staff radiographers. Other opportunities for employment include computed tomography (CT), Magnetic Resonance Imaging (MRI), Interventional Radiology, and Cardiac Catheterization lab. With an additional year of schooling, registered radiographers may also become sonographers, radiation therapists, or nuclear medicine technologists. Opportunities in management, sales, and education are also available after obtaining a bachelor's degree.

#### Prerequisites to Apply:

1. Eligibility for ENGL 101 Composition I.
2. Eligibility for MATH 098 Intermediate Algebra.
3. Complete two semesters of H.S. Geometry with a "C" or better OR complete (may be in progress at time of application) MATH 095 with a "C" or better.
4. Complete the Nelson Denny Reading Test with score of 120 or greater in reading comprehension only.
5. Complete (may be in progress at time of application) HLTH 140 with a "C" or better.
6. Complete (may be in progress at time of application) RADT 101 with a "C" or better. RADT 101 is offered in the fall only.
7. Meet ACT minimum subs scores and composite (15) Math (15) English (15) Science Reasoning (20) Composite (21) OR demonstrate ability to complete all general education courses prior to beginning the program (BIOL 101, 201, 202, ENGL 101, PSYCH 110).
8. Have a "C" or better in all prerequisites and program courses and maintain a minimum 2.5 Program GPA. For admission, the Program GPA is calculated using the grades and credits earned in completed Radiography general education requirement plus RADT 101. Transfer and Richland credits are used in calculating the Program GPA.

#### Student Transfer from another Radiography Program:

Any student wishing to transfer into the program must apply for College admission and program admission. Transfer credits are evaluated and transfer of credit occurs 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 RT (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 a graduate of 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 Student Records Office.

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 Radiography 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. 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.

#### Licensure/certification:

After successful completion of all didactic and clinical competency requirements, students are eligible to seek certification from the American Registry of Radiologic Technologists (ARRT). In addition to the educational standards, students must meet and agree to comply with the organization's ethical and character standards before sitting for the certification exam. Students wishing to practice within Illinois must also seek accreditation from the IEMA Division of Nuclear Safety.

#### Graduation Requirements:

Radiography program students must also complete all of the following in order to graduate:

- Earn a grade of "C" or above in all program prerequisites and program courses
- Maintain a minimum 2.5 Program GPA
- Complete all lab competencies with minimum score of 84%
- Complete all clinical proficiency exams required by the program
- Meet standards of the ARRT/ASRT Code of Professional Ethics
- Complete all clinical proficiency exams required by ARRT
- Return film ID markers and film badge holder or make reimbursement.



**Suggested Full-Time Course Sequence:**

Summer Semester	Credit Hours
RADT 102	3
RADT 108	3

Fall Semester

RADT 110	3
RADT 115	3
RADT 116	3
RADT 118	3
BIOL 101	4

Spring Semester

RADT 120	3
RADT 125	3
RADT 126	3
RADT 128	3
BIOL 201	4

Summer Semester

RADT 155	3.5
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Fall Semester

RADT 215	4
RADT 218	3
RADT 219	2
BIOL 202	4

Spring Semester

RADT 225	4
RADT 228	1.5
RADT 230	3
PSYCH 110	3
ENGL 101	3

**Additional Program Information:**

Admitted students with the minimum ACT sub scores may complete the Radiography general education courses in program. The general education courses must be completed with a "C" or better prior to or during the semester in which they are outlined.

Radiography Courses		Credit Hours	Radiography AAS 050B
BIOL 101	Concepts of Biology 1	4	X
BIOL 201	Human Anatomy & Physiology 1	4	X
BIOL 202	Human Anatomy & Physiology 2	4	X
ENGL 101	Composition 1	3	X
PSYCH 110	Introduction to Psychology	3	X
RADT 101	Introduction to Radiography	3	X
RADT 102	Radiologic Patient Care	3	X
RADT 108	Radiographic Procedures I	3	X
RADT 110	Principles of Radiography I	3	X
RADT 115	Radiography Clinical I	3	X
RADT 116	Radiation Physics	3	X
RADT 118	Radiographic Procedures II	3	X
RADT 120	Principles of Radiography II	3	X
RADT 125	Radiography Clinical II	3	X
RADT 126	Imaging Equipment	3	X
RADT 128	Radiographic Procedures III	3	X
RADT 155	Radiography Clinical III	3.5	X
RADT 215	Radiography Clinical IV	4	X
RADT 218	Radiographic Procedures IV	3	X
RADT 219	Radiation Protection & Radiobiology	2	X
RADT 225	Radiography Clinical V	4	X
RADT 228	Radiographic Image Analysis	1.5	X
RADT 230	Radiography Seminar	3	X
<b>Total Hours</b>			<b>72</b>



# Surgical Technology

**General Description:** The mission of the Richland Surgical Technology Program is to prepare students for entry level into the profession, by providing instruction in the three learning domains – affective, 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. This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

Surgical Technology is a selective admissions program. Admission to the program is by application. Admission to Richland Community College does not guarantee acceptance to the program. The applicant must meet or exceed the minimum requirements to be considered for admission to the Surgical Technology Program.

Richland's Surgical Technology Degree program is a Regional Partnership with Heartland Community College and Lake Land College. In addition to serving Richland, the program also serves these colleges by reserving a limited number of seats for qualified students seeking admission. Students residing outside of the Richland or the Regional Partnership districts will be considered for admission when space is available.

The Surgical Technology Program follows the Health Professions' selective admissions process. Students use the online Pre-Advisement Plan on myRichland to submit an application during the designated application period. Applications are accepted between January 4 and March 1. After March 1, admission is ongoing until capacity is met in each region. If reserved seats among the Regional Partnership districts remain open in August, they are filled with overflow from Richland or other Regional Partnership districts. The Surgical Technology Program admits to the fall semester.

**Accreditation:** The Surgical Technology AAS Degree Program is accredited by the Commission of Accreditation of Allied Health Education Programs (CAAHEP, 1361 Park Street, Clearwater, FL 33756 Phone: (727) 210-2350 Web: [www.caahep.org](http://www.caahep.org)).

**Sample of job titles with this degree:** Surgical Technologists are employed in hospital surgery departments, obstetric departments, and surgery centers. They may also specialize in cardiac, orthopedic or pediatric surgery.

## Prerequisites to Apply:

1. Eligibility for ENGL 101
2. Complete two years of high school biology and 1 year of high school chemistry or physics with a "B" or better within the last 3 years or complete BIOL 101 with a "C" or better or meet prerequisites for Microbiology at district community college (applicable to regional program students only). Students who have completed BIOL 201, 202, or 220 must have completed one within the last 5 years
3. Have a "C" or better in all prerequisites and program courses and maintain a minimum 2.5 Program GPA. For admission, the Program GPA is calculated using grades and credits earned in any completed Surgical Technology program course. Program courses that can be completed prior to admission include: BIOL 101, BIOL 201, BIOL 202, ENGL 101, HLTH 140, and PSYCH 110. Transfer and Richland credits are used in calculating the Program GPA
4. Arrange a pre-admission meeting with the Surgical Technology Program Director
5. Complete the PSB test and obtain a minimum 50% average for all seven areas (results found in myRichland)

## Licensure/Certification:

After successful completion of all didactic, laboratory, and clinical competency requirements, the graduate will receive an AAS Degree and become a Certified Surgical Technologist (CST) upon passing the National Certification Examination given by the NBSTSA. Students wishing to practice within Illinois may also seek registration from the Department of Regulation in Springfield, Illinois.

## Student Transfer from another Surgical Technology Program:

Any student wishing to transfer into the program must apply for College admission and program admission. Transfer credits will be evaluated and transfer of credit will occur through College policy. Such transfer shall be subject to the availability of an appropriate clinical placement, student admission procedures, and Program Director approval.

## Degree Completion Program for Certified Surgical Technologist:

A graduate of an accredited Surgical Technology Program who is currently employed and working as a Certified Surgical Technologist (CST) may be eligible to enroll in SURGT 290 Internship in Surgical Technology. Upon successful completion of SURGT 290 and all program general education requirements, the student may apply for transfer credit based on certification and work experience and will be awarded an Associate of Applied Science in Surgical Technology.

## Graduation Requirements:

Surgical Technology program students must also complete all of the following in order to graduate:

- Earn a "C" or better in all prerequisite and program courses
- Maintain a minimum 2.5 Program GPA
- Complete all lab/clinical competencies at 100%
- Complete a minimum of 125 solo scrubs
- Meet standards of the Professional Integrity Policy

**Suggested Full-Time Course Sequence:**First Semester Credit Hours

BIOL 220	4
ENGL 101	3
HLTH 140	3
SURGT 100	2

Second Semester

BIOL 201	4
SURGT 101	6

Third Semester

SURGT 102	7
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Fourth Semester

BIOL 202	4
SURGT 201	13

Fifth Semester

PSYCH 110	3
SURGT 202	9
Elective	3

**Additional Program Information:**

Students must complete program courses with a "C" or better prior to or during the semester in which they are outlined.

Surgical Technology Courses		Credit Hours	Surg Tech AAS 0056
BIOL 201	Human Anatomy & Physiology 1	4	X
BIOL 202	Human Anatomy & Physiology 2	4	X
BIOL 220	Microbiology	4	X
ENGL 101	Composition 1	3	X
HLTH 140	Medical Terminology	3	X
PSYCH 110	Introduction to Psychology	3	X
SURGT 100	Surgical Technology Orientation	2	X
SURGT 101	Surgical Technology I	6	X
SURGT 102	Surgical Technology II	7	X
SURGT 201	Surgical Technology III	13	X
SURGT 202	Work Experience Program	9	X
Elective		3	X
<b>Total Hours</b>			<b>61</b>

**New Curriculum Pending ICCB Effective Fall 2012****Suggested Full-Time Course Sequence:**First Semester Credit Hours

BIOL 220	4
ENGL 101	3
HLTH 140	3
SURGT 110	2

Second Semester

BIOL 201	4
SURGT 120	4
SURGT 125	3
SURGT 128	1

Third Semester

SURGT 130	3
SURGT 135	2
SURGT 138	3

Fourth Semester

BIOL 202	4
SURGT 240	6
SURGT 245	2
SURGT 248	6

Fifth Semester

PSYCH 110	3
SURGT 250	2
SURGT 255	2
SURGT 258	6
SURGT 259	1
Elective	3

**Additional Program Information:**

Students must earn a grade of "C" or better in the program prerequisites, core curriculum courses, and general education courses.



<b>Surgical Technology Courses</b>		<b>Credit Hours</b>	<b>Surg Tech AAS 0056</b>
BIOL 201	Human Anatomy & Physiology 1	4	X
BIOL 202	Human Anatomy & Physiology 2	4	X
BIOL 220	Microbiology	4	X
ENGL 101	Composition 1	3	X
HLTH 140	Medical Terminology	3	X
PSYCH 110	Introduction to Psychology	3	X
SURGT 110	Introduction to Surgical Technology	2	X
SURGT 120	Principles of Surgical Technology I	4	X
SURGT 125	Fundamentals of Surgical Technology	3	X
SURGT 128	Intro to the Clinical Experience	1	X
SURGT 130	Principles of Surgical Technology II	3	X
SURGT 135	Surgical Procedures I	2	X
SURGT 138	Basic Surgical Technology Clinical I	3	X
SURGT 240	Principles of Surgical Technology III	6	X
SURGT 245	Surgical Procedures II	2	X
SURGT 248	Int. Surgical Technology Clinical II	6	X
SURGT 250	Principles of Surgical Technology IV	2	X
SURGT 255	Surgical Procedures III	2	X
SURGT 258	Adv. Surgical Tech Clinical III	6	X
SURGT 259	Professional Seminar	1	X
Elective		3	X
<b>Total Hours</b>			<b>67</b>



## Teacher Assistant (See Paraprofessional Education, Page 72)

### 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.

**Sample of job titles with this degree:** Truck Driver.

This is a career and technical education program. Some courses may not transfer to four-year institutions.

### Welding Technology

**General description:** Welding is the most common way of permanently joining metal. Because of its strength, welding is used to build and repair a myriad of products, from pipelines and power plants to ships and spacecraft. Job opportunities are on the rise as the demand for highly trained welders increases with industries throughout the world. Welders plan the sequence of operations and select the equipment to be used according to the kinds of metals involved and the type of weld to be made. The Welding Technology Program is designed to provide skill development in currently used welding processes including brazing, soldering, arc welding, gas welding, resistance welding, and solid state welding. Additionally, skill development may be obtained in oxy-fuel cutting, arc cutting, thermal cutting, thermal spraying, and adhesive bonding. This program prepares students to take the certification exams reflecting the structural codes and standards set by the American Society of Mechanical Engineers (ASME 9), American Welding Society (AWS), and the National Center for Construction Education & Research (NCCER). Students seeking this degree will need to choose between a construction and pipe welding concentration or an industrial and equipment specialty. Welders work indoors and outdoors, often welding in awkward positions.

**Construction and Pipe Specialty** – Students will be qualified to pursue certification in API-1104, ASME Section 9 & D11. Many courses in this specialization have a higher tuition cost – check with the Student Services Center for details.

Please be advised that the Welding Technology program utilizes the Angel Online Learning Management System. Having this online component allows the Welding Technology program to provide self-paced studies on or off campus for students enrolled in any Welding Technology course.

**Sample of job titles with this degree:** Construction Steel Erector, Industrial fabrication heavy, industrial fabrication light, industrial maintenance, robotic welding operators, specialty welding, piping fabrication, welding fabrication supervisors, tank and pressure vessels welding, recreational vehicle design & fabrication, welding instructors.

This is a career and technical education program. Some of the courses may not transfer to four-year institutions.

#### Construction & Pipe Specialty: Suggested Full-Time Course Sequence:

<u>Fall Semester</u>	<u>Credit Hours</u>
ENGL 110 (or ENGL 101)	3
ENGT 102 (or ENGT 101)	2
MATH 104	4
WELD 100	1
WELD 101	4
WELD 102	4

<u>Spring Semester</u>	
P REL 100	3
WELD 103	3
WELD 201	2
WELD 205	3
WELD 202	2
WELD 204	4

<u>Fall Semester</u>	
WELD 230	3
WELD 240	3
WELD 241	3
WELD 242	3
COMM 120	3

<u>Spring Semester</u>	
WELD 231	4
WELD 232	4
WELD 233	3
WELD 234	4
General Education Elective	3



Welding Technology Courses		Credit Hours	Const & Pipe AAS 0032	Industrial & Equipment AAS 0032	Pipefitting & Pipe Cert. C 032B	Welding Tech Cert. C 032A	Welding Cert. C 0030
COMM 120	Business & Professional Speaking (or COMM 101)	3	X	X			
ENGL 110	Communicating in the Workplace (or ENGL 101)	3	X	X			
ENGT 100	Industrial Processes	3		X		X	
ENGT 102	Blueprint Reading (or DRAFT 101)	2	X	X	X	X	X
ENGT 105	Occupational Safety	3		X		X	
ENGT 160	Metrology	2		X		X	
ENGT 200	Industrial Materials	3		X		X	
ENGT 231	Piping Fundamentals	2		X		X	
ENGT 232	Rigging & Cranes	2		X		X	
ENGT 260	Quality Fundamentals	3		X		X	
ENGT 290	Work Experience Practicum & Seminar (or ENGT 295)	3		X			
MATH 104	Technical Mathematics	4	X	X			X
P REL 100	Human Relations	3	X	X			
WELD 100	Oxy-Acetylene & Plasma Arc Cutting	1	X	X	X	X	X
WELD 101	Shielded Metal Arc Welding	4	X	X	X	X	X
WELD 102	Adv. Shielded Metal Arc Welding	4	X	X	X	X	X
WELD 103	Welding Tools & Safety	3	X	X	X	X	X
WELD 190	Maintenance Welding	2		X		X	X
WELD 201	Gas Metal Arc & Flux Core Arc Welding	2	X	X	X	X	X
WELD 202	Welder Certification	2	X	X	X	X	X
WELD 204	Pipe Welding	4	X	X	X	X	X
WELD 205	Gas Tungsten Arc Welding	3	X	X	X	X	X
WELD 230	Pipefitting Fundamentals	3	X		X		
WELD 231	Pipefitting Applications	4	X		X		
WELD 232	Pipefitting Techniques	4	X		X		
WELD 233	Pipe Fabrication	3	X		X		
WELD 234	Field Maintenance & Safety	4	X		X		
WELD 240	Non-Ferrous Welding	3	X		X		
WELD 241	GMAW/FCAW Pipe	3	X		X		
WELD 242	Aluminum Plate & Pipe	3	X		X		
General Education Elective (PHYS 100 recommended)		3	X	X			
<b>Total Hours</b>			68	64	52	45	31



## Guarantee for Technical Competency

Any student earning an Associate in Applied Science degree or certificate who is judged by an employer to be lacking in the technical job skills necessary for entry into the job for which the degree or certificate was designed shall be provided up to nine tuition-free credit hours of additional skill training. The graduate, under the agreement to enact this guarantee, will still be responsible for all costs other than the tuition specified.

Qualifying Conditions for the Guarantee:

1. The graduate must have earned the Associate in Applied Science degree or certificate no earlier than one year prior to the beginning date of the employment under consideration.
2. The graduate must have completed the degree within a five-year time period beginning at the point of first employment.
3. The graduate must be employed full-time in a position directly related to the program of study as certified by the Vice President of Student and Academic Services.
4. The employer must certify in writing that the graduate is lacking entry-level skills within 90 days of the graduate's initial date of employment.
5. The employer, graduate, division Dean, and appropriate faculty member, on the occasion of confirmed need for more training, would develop a written educational plan for retraining.
6. This guarantee does not imply that the graduate is guaranteed to pass any licensing or qualifying examination for a particular career.





# 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 career and technical education, baccalaureate-oriented, or liberal studies programs but who need additional preparation to meet their goals. Therefore, this program is more structured than the other seven basic certificate general studies programs.

### Basic Certificate in Community and Civic Development

The program is meant to serve those who have an interest in improving their understanding of community and civic affairs. Persons with such an interest in community and civic activities may enroll in this program even if they do not intend to receive a certificate. Interested individuals should plan their programs with an academic advisor.

Graduation requirements for this Certificate are completion of

1. Sixteen (16) 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 (see page 12).
2. 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 37).

### Basic Certificate in Developmental, Preparatory, or Basic Skills

The program is meant to serve those who want to develop or strengthen their abilities in the basic study skills areas, such as reading, writing, or arithmetic, which are important to daily living and/or further study. This program allows them to develop or strengthen these general skills in a less formalized program structure than is provided for the Basic Certificate in Personal Development. Persons with an interest in this area may enroll in the program even if they do not intend to receive a certificate. Interested individuals should plan their program with an academic advisor.

Graduation requirements for this certificate are completion of

1. Sixteen (16) 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 (see page 12).
2. 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 37).

### Basic Certificate in Health, Safety, and Environment

The program is meant to serve those who have an interest in improving their understanding of matters relating to health, safety, and environment (ecology). Persons with an interest in those fields may enroll in this program even if they do not intend to receive a certificate. Interested individuals should plan their program with an academic advisor.

Graduation requirements for this Certificate are completion of

1. Sixteen (16) 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 (see page 12).
2. 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 37).

### Basic Certificate in Homemaking

The program is meant to serve those who have an interest in developing or improving their homemaking capabilities. Persons with an interest in this area may enroll in the program even if they do not intend to receive a certificate. Interested individuals should plan their program with an academic advisor.

Graduation requirements for this Certificate are completion of

1. Sixteen (16) 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 (see page 12).
2. 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 37).

### Basic Certificate in Improving Family Circumstances

The program is meant to serve those who have an interest in improving family life. Such an interest could range from the development of skills useful in the home to the development of psychological and/or sociological understanding. Persons with an interest in this area may enroll in the program even if they do not intend to receive a certificate. Interested individuals should plan their program with an academic advisor.

Graduation requirements for this Certificate are completion of

1. Sixteen (16) 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 (see page 12).
2. 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 37).



### Basic Certificate in Intellectual and Cultural Studies

The program is meant to serve those who have an interest in pursuing studies for their own intellectual and/or cultural development. Richland recognizes that many persons enroll for the purpose of studying in areas not previously pursued even though they may have earned one or more college degrees. Other persons may have developed their occupational skills primarily through employment experiences and now desire to take advantage of the opportunity for intellectual and/or cultural development. Such study is for personal enrichment rather than for the purpose of development of occupational competence or the pursuit of a baccalaureate-oriented curriculum. Those interested in pursuing work for such a purpose may enroll in this program even if they do not intend to receive a certificate. Interested individuals should plan their program with an academic advisor.

Graduation requirements for this certificate are completion of

1. Sixteen (16) semester hours of course work that complements the individual's other life experiences and broadens his/her intellectual and/or cultural understanding. Students transferring credit to Richland should see regulations under Admissions (see page 12).
2. 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 37).

### 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 an academic advisor, 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 an academic advisor.

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.
2. Total credits required – 16 semester hours including requirements in Item 1 above plus general electives. Students transferring credit to Richland should see regulations under Admissions (see page 12).
3. 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 37).

### Suggested Courses:

#### Communications Skills

- ENGL 090 – Reading and Study Skills II
- ENGL 097 – Developmental Writing II
- ENGL 101 – Composition 1
- COMM 101 – Principles of Speech
- ED 100 – Introduction to Public Education

#### Social Science

- POL S 100 – People and Politics
- PSYCH 100 – Practical Psychology
- SOCIO 100 – Man, Society, and Culture
- SOCIO 200 – Marriage and the Family

#### Natural/Life/Physical Science

- BIOL 101 – Concepts of Biology
- CHEM 100 – Concepts of Chemistry

#### Mathematics

- MATH 090 – Pre-Algebra
- MATH 091 – Basic Algebra
- MATH 110 – Concepts of Math
- MATH 113 – Intro to Applied Statistics

#### Humanities/Fine Arts

- AF AM 100 –
- AF AM 120 -
- ART 100 – Art Appreciation
- THTRE 150 – Theatre Appreciation
- MUSIC 100 – Music Appreciation
- MUSIC 190 – Introduction to American Music

#### Other

- P DEV 100 – Human Potential Seminar

In addition to the suggested courses listed for the group requirements areas, a student may utilize one or more other courses if his or her background is appropriate to a particular area of study. Electives may include other introductory courses not listed.



## 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:

### Business and Technology Division

Dean – Room C242

(Accounting, Agribusiness/Agriculture, Automotive, Business, Drafting and Design Engineering, Engineering Technology, Health Information Technology, HVAC&R, Horticulture, Information Technology, Office Technology, Welding Technologies)

### Communications, Education, Humanities, and Fine Arts Division

Dean – Room C162

(African American Studies, Arabic, Art, Chinese, Communication, Dance, Early Childhood Education, Education, English, French, German, Graphic Arts, Humanities, Journalism, Music, Philosophy, Spanish, Theatre)

### Continuing and Professional Education Division

Dean – Room SC06

(Transportation – CDL)

### Correctional Education Division

Director – Room W206

(Department of Corrections Programs: Commercial Custodial Services, Construction Occupations, Food Service Technology, Horticulture)

### Enrollment Services

Dean – Room N131

(Service Learning, Leadership Development, Career Development, Personal Development)

### Health Professions Division

Dean – Room S162

(Health, Emergency Medical Services, Nursing Assistant, Pharmacy Technology, Practical Nursing, Radiography, ADN/Registered Nursing, Surgical Technology)

### Mathematics and Sciences Division

Dean – Room S119

(Anthropology, Astronomy, Biology, Chemistry, Criminal Justice, Earth Science, Economics, Engineering, Fire Science, History, Mathematics, Physical Education, Physics, Physical Science, Political Science, Psychology, Social Science, Sociology)

### Teaching and Learning Support Services

Dean – Room S145A

(Personal Development)

### Workforce Development

Dean - Room E185

(Culinary Arts, Hospitality Management)

## 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. Career and Technical Education-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 Richland graduation. The degrees are abbreviated: AAS – Associate in Applied Science; AES – Associate in Engineering Science; ALS – Associate in Liberal Studies; AA – Associate in Arts; AS – Associate in Science; AAT – Associate in Arts in Teaching; and AFA – Associate in Fine Arts.

## Course Titles, Hours, and Credit

Course titles include (1) the general area of instruction for the course, which is called the course "Prefix" (for example: ACCT, MATH, HIST); (2) the course number; (3) the descriptive course title (for example: Financial Accounting, College Algebra, United States to 1877); and (4) the number of hours a class normally meets a week and the number of semester credit hours granted (for example: 1-4-3 would indicate 1 hour of lecture/discussion per week and 4 hours of laboratory per week for 3 semester hours of credit.)

## Key to Course Descriptions

Below is an example of a Course Description that will serve as a Key to those descriptions that follow.

Course No. – Course Title  
**ACCT 100 – Fundamentals of Accounting**

Lecture  
 Lab  
 Credit Hours  
**3-0-3**



# Accounting

## **ACCT 100 - Accounting Fundamentals** 3-0-3

is designed to promote success in ACCT 101 with an emphasis on the financial statements, accounting cycle, special journals and ledgers, adjustments, accounts receivable and accounts payable, bank reconciliation, inventories, and depreciation. This course is recommended for non-business majors and small business managers. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **ACCT 101 - Financial Accounting (IAI: BUS 903)** 4-0-4

presents accounting as an information system that produces summary financial statements primarily for users external to a business. Emphasis is on applying basic accounting principles, recording, reporting, and interpretation of all four basic financial statements. This course includes coverage of proprietorship, partnership, and corporate forms of organization. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Accounting

## **ACCT 102 - Managerial Accounting Fundamentals (IAI: BUS 904)** 4-0-4

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.

(prerequisite: ACCT 101)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Accounting

## **ACCT 201 - Intermediate Accounting 1** 4-0-4

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.

(prerequisite: ACCT 101)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **ACCT 202 - Intermediate Accounting 2** 4-0-4

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.

(prerequisite: ACCT 201)

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

## **ACCT 205 - Small Business Accounting** 2-2-3

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.

(prerequisite: ACCT 101 (or OT 160) or consent of full-time Accounting instructor)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **ACCT 210 - Tax Accounting** 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 - Not Applicable

Area of Concentration - Not Applicable

## **ACCT 211 - Managerial Cost Accounting** 4-0-4

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.

(prerequisite: ACCT 101)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **ACCT 290 - Work Exp Practicum & Seminar** 1-10-3

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. Students will need to work a minimum of 150 hours during the semester to receive credit for this course. Offered as needed.

(prerequisite: completion of 45 credit hours or approval of appropriate instructional team)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **ACCT 295 - Special Advanced Projects** 1-10-3

designed around an individual or group project that allows the student the opportunity to work on an advanced level in his/her major area of study. Offered as needed.

(prerequisite: completion of 45 credit hours or approval of appropriate instructional team)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

# African American Studies

## **AF AM100 - African American Studies** 3-0-3

surveys the history and culture of African Americans that introduce students to foundational information on the humanistic approach in the study of African American heritage, life, struggles, tragedies and successes. The course will consider language, literature, the fine and performance arts, historical analyses, religion, philosophy, and the humanities in African American heritage. Successful completion of formal writing assignments is necessary for completion of the course. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Humanities, Fine Arts (AAS & ALS only)

Area of Concentration - African-American Studies

## **AF AM103 - The African American Experience through the Arts (IAI: HF 906D) 3-0-3**

presents a critical, aesthetic, and historical introduction to African-American music, drama, and visual arts as ethnic tradition and as part of the American cultural experience. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Humanities, Fine Arts

Area of Concentration - African-American Studies

## **AF AM104 - The African-American Experience thru Literature (IAI: H3 910D) 3-0-3**

presents a critical and cultural introduction to African-American poetry and prose as ethnic tradition and as part of the American literary experience. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Humanities, Fine Arts

Area of Concentration - African-American Studies



### **AF AM105 - History of African American Gospel Music** 3-0-3

is designed to provide the student with a practical viewpoint of the role of gospel music in the African American culture. This course emphasizes the historical legacy behind the music and some of its musicians. Students will have the opportunity to take a look into the lives and souls of a group of people whose only hope was found in the spiritual words of the songs they sang, as well as the connection to the continent of Africa, blues, jazz, and jubilee styles of music. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities and Fine Arts (AAS and ALS only)
- Area of Concentration - African-American Studies

### **AF AM110 - Research Strategies in African American Studies** 3-0-3

surveys the basic concepts, principles, methods, and approaches in African Americans Studies. Various research methods will be examined and compared with the goals and the efficacy of accurate information gathering. Topics covered include: conceptualization, observation, interviews, ethnographies, surveys, and community studies. Each phase of the process-design, data collection, analysis, validity, and report writing, will be explored and applied to create original research on the African American experience in individual or group projects. Research topics will be humanities oriented and will vary each. Sample topics include: religious tradition, identity, health and life passage events, family heritage, oral traditions, philosophical beliefs, and musical traditions. Offered in Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities, Fine Arts (AAS & ALS only)
- Area of Concentration - African-American Studies

### **AF AM120 - The African-American Experience (IAI: HF 906D)** 3-0-3

surveys African American heritage from its African roots through the beginning of the civil rights movement and critically examines literature and other products of African American culture. Offered in Fall, Spring, and Summer. (Formerly AF AM 101)

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities, Fine Arts
- Area of Concentration - African-American Studies

### **AF AM130 - African American Social Movements** 3-0-3

surveys social movements of African Americans through analyzing the challenges and risks in the struggle to gain racial equality in the United States. Multiple perspectives will be covered in the study of segregation, the Civil Rights Movement, Niagara Movement, NAACP, Urban League, Pan Africanism, Harlem Renaissance, sit-ins, Freedom Movement, Black Panther Party, Black Arts Movement, Black Women and the Club Movement, and African American cultural and intellectual movements. Offered as needed. (Formerly AF AM 102)

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities and Fine Arts (AAS and ALS only)
- Area of Concentration - African-American Studies

### **AF AM140 - African American Women (IAI: HF907D)** 3-0-3

surveys issues and conditions of African American women as examined through the impact of socio-political history, the institution of slavery, the humanities, and artistic expressions. Emphasis will be placed on identifying and analyzing social trends that impact African American women in a variety of communities through primary sources. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities, Fine Arts
- Area of Concentration - African-American Studies

### **AF AM141 - African American Men** 3-0-3

surveys the identity, conditions, and perceptions of African American men as seen through the humanities, including history, art, music, oral traditions, literature, theatre, film, the performing arts, and the religious and philosophical experience. Course materials will emphasize primary references in the humanities as well as the creation of primary resources in original research. Successful completion of formal writing assignments is necessary for completion of the course. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities and Fine Arts (AAS and ALS only)
- 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 Degrees
- Group Requirement - Natural Science (AAS only)
- Area of Concentration - Agriculture

### **AGRIC130 - Crop Science (IAI: AG 903)** 3-2-4

examines basic principles of plant growth, including human and environmental influences and the theoretical and practical application of agronomic principles to crop production. Includes the historical and economic importance of crop plants for food, feed, and fiber; origin, classification, and geographic distribution of field crops; environmental factors and agronomic problems; crop plant breeding, growth, development, and physiology; cropping systems and practices; seedbed preparation, tillage, and crop establishment; pests and controls; and harvesting, storing, and marketing practices. Offered in Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural Science (AAS and ALS only)
- Area of Concentration - Agriculture

### **AGRIC195 - Contemporary Issues in AgriBusiness** 3-0-3

provides an introduction to issues and career opportunities in agriculture focusing on, but not limited to, agribusiness. Topics may include communications, finance, economics, accounting, commodity marketing, and the study of the political landscape of agriculture. An in-depth dialogue and possible field visits will help develop an understanding of the skill sets needed to succeed in each of the different areas discussed. Offered in Spring.

Applicable toward graduation where program structure permits:

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

### **AGRIC200 - Weed & Pest Control** 3-2-4

covers the safety and handling of approved agricultural pesticides with emphasis on pesticides used in corn and soybean production. Students will develop the ability to select pesticides, formulate mixes, and understand how to apply materials in a safe and approved manner. Also included are discussion and understanding of integrated pest management principles and practices as related to weed and pest control. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **AGRIC210 - Soil Science (IAI: AG 904)** 3-2-4

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.

(prerequisite: CHEM 100 or 110 or consent of Agriculture Coordinator)

Applicable toward graduation where program structure permits:

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

### **AGRIC232 - Agricultural Economics** 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, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **AGRIC240 - GPS Applications** 2-2-3

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.

(prerequisite: CIS 110 or equivalent skills)

Applicable toward graduation where program structure permits:



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

#### **AGRIC241 - Introduction to GIS Using Arcview** **2-2-3**

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.

**(prerequisite: CIS 110 or permission of the instructor)**

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** **3-0-3**

is designed to help farmers develop marketing skills by determining production costs and understanding the cash and futures markets, to conduct a technical analysis of the markets, and to use these principles to develop a marketing plan for their own operation. Offered in Fall.

Applicable toward graduation where program structure permits:

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

#### **AGRIC290 - Work Exp Practicum + Seminar** **1-10-3**

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.

**(prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an Agribusiness Degree or approval of the Dean)**

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 & Project** **1-10-3**

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.

**(prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an Agribusiness Degree or approval of the Dean)**

Applicable toward graduation where program structure permits:

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

## Anthropology

#### **ANTHR110 - Intro to Cultural Anthropology(IAI: S1 901N)** **3-0-3**

is an introduction to cultural anthropology, which strives for a holistic and comparative view of human culture. Examples from societies around the world will be used to provide the students with a broader perspective of their own culture. This involves examining religion, kinship, technology, political and economic systems, and the process of cultural change. Offered in Fall and Spring.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
 Group Requirement - Social Science  
 Area of Concentration - Anthropology

#### **ANTHR120 - Intro to Physical Anthropology(IAI: S1 902)** **3-0-3**

is an introduction to physical anthropology, with a primary focus on human evolution. It includes elements of evolutionary biology, genetics, paleoanthropology, archaeology, and the study of non-human primates. We will discuss the methodology of physical anthropology, the fossil record and archaeological evidence for hominid biology and behavior, and the variation found in modern human populations. Offered in Fall.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
 Group Requirement - Social Science  
 Area of Concentration - Anthropology

#### **ANTHR130 - Introduction to Archaeology(IAI: S1 903)** **3-0-3**

is designed to introduce students to anthropological archaeology, including archaeological data, concepts, methods, and goals. Time is also spent discussing the major events in human prehistory, such as the domestication of plants and animals, and the development of cities and complex societies, as well as the history of archaeology and archaeological thought. Offered in Spring.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
 Group Requirement - Social Science  
 Area of Concentration - Anthropology

## Arabic

#### **ARAB 115 - Conversational Arabic 1** **3-0-3**

is the development of conversational Arabic skills with intensive oral practice in listening and speaking. The communicative approach in instruction will emphasize functional conversational patterns, idiomatic vocabulary, basic grammar and syntax, cultural information, readings/writing of the script for travel, career development, cultural outreach, or personal enrichment. Offered as needed.

Applicable toward graduation where program structure permits:

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

## Art

#### **ART100 - 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.

**(This course is not for fine or graphic art majors.)**

Applicable toward graduation where program structure permits:

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

**ART101 - Introduction to Drawing 1** **1-5-3**

acquaints the student with the basic concepts and practice of drawing including the study of line, form, space, value, and composition. Subject matter will include still life arrangements and other projects. Offered in Fall.

Applicable toward graduation where program structure permits:

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

**ART102 - Introduction to Drawing 2** **1-5-3**

continues exercises from still life arrangements and other projects. Black and white as well as color media is used. Offered in Spring.

**(prerequisite: ART 101)**

Applicable toward graduation where program structure permits:

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

**ART111 - Design 1** **1-5-3**

offers the student orientation in the principles and practice of two-dimensional designing using various media and dealing with the elements of line, color, balance, value, and form. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**ART112 - Design 2** **1-5-3**

involves the study and practice of three-dimensional design and exploration of various tools, materials, and techniques. Offered in Fall.

**(prerequisite: ART 111)**

Applicable toward graduation where program structure permits:

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

**ART113 - Figure Drawing 1** **1-5-3**

introduces the student to the drawing of the human figure with activities involving techniques, anatomy, and design in varied media. Offered in Fall.

**(prerequisite: ART 101, 102, 111, or 112 or concurrent enrollment in any one of these courses)**

Applicable toward graduation where program structure permits:

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

**ART114 - Figure Drawing 2** **1-5-3**

continues activities involving techniques, anatomy, and design in various media of drawing the human figure. Offered in Fall.

**(prerequisite: ART 113)**

Applicable toward graduation where program structure permits:

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

**ART115 - Printmaking 1** **1-5-3**

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 Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Art

**ART116 - Printmaking 2** **1-5-3**

introduces the student to an exploration of the silkscreen print technique. Offered as needed.

**(prerequisite: ART 115)**

Applicable toward graduation where program structure permits:

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

**ART117 - Painting 1** **1-5-3**

introduces the student to the approaches, media, and techniques of painting as a medium of expression. Offered in Fall.

Applicable toward graduation where program structure permits:

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

**ART118 - Painting 2** **1-5-3**

continues exploration of the approaches, media, and techniques of painting as a medium of expression. Offered as needed.

**(prerequisite: ART 117)**

Applicable toward graduation where program structure permits:

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

**ART119 - Sculpture 1** **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 Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Art

**ART120 - Sculpture 2** **1-5-3**

offers further work in various three-dimensional materials. Attention is given to personal and individual problem-solving. Offered as needed.

**(prerequisite: ART 119)**

Applicable toward graduation where program structure permits:

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

**ART121 - Ceramics 1** **1-5-3**

is an introduction to various hand-building techniques, decorative methods, and firing processes. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

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

**ART122 - Ceramics 2** **1-5-3**

is a continuation of various hand-building techniques, decorative methods, and firing processes. Offered in Fall and Spring.

**(prerequisite: ART 121)**

Applicable toward graduation where program structure permits:

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

**ART123 - Watercolor 1** **1-5-3**

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 Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Art



### **ART124 - Watercolor 2** 1-5-3

continues the approaches, techniques, and media of transparent and opaque water-soluble paints. Offered as needed.

**(prerequisite: ART 123)**

Applicable toward graduation where program structure permits:

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

### **ART125 - Photography 1: Black and White** 1-5-3

introduces the student to photography, covering fundamentals of film camera, studio, and darkroom techniques. (Students must supply their own fully manual 35mm film cameras. Refer to equipment list for the class.) A minimum of a 50-minute laboratory period per week is 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 Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Art

### **ART126 - Photography 2: Black and White** 1-5-3

is a continuation of ART 125. It offers further study and experimentation with film camera, studio, and darkroom techniques. A minimum of a fifty-minute laboratory period per week is required in addition to scheduled class hours. Offered in Fall and Spring.

**(prerequisite: ART 125 or evaluation of portfolio)**

Applicable toward graduation where program structure permits:

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

### **ART127 - Digital Photography 1** 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 in Spring.

Applicable toward graduation where program structure permits:

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

### **ART128 - Fiber 1** 1-5-3

will employ technical information for manipulating cloth and traditional fiber materials, as well as in-depth readings pertaining to the contemporary world of fiber and material studies. Sewing, knitting, wrapping, coiling, beading, casting, dyeing, and discharge work are techniques that may be covered in the course curriculum. Students will be investigating materials and their meaning in order to explore and express personal content and ideas. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **ART129 - Digital Photography 2** 1-5-3

is a course for persons experienced in photography or those interested in improving their current skills. It covers more advanced aspects of photography and photo manipulation in Adobe Photoshop. Use of CD/DVD slide shows will also be covered. The course instructor delivers critiques of photo skills to improve the skills of the photographer. Offered as needed.

**(prerequisite: ART 127)**

Applicable toward graduation where program structure permits:

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

### **ART131 - Advanced Ceramics 1** 0-6-3

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.

**(prerequisite: ART 122)**

Applicable toward graduation where program structure permits:

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

### **ART140 - Principles of Graphic Design** 1-5-3

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 in Fall.

**(prerequisite: completion of or concurrent enrollment in ART 101 and 111)**

Applicable toward graduation where program structure permits:

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

### **ART145 - Typography1** -5-3

is part of the graphic design sequence. This course is the study and application of text and type as it applies to graphic design. Studies will include but are not limited to the following: an overview of typographic history, terminology, the application of the elements and principles, type classification, portfolio presentation, production methods, compositional practices and creative development. Studio assignments are both computer and non-computer aided. Offered in Fall.

Applicable toward graduation where program structure permits:

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

### **ART151 - Computer Graphics 1** 1-5-3

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 in Spring.

**(prerequisite: ART 140)**

Applicable toward graduation where program structure permits:

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

### **ART152 - Computer Graphics 2** 1-5-3

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 in Fall.

**(prerequisite: ART 151)**

Applicable toward graduation where program structure permits:

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

### **ART162 - Computer Animation 1** 1-5-3

introduces the student to the fundamentals of 3-D modeling, lighting and texture using the latest industry standard software Maya/Foundation. This course also provides the fundamentals of using the software in preparation for more advanced techniques in Computer Animation 2. Offered as needed.

**(prerequisite: ART 111, ART 151, or instructor approval)**

Applicable toward graduation where program structure permits:

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

### **ART199 - Topics in the Fine and Applied Arts (Variable Credit)** 3-0-1 to 3

provides the student an opportunity to engage in a comprehensive study of 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 as needed.

Applicable toward graduation where program structure permits:

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

### **ART210 - Art History 1: Ancient - Medieval (IAI: F2 901)** 3-0-3

is the study of the environmental, social, religious, cultural and global events that shaped the arts and artists of the Prehistoric, the Ancient Near Eastern, Egyptian, Greek, Roman, Byzantine, and Medieval periods. An examination of the materials, styles, and subjects of those periods will be undertaken through lecture, discussion, and hands-on experiences. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **ART217 - Digital Painting** 1-5-3

teaches concepts of painting in Photoshop to produce high-quality illustrations used for pitches and IP development in the film and game industries. Course work involves designing and illustrating environments, key frame illustrations, color keys, principles of dramatic lighting, composition, atmospheric perspective and applying textures. Students will learn and apply elements of traditional painting and sculpting to digital format. Offered in Fall.

**(prerequisite: ART 117 & 140, consent of instructor, or via testing)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable





## Area of Concentration - Art

**ART220 - Art History 2:Renaissance- Rococo(IAI: F2 902) 3-0-3**

is the study of the political, social, philosophical, cultural and global events that shaped the arts and artists of the early to late Renaissance, Baroque and Rococo periods. An examination of the materials, styles, and subjects of those periods will be undertaken through lecture, discussion, and hands-on experiences. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Fine Arts

Area of Concentration - Art

**ART230 - Art History 3: Modern Art(IAI: F2 902) 3-0-3**

is the study of the political social, philosophical, cultural, and global events that shaped and continue to share the arts and artists from the Neo-Classical period to the present. An examination of the materials, styles, and subjects of those periods will be undertaken through lecture, discussion, and hands-on experiences. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Fine Arts

Area of Concentration - Art

**ART240 - History of Design 3-0-3**

is an introductory course in art history as it pertains to the field of design from its origins to the present. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Fine Arts

Area of Concentration - Art

**ART251 - Computer Graphics 3 1-5-3**

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 in Fall.

(prerequisite: ART 152)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art

**ART252 - Graphic Arts 4 1-5-3**

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 in Spring.

(prerequisite: ART 152, ART 160, or ART 251)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art

**ART260 - 3D Computer Modeling for Game Design 5-1-3**

explores the knowledge and skills including the aesthetics and the technical aspects needed for advanced lighting and rendering of 3D imagery using Maya. Topics will include how to achieve lighting effects that are a mix of character lighting, outdoor and indoor lighting, landscapes, atmospheric effects, optical effects, global/gel effects, three-point lighting, simulating global illumination, rendering in layers and compositing. Discussions will also cover the advantages and limitations of various rendering solutions, emphasizing optimizations crucial to minimize render time. Demonstrations will include elements appropriate for game, television and film applications. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art

**ART261 - Illustration 1-5-3**

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 in Fall.

(prerequisite: successful completion of ART 102, ART 111 and ART 140, or consent of instructor)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art

**ART262 - Advanced 3D Modeling 1-5-3**

explores methods of object creation and manipulations, from creating the basic form to sculpting in extremely fine details. Course covers the export of Maya objects into ZBrush for creating highly detailed models, Pixologic's 2.5d "pixon" technology; generated

elements within ZBrush's, zsppheres, and the import and export of geometry with created displacement, bump or normal maps for aid in external renderers or real-time video game systems. Traditional sculpting concepts will be reviewed to show a correlation between the 3D digital sculpting and traditional sculpting techniques. Offered in Fall. Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art

**ART263 - 3D Texturing/Light for Comp Game 1-5-3**

explores aesthetics and technical skills for advanced lighting and rendering of 3D imagery using Maya. Topics include how to achieve lighting effects mixing of character lighting, outdoor and indoor lighting, landscapes, atmospheric effects, optical effects, global/gel effects, three-point lighting, simulating global illumination, rendering in layers and compositing. Advantages and limitations of various rendering solutions, emphasizing optimizations crucial to minimize render time, will be covered. Different artistic styles, levels of craftsmanship (handmade, manipulated scanned imagery and 3D copositing), repetition structures, and tileable and seamless motifs will be reviewed, along with elements appropriate for game, television and film applications. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art

**ART264 - 3D Character Rigging and Animation 1-5-3**

explores animating bipedal & quadruped organisms, including the process of rigging arms, legs, a face and even complex joints such as shoulders and hands. Students will learn to make decisions in the planning stages to save time and avoid frustrations during the animation stage. Each week includes a theoretical discussion to help students understand the concepts at play, as well as easy-to-follow lectures/tutorials. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art

**ART270 - Introduction to Multimedia 1-5-3**

offers practice in design and creation of original computer interactive multimedia presentations involving animation, digital video, photography, graphics, and sound. Students will use a variety of software programs such as Adobe Photoshop, After Effects, Flash, and Final Cut Pro in a simulated work environment. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art

**ART272 - Cinematography for Graphic Arts 1-5-3**

explores the visual design of movies using cinematic techniques: camera, placement, composition, motion, light, editing and sound. This course maximizes Flash's animation and production power to create web-based animated shorts, interactive graphic novels and online commercials. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Art



### **ART273 - Special Effects** **1-5-3**

exposes students to Adobe After Effects, the industry standard tool for motion graphics and visual effects. Students will use the After Effects 2D and 3D compositing and animation toolset to develop graphics images with maximal speed and control to deliver high-quality video effects for film, video, multimedia, or the Web. Students will incorporate video with Photoshop and Illustrator graphics, use video-layering techniques, work with key frames, use filters for special effects and render a final project. Different rendering techniques will be contrasted to optimize the production. Offered in Spring.

Applicable toward graduation where program structure permits:

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

### **ART280 - Rich Internet Applications(RIAs)** **1-5-3**

incorporates the nut and bolts of creating and publishing rich media content using a variety of software programs and scripting languages. Students will learn about the state-of-the-art Web video through profiles of leading producers in the field and close-up looks at current Web video work. Students will learn scripting languages (such as jQuery) for building dynamic application, as well as technical and aesthetic steps of creating effective presentation specifically for the Web. Offered in Fall.

Applicable toward graduation where program structure permits:

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

### **ART290 - Work Experience/Internship (Variable Credit)** **1-25-1 to 5**

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 in Spring.

**(prerequisite: sophomore standing)**

Applicable toward graduation where program structure permits:

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

### **ART295 - Workplace Simulation & Projects** **1-10-3**

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 in Spring.

**(prerequisite: completion of 45 credit hours toward an AAS degree in Graphic Arts or approval of the Dean)**

Applicable toward graduation where program structure permits:

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

## **Astronomy**

### **ASTRO105 - Introduction to Astronomy(IAI: P1 906)** **4-0-4**

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.

**(prerequisite: eligibility for ENGL 101 and successful completion of MATH 091**

**["C" or better grade] or equivalent competencies)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural/Physical Science
- Area of Concentration - Not Applicable

## **Automotive Technology**

### **AUTO 101 - Basic 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

### **AUTO 102 - Electrical Systems** **1-6-4**

is for students with basic automotive and/or electrical knowledge. It covers operations and principles of the electrical and electronic components in the automobile. Students will also learn practical applications in the basic diagnosis and repair of automotive electrical systems. Topics include batteries, electrical and electronic devices, AC and DC charging systems, ignition systems, instruments and accessories, and troubleshooting. Offered in Fall.

Applicable toward graduation where program structure permits:

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

### **AUTO 201 - Suspension & Steering Alignment** **1-6-4**

introduces the more advanced automotive student to the components and functions of suspension equipment, steering equipment, and braking systems. Classroom work and practical applications provide knowledge and hands-on experience with equipment and operations such as front and rear suspension; shock absorbers; manual and power steering; wheels and tires; wheel alignment and balance; various brake types; antilock braking systems; and brake diagnosis, service, and inspection. Offered in Spring.

Applicable toward graduation where program structure permits:

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

### **AUTO 202 - Heating & Air Conditioning** **1-6-4**

covers functions and components of automotive heating and air conditioning systems. Students will learn the fundamental operations of cooling systems, heating and ventilating systems, and refrigeration systems. Safety precautions, diagnostic procedures, and cleaning and inspection are also covered. Offered in Summer.

Applicable toward graduation where program structure permits:

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

### **AUTO 203 - Fuel and Emission Systems** **1-7-4**

introduces the advanced student to the functions and components of advanced fuel injection and turbo and super charging. Through classroom work and hands-on applications, students will become familiar with the following equipment and operations: turbochargers and superchargers; gasoline, diesel, and propane fuels; fuel supply systems; carburetors; fuel injection systems and injectors; gasoline and diesel fuel injection components; exhaust systems; and emission controls and modifications. Students will also be introduced to diagnostic and performance testing procedures. Offered as needed.

**(prerequisite: AUTO 102)**

Applicable toward graduation where program structure permits:

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

### **AUTO 204 - 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 as needed.

Applicable toward graduation where program structure permits:

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

### **AUTO 205 - Manual Drive Train & Axles** **1-6-4**

covers the terms and components related to manual drive trains and axles. Students will study principles and operations of manual transmissions, learning equipment, terms, and safety procedures. Course also includes information on diagnosis and service, cleaning, and inspection. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS



Group Requirement - Not Applicable  
Area of Concentration - Not Applicable

#### **AUTO 206 - Automatic Transmissions/Transaxles 1-7-4**

introduces the student to the terms and components involved in maintenance and service of automatic transmissions. Students will study the basic parts and operation of automatic transmissions, including safety tips, service, and diagnostic procedures. Offered as needed.

Applicable toward graduation where program structure permits:

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

#### **AUTO 207 - Advanced Automotive Electronics 1-6-4**

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.

**(prerequisite: AUTO 102 or permission of instructor)**

Applicable toward graduation where program structure permits:

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

#### **AUTO 208 - Automotive Brakes 1-6-4**

teaches the advanced diagnostic and analytical skills that are needed to service today's high tech, electronically-controlled anti-lock brake systems properly. Topics include brake types (design and application), braking principles, hydraulic brake systems, power brakes, disc brakes, drum brakes, electric brakes, anti-lock braking systems, and testing and diagnosis of brake systems. Offered as needed.

Applicable toward graduation where program structure permits:

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

#### **AUTO 209 - Advanced Driveability Problem Diagnosis 1-7-4**

teaches advanced diagnostic and analytical skills that are needed to service today's high tech, computer-controlled engine management systems properly. Students will learn intake and fuel system design and application, exhaust and emission systems, carburetors, fuel injection, ignition systems and problem diagnosis, computerized engine controls and circuits, and engine performance diagnosis and troubleshooting. Lab work includes examination, analysis, and diagnosis of various vehicles. Offered as needed.

**(prerequisite: AUTO 102, 203, and 207)**

Applicable toward graduation where program structure permits:

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

#### **AUTO 290 - Automotive Internship 0-15-3**

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.

**(prerequisite: minimum completion of 45 credit hours toward Automotive Technology Degree)**

Applicable toward graduation where program structure permits:

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

## Biology

#### **BIOL 101 - Concepts of Biology 1(AI: L1 900L, BIO 910) 3-2-4**

is an introduction to basic principles of biology with emphasis on the biochemistry, structure, function, and organization of cells. Topics include scientific method, cellular respiration, photosynthesis, cellular reproduction, molecular and classical genetics, and an introduction to evolution and ecology. This course includes lecture and laboratory classes. Offered in Fall, Spring, and Summer.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural/Life Science  
Area of Concentration - Biology, General Science

#### **BIOL 102 - Concepts of Biology 2(AI: BIO 910) 3-2-4**

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.

**(prerequisite: successful completion ["C" or better grade] of BIOL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Natural Science (AAS and ALS only)  
Area of Concentration - Biology, General Science

#### **BIOL 106 - Issues in Human Biology(AI: L1 904) 3-0-3**

is designed as a non-lab/non-majors course. The course examines practical aspects of selected concepts in biology and their application to life and technology. Concepts include heredity, growth, development, health, diseases of the human body, edological issues, and a brief introduction to anatomy and physiology. This course DOES NOT fulfill the prerequisite for BIOL 201 or BIOL 220. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Life Science  
Area of Concentration - Biology, General Science

#### **BIOL 120 - Plants and Society(AI: L1 901) 3-0-3**

is an introduction to plant biology with an emphasis on plant structure, plant physiology, plant growth and reproduction, and the economic importance of plants. Also, it includes an interrelationship between plants and humans. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

#### **BIOL 130 - Genetics and Society 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101 and MATH 098)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Natural/Life Science (AAS and ALS only)  
Area of Concentration - Biology, General Science

#### **BIOL 201 - Human Anatomy & Physiology 1 3-2-4**

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, and Summer.

**(prerequisite: successful completion ["C" or better grade] of BIOL 101 or successful completion ["B" or better grade for each course] of two years of high school biology and 1 year of high school chemistry within the last three years)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Natural Science (AAS only)  
Area of Concentration - Biology, General Science

#### **BIOL 202 - Human Anatomy and Physiology 2 3-2-4**

is a continuation of BIOL 201, covering the circulatory, lymphatic, respiratory, digestive, urinary, reproductive, and endocrine systems. This course includes lecture and laboratory classes. Offered in Fall, Spring, and Summer.

**(prerequisite: successful completion ["C" or better grade] of BIOL 201 or successful completion of BIOL 201 proficiency exam)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Natural Science (AAS only)  
Area of Concentration - Biology, General Science

#### **BIOL 210 - Environmental Biology(AI: L1 905L) 3-2-4**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**BIOL 220 - Microbiology** **3-2-4**

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.

**(prerequisite: successful completion ["C" or better grade] of BIOL 101 or successful completion ["B" or better grade for each course] of two years of high school biology and 1 year of high school chemistry within the last three years)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural Science (AAS only)
- Area of Concentration - Biology, General Science

## Building Construction

**B CON210 - Mech + Elect Bldg Serv Systems** **2-2-3**

introduces the study of the materials and equipment used in the mechanical and electrical service systems of buildings. The student is provided with information on how a modern building operates. This information enables the student to make reasonable preliminary selection of necessary mechanical and electrical equipment. Topics covered include illumination, heat gain and loss, heating systems, sewage disposal, electrical sources, and materials. Students will visit buildings to observe the service systems and equipment so that they may be better able to realize the relationship of these elements to the building as a whole. Offered as needed.

Applicable toward graduation where program structure permits:

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

## Business

**BUS100 - Business Fundamentals** **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 Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Business, Economics, International Business, Social Science

**BUS101 - Hospitality & Tourism** **3-0-3**

includes a study of the application of all aspects of the hotel, food service, restaurant, and travel and tourism businesses, including operations, marketing, and sales. The course will reflect current developments in this rapidly changing industry, stressing problem-solving tools and industry-wide trends. Offered in Spring.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**BUS102 - Teller Fundamentals** **2-0-2**

provides an in-depth focus of the skills needed in today's banking industry to become a successful bank teller. It provides a comprehensive overview of the workings of the banking industry, the U.S. Payments System, the duties of the Federal Reserve System, and an overview of pertinent banking laws and regulations. In addition, the course explains the variety of daily transaction procedures that the position involves as well as the teller's responsibilities and delivery of quality customer service. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**BUS110 - Business Mathematics** **3-0-3**

covers basic applications of mathematics in the business world. Students develop understandings of these processes as they relate to general business applications. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

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

**BUS121 - Purchasing & Product Identification** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

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**

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.

**(prerequisite: completion of or concurrent enrollment in OT 119 or ENGL 101)**

Applicable toward graduation where program structure permits:

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

**BUS220 - Cost Management** **4-0-4**

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.

**(prerequisite: eligibility for ENGL 101, completion of CIS 110 and either BUS 110 or CA 150)**

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 3-0-3**

will examine how to handle vital risk management, claims, and insurance issues in the hospitality workplace. This includes the study of safety and security case studies developed with industry professionals and will utilize links to Internet-based, hospitality-specific resources for safety and security. The formation of in-house safety committees, crisis communications, development of an OSHA-approved safety program, and the importance of safety equipment will be discussed in detail. Offered in Spring.

**(prerequisite: eligibility for ENGL 101)**

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 Development 3-0-3**

introduces the fundamentals for the start-up and management of a small business particularly in an entrepreneurial environment. Topics include forms of businesses, business policy and operations, staffing a small business, the legal environment, and government relations. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**BUS228 - Global Topics in Business 3-0-3**

introduces the student to the global economy and its inter-relationships with countries of the world and the multinational corporations. The objectives of the course are to expose students to a better understanding of how foreign countries work in the marketplace and how these economies impact upon our business environment. Whenever possible, practical applications are used to further explain the theories. Offered in Fall.

**(prerequisite: BUS 100)**

Applicable toward graduation where program structure permits:

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

**BUS229 - Case Problems in Business 3-0-3**

encourages critical thinking through case analyses and the direct application of an array of decision-making tools. Teamwork is emphasized as group participation leads to the identification of real-world organizational problems and opportunities and the design of relevant solutions. Offered in Spring.

**(prerequisite: completion of 30 credit hours)**

Applicable toward graduation where program structure permits:

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

**BUS230 - Negotiation 3-0-3**

provides a framework upon which effective business negotiations are conducted. Prioritizing issues and negotiation preparation are discussed as well as the use of power and persuasion in the negotiation process. The impact of environmental conditions on negotiations is considered alongside dynamics in negotiating in the global environment. Offered in Fall.

**(prerequisite: P REL 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Not Applicable
- 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.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Business, Economics, International Business, Social Science

**BUS232 - Business Law & Ethics 3-0-3**

includes a study of the legal and social environment of business, with emphasis on business ethics and corporate social responsibilities. Areas of concentration include governmental regulation of business, securities law, consumer protection law, labor law, and employment law. Offered in Spring.

**(prerequisite: BUS 231 or equivalent competencies)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Business, Economics, International Business, Social Science

**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, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

**BUS235 - Human Resource Management 3-0-3**

presents the functions typically performed under the scope of the human resource manager. Analyzes the human resource manager's assessment of both the internal and external environments in human resource planning, as well as the development of effective employee recruitment and selection tools. Also focuses on the value of employee training and the variables affecting the design of benefits and compensation packages. Whenever possible, practical applications are used to further explain the theories. Offered in Spring.

**(prerequisite: BUS 100)**

Applicable toward graduation where program structure permits:

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

**BUS236 - Recruitment, Selection & Training 3-0-3**

presents effective recruitment and selection strategies as implemented by the human resource manager. Focuses particularly on contemporary recruitment tools, as well as the interview process, testing options, and people-job fit in the selection of employees. Lays out an effective training framework to introduce new-employee orientation, ethics training, diversity training, team-based training, and other types of training tools utilized by contemporary organizations. Also incorporates global topics that pertain to the course subjects. Offered in Fall.

**(prerequisite: BUS 235)**

Applicable toward graduation where program structure permits:

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

**BUS237 - Benefits Administration 3-0-3**

presents the framework for designing and implementing benefits and compensation packages in organizations. Focuses particularly on organizational and environmental variables that impact benefits and compensation, as well as the challenges evident in building pay structures. Also discusses various types of pay. Offered in Spring.

**(prerequisite: BUS 235)**

Applicable toward graduation where program structure permits:

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

**BUS238 - Team Dynamics 3-0-3**

presents the key foundations for team recruitment and an array of variables integral to the development of functional team dynamics. The course will focus on the traditional stages of the work team's life cycle, including the dynamics that develop throughout the lifecycle related to member recruitment, goal-setting, team interactions, and work implementation. This course will also focus on the evolution of power within teams, handling conflict, management support of teamwork, knowledge sharing, and team-member differences based on a number of heterogeneous variables. Whenever possible, practical applications are used to further explain the theories. Offered in Fall.

**(prerequisite: BUS 235)**

Applicable toward graduation where program structure permits:

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

**BUS240 - Marketing Fundamentals 3-0-3**

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.

**(prerequisite: completion of or concurrent enrollment in OT 119 or eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **BUS245 - Advertising and Sales Promotion** **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 - Not Applicable

Area of Concentration - Not Applicable

#### **BUS247 - Market Research** **3-0-3**

introduces students to types of market research data, data collection methods, and varying methods of the analysis of market data. This course also provides students with hands-on opportunities to collect market data and produce graphs, charts, and market reports based on data collections and analyses from real-world settings. Offered in Fall.

**(prerequisite: Bus 240)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **BUS248 - Public Relations** **0-0-3**

evaluates the role of public relations as a major element of non-personal selling. This course invites students to examine the value of an organization's public relations efforts, alongside its advertising and sales promotion plans. Students are provided the opportunity to evaluate the public relations efforts of organizations in real-world settings as well as design their own public relations program for an organization of their choice. Offered as needed.

**(prerequisite: Bus 240)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **BUS250 - Selling & Sales Management** **3-0-3**

is a practical course that centers on the seven steps in the personal selling process, consumer motivation, ethics, and careers in sales. Role playing, demonstrations, and critiques of demonstration allow students the opportunity to apply selling skills. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **BUS255 - Principles of Banking** **3-0-3**

is designed for anyone seeking to gain a better understanding of the diversified services offered by the banking industry and is essential for most new banking personnel. Further, this course will provide information to entry to mid-level bankers with the information they need to provide effective service to their customers and thereby improve bank profitability. Topics include the history of banking, the effects banks have on the U.S. economy, the purpose and business of banking, check processing, collection functions, bank bookkeeping, loans and investments, trust services and the security functions of the bank. Lastly, students will gain an understanding of the inter-relationships among bank departments, the role of Ethics and the Code of Conduct that govern employees' actions, and the application of banking laws and regulations. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **BUS260 - Hospitality Nutrition** **3-0-3**

includes a study and application of nutrients, carbohydrates, lipids, introduction to protein, vitamins, water, minerals, nutritional menu planning for the life cycle and for weight management, menu planning for vegetarians and for better health, nutritious menu planning and recipe development, and marketing nutrition in the food service management industry. Offered in Fall.

**(prerequisite: eligibility for ENGL 101)**

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 & Beverage Management** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **BUS262 - Dining Room Management** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

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

#### **BUS280 - Strategic Decision Making** **3-0-3**

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.

**(prerequisite: BUS 100)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

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 completion of BUS 280, Strategic Decision Making, prior to this course beneficial, but it is not a prerequisite. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable



### **BUS282 - Strategic Tax Management** 3-0-3

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 - Not Applicable

Area of Concentration - Not Applicable

### **BUS283 - Personal Finance** 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, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **BUS290 - Work Exp Practicum & Seminar** 1-10-3

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.

**(prerequisite: sophomore standing and a minimum completion of 45 credit hours toward a Business or Hospitality Management degree, or approval from the appropriate full-time faculty.)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

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

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.

**(prerequisite: student seeking AAS degree or certificate in Business or Hospitality Management who has completed at least 45 credit hours of college work or who has approval of appropriate instructional team)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **Career Planning and Development**

### **C DEV112 - Career Planning and Development** 3-0-3

Provides the student with a presentation of career development and career decision-making as a lifelong process and an introduction and discussion of the relationship of individuals to the world of work. Students will practice their approach to decision-making in personal, academic, and career planning. Students will explore values, skills, interests, and abilities as they relate to the world of work. Job search techniques, resume, development, cover letters, and interviewing skills will be developed as a part of the course. (Students may not receive credit for C DEV112 and P DEV109, 110, and/or 111.) Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **Chemistry**

### **CHEM 100 - Concepts of Chemistry (IAI: P1 902L)** 3-2-4

examines fundamental concepts of chemistry, both theoretical and practical. Course content includes the following: measurement, atomic structure, chemical 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.

**(prerequisite: eligibility for MATH 098)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural/Physical Science

Area of Concentration - Not Applicable

### **CHEM 106 - Chemistry in Everyday Life (IAI: P1 903L)** 3-2-4

is designed as a general introduction to chemistry for non-majors. The course will examine the impact of chemistry on our everyday life including its impacts on health, the environment, and our society. Offered in Fall and Spring.

**(prerequisite: eligibility for ENGL 101 and MATH 098)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural/Physical Science

Area of Concentration - Not Applicable

### **CHEM 110 - Survey of Organic Chemistry** 3-4-5

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 Spring.

**(prerequisite: CHEM 100 with "C" or better grade)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural Science (AAS only)

Area of Concentration - General Science

### **CHEM 131 - General Chemistry 1 (IAI: P1 902L, CHM 911)** 3-3-4

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.

**(prerequisite: MATH 116 and either (1) one year of high school chemistry with "B" or better grade or (2) CHEM 100 with "B" or better grade)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural/Physical Science

Area of Concentration - Chemistry, General Science

### **CHEM 132 - General Chemistry 2 (IAI: CHM 912)** 3-4-5

is the second part of a two-semester college-level general chemistry course. Topics include chemical kinetics, chemical equilibrium, reactions in solutions, chemical thermodynamics, electrochemistry, nuclear chemistry, and the descriptive chemistry of metals and non-metals. Offered in Spring.

**(prerequisite: MATH 116 with MATH 121 strongly recommended and CHEM 131 with "B" or better grade)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural Science (AAS only)

Area of Concentration - Chemistry, General Science

### **CHEM 201 - Organic Chemistry 1** 3-6-5

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.

**(prerequisite: CHEM 132 or equivalent competencies)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural Science (AAS only)

Area of Concentration - Chemistry, General Science

### **CHEM 202 - Organic Chemistry 2** 3-6-5

is a continuation of CHEM 201. Topics studied include nomenclature, synthesis and reactions of aromatic hydrocarbons, phenols, organometallics, amines, carbonyl compounds, carboxylic acids and derivatives, and biomolecules, with an introduction to the physical methods of structure identification. The study of reaction mechanisms and synthetic methods is continued from the first course. Two 3-hour lab periods per week are conducted with an



emphasis on qualitative analysis and instrumental methods of analysis, including nuclear magnetic resonance spectroscopy, infrared spectroscopy, and gas chromatography. CHEM 202 is recommended for chemistry and biology majors and students entering programs in medicine, chiropractic, dentistry, pharmacy, or related areas. Offered as needed. **(prerequisite: CHEM 201 or equivalent competencies)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural Science (AAS only)
- Area of Concentration - Chemistry, General Science

## Chinese

### **CHIN 101 - Beginning Chinese 1** **4-0-4**

is the beginning Chinese language instruction in Mandarin Chinese/putung hua including writing, listening, speaking, and reading using the communicative approach with cultural materials. Basic vocabulary, grammar and syntax, pronunciation and tones, speech patterns, and character writing will be learned. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **CHIN 102 - Beginning Chinese 2** **4-0-4**

is a continuation of CHIN 101. Beginning Chinese language instruction in Mandarin Chinese/putung hua includes writing, listening, speaking, and reading using the communicative approach with cultural materials. Basic vocabulary, grammar and syntax, pronunciation and tones, speech patterns, and character writing will be learned. Offered as needed.

**(prerequisite: CHIN 101)**

Applicable toward graduation where program structure permits:

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

### **CHIN 115 - Conversational Chinese 1** **0-0-3**

is development of conversational Chinese skills with intensive oral practice in listening and speaking. The communicative approach in instruction will emphasize functional conversational patterns, idiomatic vocabulary, basic grammar and syntax, cultural information, and readings/writing of the script for travel, career development, cultural outreach, or personal enrichment. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **CHIN 201 - Intermediate Chinese 1** **4-0-4**

is a continuation of CHIN 102. Intermediate Chinese language instruction in Mandarin Chinese/Putung hua including writing (beginning compositions), listening, speaking, and reading using the communicative approach with cultural materials. The development of vocabulary, grammar and syntax, pronunciation and tones, speech patterns, and character writing will be learned. Offered as needed.

**(prerequisite: CHIN 102)**

Applicable toward graduation where program structure permits:

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

### **CHIN 202 - Intermediate Chinese 2 (IAI: H1 900)** **4-0-4**

is a continuation of CHIN 201. Intermediate Chinese language instruction in Mandarin Chinese/putung hua including writing (beginning composition), listening, speaking, and reading using the communicative approach with cultural materials. The development of vocabulary, grammar and syntax, pronunciation and tones, speech patterns, and character writing will be learned. Offered as needed.

**(prerequisite: CHIN 201)**

Applicable toward graduation where program structure permits:

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

study include listening, communication theory, and informative and persuasive speaking, argument building, and electronic presentations. Offered in Fall, Spring, and Summer.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **COMM 110 - Discussion + Group Conference (formerly SPCH 110)** **3-0-3**

examines the nature and effects of interpersonal communication in small groups. Major areas of study include effective leadership and participation in groups, problem-solving and decision-making 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 Degrees
- Group Requirement - Communications (AAS and ALS only)
- Area of Concentration - Speech and Drama

### **COMM 120 - Business & Professional Speaking (formerly SPCH 120)** **3-0-3**

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 Fall and Spring.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Communications (AAS and ALS only)
- Area of Concentration - Speech and Drama

### **COMM 130 - Interpersonal Communications** **3-0-3**

studies interpersonal communication, including language processes; types of verbal and nonverbal communication; oral and visual means of transmitting information; history; methods of encoding information; and social consequences. Focus on intrapersonal communication, interpersonal communications, and technology. Offered in Fall.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Communications
- Area of Concentration - Communication

### **COMM 140 - Forensic Activities (formerly SPCH 140)** **0-2-1**

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 as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Communications (AAS and ALS only)
- Area of Concentration - Speech and Drama

### **COMM 201 - Advanced Public Speaking** **3-0-3**

concentrates on study and experience in public speaking. Includes topic analysis, preparation, variety of public address forms, and practice in formal and informal debate and argumentation. Class culminates in a public address. Offered in Spring.

**(prerequisite: COMM 101)**

Applicable toward graduation where program structure permits:

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

## Communication

### **COMM 101 - Public Speaking (formerly SPCH 101) (IAI: C2 900)** **3-0-3**

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





### **COMM 240 - Intercultural Communications (formerly SPCH 240)** 3-0-3

provides an overview of the study of communication and culture through examination of communication barriers, dialects, structural, and phonetic differences among ethnic groups and Standard English speaking groups. This course includes both verbal and nonverbal communication. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Communications (AAS and ALS only)
- Area of Concentration - Speech and Drama

### **COMM 250 - Argumentation and Debate** 3-0-3

studies the principles, forms, and uses of debate and argumentation. Emphasis is on analysis, research, reasoning, briefs, refutation, and debating style utilizing current events for topical content in applied settings. Offered in Spring.

(prerequisite: COMM 101)

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Communications
- Area of Concentration - Communication

## Computer Information Systems

### **CIS101 - Computer Literacy** 1-0-1

provides a brief overview of basic computer concepts and hands-on learning for students who are new to the use of a computer and the Internet. Topics will include basics of the following: PC navigation, PC hardware and software, logging on to a network, accessing e-mail, use of the Internet, use of a course management tool, downloading and uploading files, and how to use an online library database. Students are not charged tuition or fees for this course. Offered as needed.

(Office 2007. Students are not charged tuition or fees for this course)

Applicable toward graduation where program structure permits:

- Certificate or Degree - Computer Literacy Certificate, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **CIS110 - Business Applications for Microcomputers (IAI: BUS902)** 2-2-3

introduces students to the concepts and applications of operating systems, word processing, spreadsheets, databases, the Internet, and presentation software. Topics will include exposure to software for each of the areas of study and how to evaluate software and hardware. (Software used in this class is Office 2007.) Offered in 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 - Business

## Computer Science

### **CS 105 - Foundations of Information Technology** 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 and Spring.

Applicable toward graduation where program structure permits:

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

### **CS 161 - COBOL Programming** 3-2-4

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.

(prerequisite: IT 131 or concurrent enrollment)

Applicable toward graduation where program structure permits:

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

### **CS 230 - Event-Driven Programming** 2-2-3

is a course in event-driven programming building on prior programming experience. Topics include algorithm development, structured design, object-oriented, event-driven 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) and Language Integrated Query (LINQ). This course uses Microsoft Visual Basic programming language to teach object-oriented, event-driven programming. Offered in Fall.

(prerequisite: IT 131 or concurrent enrollment)

Applicable toward graduation where program structure permits:

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

### **CS 251 - Object-Oriented Programming** 3-2-4

is designed to introduce students to top-down structured problem-solving, algorithm development, procedural and data abstraction. Topics include selection, repetition, sequence control structures; program design, development, test, and documentation; coding style, readability and maintainability; and array, record, and file manipulation. Students will examine elements of object-oriented programming languages including fundamental data types, classes, objects, methods, abstract data types, variable declaration, expressions, operators, control statements, arrays, strings, I/O, functions, parameters, structures, and libraries. To teach these concepts, the course presents three similar object-oriented programming languages side by side: C++, C#, and Java. Offered in Spring.

(prerequisite: IT 131 or concurrent enrollment and MATH 116)

Applicable toward graduation where program structure permits:

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

### **CS 281 - Advanced Object-Oriented Programming** 3-2-4

is designed to prepare students for large-scale program and system design and implementation. Topics include abstract data types; data structures such as files, sets, pointers, lists, stacks, queues, trees, and graphs; program verification and complexity analysis; recursion; dynamic concepts such as memory, scope and block structures; string processing; and searching and sorting algorithms. The course focuses on object-oriented programming concepts and design, classes, objects, methods, 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. To teach these concepts, the course presents three similar object-oriented programming languages side by side: C++, C#, and Java. Offered in Fall.

(prerequisite: CS 251)

Applicable toward graduation where program structure permits:

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



# Criminal Justice

## **CRJ110 - Criminal Justice Fundamentals(IAI: CRJ 901) 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

## **CRJ112 - Investigative Report Writing 3-0-3**

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 in Fall.

**(prerequisite: ENGL 101 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

## **CRJ113 - Fundamentals of Investigations and Investigative Reporting 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

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 3-0-3**

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 in Fall and Spring.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

## **CRJ116 - Probation/Parole 3-0-3**

analyzes modern probation and parole practices and services and examines current probation and parole procedures and the legal decisions. Specifically, the course will encompass the criminal justice system, probation and parole, types of offenses, sentencing process, pre-sentence investigation, revocation procedures, alternatives to incarceration, parole board functions, Parole Officer responsibilities, and guidelines for releasing inmates. Offered in Spring.

**(prerequisite: eligibility for ENGL 101)**

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**

includes patrol functions, types of calls and methods of response, protection of scene, response to hazardous materials spills, crime prevention, and patrol techniques. This course helps prepare learners to demonstrate effective patrol techniques; interact professionally with complainants, victims, witnesses, suspects, members of the community-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.

**(prerequisite: eligibility for ENGL 101)**

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**

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.

**(prerequisite: eligibility for ENGL 101)**

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(IAI: CRJ 911) 3-0-3**

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 as needed.

**(prerequisite: eligibility for ENGL 101)**

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**

studies the social and psychological factors of delinquent behavior and is designed to give meaning and direction to the law enforcement employee who must deal with the problem daily. Discusses the practical applications of different juvenile behavior theories. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

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 Corrections 3-0-3**

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 as needed.

**(prerequisite: eligibility for ENGL 101)**

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 & Treatment 3-0-3**

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 as needed.

**(prerequisite: CRJ 110, CRJ 128, CRJ 132, and eligibility for ENGL 101)**

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 3-0-3**

covers aspects of self-defense as related to the field of criminal justice. Emphasis will be placed on defense against common types of attacks that officers may encounter during the course of their work and also will include defense against knife and handgun attacks. This course will also cover when such force is legally acceptable and discusses the court requirements for any such force by an officer. Offered as needed.

**(prerequisite: eligibility for ENGL 101 and completion of CRJ 110 and approval of Criminal Justice Coordinator)**

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 & Police Intervention 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101 and completion of SOCIO 110, PSYCH 110, and CRJ 110)**

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 & Community Relations 3-0-3**



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.

**(prerequisite: eligibility for ENGL 101)**

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 & Seminar** **1-10-3**

affords the student in the Criminal Justice program the opportunity to apply the principles learned in other courses to the work situation through employment in or observation of activities necessary for the operation of a law enforcement agency. Employment or observation activities are coordinated with the student's course work. Students must work a minimum of 150 hours during the semester to receive credit for this course. Students will be required to meet with their supervisor weekly for an hour to discuss progress and/or concerns, and they are required to submit a weekly log of their practicum activities to the Dean/Coordinator of the Criminal Justice Program and write a research paper. A background check is required. Offered as needed.

**(prerequisite: eligibility for ENGL 101 and approval of the Criminal Justice Coordinator)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **CRJ295 - Special Projects** **1-10-3**

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.

**(prerequisite: eligibility for ENGL 101 and completion of CRJ 110, PSYCH 110, and SOCIO 110; sophomore standing; minimum completion of 45 hours toward the AAS in Criminal Justice; and approval of the Criminal Justice Coordinator)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## Culinary Arts

#### **CA 105 - Culinary Fundamentals** **2-4-4**

is a study of the fundamental elements of the food service industry, including terminology, equipment identification and usage, information regarding types of foods and trends in the industry, and basic preparation techniques. Students will break down and operate kitchen equipment and learn and use the following: cookery methods, product identity, soups, stocks and sauce, and the function of production kitchen. Students will also be taught culinary math and its application to yields and recipe costs. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **CA 115 - Culinary Applications** **2-4-4**

will focus on development of 1) strong basic culinary skill, 2) sanitation, 3) speed and efficiency, and 4) proper nutrition. Students will continue to expand their culinary knowledge and skills. Students study and practice how to operate efficiently and effectively in a variety of restaurant kitchen stations such as broiler, saute, roundsman, etc. Special emphasis is placed on presentations and plating of quality food served to the public. Students will develop an understanding of key cooking terms and procedures such as roasting, braising, sauteing, grilling and broiling. Students will also learn proper cooking techniques for vegetables and starches. Offered in Spring.

**(prerequisite: CA 105)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **CA 120 - Baking Fundamentals** **2-4-4**

introduces students to the fundamental elements of baking science, ingredients, weights, measures, formula conversion, and storage. Topics include formulation of yeast-based products, the functions and properties of various flours, fats, sugars, leaveners, and other baking ingredients. Students will spend lab time applying their knowledge in the production of various products. Offered in Spring.

**(prerequisite: CA 105)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **CA 150 - Culinary Math** **2-0-2**

covers the basic mathematic applications in the commercial kitchen. Students develop an understanding of these processes as they are related to general food service applications. Offered in Fall.

**(prerequisite: eligibility for MATH 090)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **CA 200 - Meat, Poultry and Fish** **2-3-3**

focuses on the identification of wholesale and fabricated cuts of beef, pork, veal and lamb and the recognition of various types of poultry and fish. It includes the study of the fundamental principles regarding meat, poultry and fish preparation. Offered in Fall.

**(prerequisite: CA 115)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **CA 210 - Garde Manger** **2-3-3**

is a basic overview of the history of Garde Manger. Students will develop and apply knowledge related to cold food preparation, hors d'oeuvres, display platters, and buffet center pieces. The students will develop Garde Manger skills and learn various functions as they prepare products. Offered in Spring.

**(prerequisite: CA 115)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **CA 220 - Pastry Fundamentals** **2-3-3**

familiarizes the student with the proper methods of pastry assembly, color coordination and the importance of appropriate taste combinations and pastry finishing techniques. The student acquires and practices skills involving pastries, specialty breads, icings, and fillings. Offered in Fall.

**(prerequisite: CA 120)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable



### **CA 230 - International Cuisine** **2-4-4**

reinforces knowledge of tools, equipment, vocabulary and theories learned in other courses along with providing the student with the exposure to cooking methods, procedures and ingredients used in international cuisines. The student will explore the cooking of Europe and the Mediterranean along with Asian cuisine and cuisines of the Americas.

**(prerequisite: CA 115)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **CA 290 - Work Exp Practicum & Seminar** **1-10-3**

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. Students will need to work a minimum of 150 hours during the semester to receive credit for this course. Offered as needed.

**(prerequisite: completion of 45 credit hours toward a Culinary Arts degree or approval of full-time Culinary Arts instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **CA 295 - Special Advanced Projects** **1-10-3**

designed around an individual or group project that allows the student the opportunity to work on an advanced level in his/her major area of study. Offered as needed.

**(prerequisite: completion of 45 credit hours toward a Culinary Arts degree or approval of full-time Culinary Arts instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **Dance**

### **DANCE110 - Beginning Ballet** **0-2-1**

is designed to help students to understand Ballet technique used in barre exercises, center floor work, and dance combinations and is concerned with correct body alignment of students and their basic understanding of Ballet terminology. Course may be repeated one time for a total of 2 accrued credits. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **DANCE120 - Beginning Tap** **0-2-1**

is designed to help students to understand tap technique used in warm-up exercises in the center and at the barre, in center floor work (including combinations and dance routines). Tap students will focus on using good posture, coordinating the feet, familiarizing themselves with various tap rhythms, and gaining a basic understanding of tap terminology. Course may be repeated one time for a total of 2 accrued credits. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **DANCE130 - Beginning Jazz Dance** **0-2-1**

is designed to help students to understand Jazz technique used in warm-up exercises at the barre and in center, center floor work, combination, and dance routines and to help their basic understanding of Jazz terminology. Course may be repeated one time for a total of 2 accrued credits. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **DANCE140 - Beginning Swing** **0-2-1**

is designed to help students to understand swing dancing technique and combinations that can be used to create dance routines for enjoyment and performances. Course may be repeated one time for a total of 2 accrued credits. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **DANCE150 - Hip Hop** **0-2-1**

explores Hip Hop as a dance form, as used in warm up exercises, across the floor, center work, combinations, and dance routines. Understanding and application of dance terminology and proper techniques will be emphasized. This 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 Degrees

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **DANCE151 - Hip Hop 2** **0-2-1**

further understanding, knowledge, skills, and techniques learned in Hip Hop 1 in warm up exercises, across the floor, center work, combinations, and dance routines. Applied dance terminology and techniques will be emphasized along with current developments. Offered as needed.

**(prerequisite: DANCE 150)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **DANCE160 - Modern Dance** **0-2-1**

explores modern dance as a dance form, as used in warm up exercises, across the floor, center work, combinations, and dance routines. Understanding and application of dance terminology, historical basis, famous dancers, and proper techniques will be emphasized. Learn from dancing of Graham, Duncan, St. Dennis, and Shawn. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## **Drafting**

### **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: IND 911)** **2-4-4**

introduces the student to the principles of design, 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.

**(prerequisite: DRAFT 215)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Manufacturing Technology/Machining

### **DRAFT110 - Technical Design** **2-2-3**

introduces the student to the principles of design. The student will develop individual creative/analytical problem-solving skills and apply them to a team problem-solving approach. These concepts will be developed through the construction of a project. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **DRAFT120 - Technical Graphics** **1-3-2**

introduces the student to pictorial drawings and drafting room practices. Pipe drafting principles and practices are covered. Offered in Fall.

**(prerequisite: DRAFT 230 or concurrent enrollment)**



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**

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.

**(prerequisite: DRAFT 101)**

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**

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.

**(prerequisite: DRAFT 101 or equivalent competencies)**

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** **2-3-3**

introduces the student to the principles of computer-aided drafting using AutoCad 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.

**(prerequisite: DRAFT 101 (or concurrent enrollment) or consent of full-time instructor)**

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**

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.

**(prerequisite: DRAFT 210 or DRAFT 215)**

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** **2-3-3**

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.

**(prerequisite: DRAFT 220)**

Applicable toward graduation where program structure permits:

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

#### **DRAFT231 - Introduction to Surveying** **2-3-3**

provides introductory training of the basic concepts of surveying and required practices using appropriate conventional and GPS equipment. Instruction will include property, construction surveys and site layout using surveying equipment and computer software. Offered in Fall.

**(prerequisite: DRAFT 101)**

Applicable toward graduation where program structure permits:

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

#### **DRAFT235 - Solid Modeling (3-D) Solid Works/Inventor** **2-3-3**

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.

**(prerequisite: DRAFT 230 or equivalent competencies)**

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**

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 parametric model, and creating multi-views from the parametric model. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

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

#### **DRAFT242 - Commercial Architecture** **2-3-3**

will enable the student to design and develop commercial buildings according to state and local codes on the CAD system. A concentration of facility design and flow, structural design, exterior and interior facade, construction detailing, landscape design, electrical design, and 3D model rendering development are implemented. Offered in Fall, Spring, and Summer.

**(prerequisite: DRAFT 245)**

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**

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.

**(prerequisite: DRAFT 245)**

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**

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.

**(prerequisite: DRAFT 220)**

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**

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

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.

**(prerequisite: minimum completion of 30 credit hours toward a Drafting degree or consent of Drafting faculty)**

Applicable toward graduation where program structure permits:

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

### **DRAFT295 - Workplace Simulation & Project** 1-10-3

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.

**(prerequisite: minimum completion of 30 credit hours toward a Drafting degree or consent of Drafting faculty)**

Applicable toward graduation where program structure permits:

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

## Early Childhood Education

### **ECE101 - Introduction to Early Childhood Education** 3-0-3

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.

**(prerequisite: eligibility for ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Early Childhood Education

### **ECE102 - School-Age Child Care** 2-0-2

introduces the individual caring for children five years to twelve years of age in a before- and after-school setting. Basic concepts of physical, intellectual, emotional, and social development of this age group are introduced. The provision of child care services is discussed. Appropriate curriculum, environment, and activities are explored by the student through semester projects and class activities. Offered as needed.

**(prerequisite: eligibility for ENGL 090 and ENGL 097)**

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** 2-0-2

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.

**(prerequisite: eligibility for ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

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

### **ECE110 - Health, Nutrition, and Safety for Young Children** 3-0-3

provides an overview of current concepts in the fields of health, nutrition, and safety with emphasis on meeting children's needs in group settings and in accordance with licensing standards. Topics include community health issues, appropriate curriculum for nutrition needs, first aid and emergency practice, reporting policies, and choices for a healthy lifestyle. This course requires five hours of classroom observation experience to be arranged with the instructor. Offered in Fall and Spring.

**(prerequisite: eligibility for ENGL 101)**

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

explores basic concepts of reading and telling stories and suggests methods of encouraging the child's creativity in the language arts. An important part of this course concerns the selection and use of materials appropriate for the level of comprehension associated with the different stages of mental, physical, and emotional development of the individual child. Particular emphasis is placed on language development. This course requires five hours of classroom observation experience. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **ECE112 - Math & Science for Young Children** 2-2-3

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.

**(prerequisite: eligibility for ENGL 090 and ENGL 097)**

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, & Drama for Young Children** 2-2-3

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.

**(prerequisite: eligibility for ENGL 090 and ENGL 097)**

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

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.

**(prerequisite: eligibility for ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

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

### **ECE116 - Infant/Toddler Development** 3-0-3

studies the physical, social, emotional, cognitive and language development of infants and toddlers from birth to 3 years old. The development of each individual child and finding appropriate materials for each child is stressed. Mandatory observation hours in an infant/toddler center will provide opportunities for students to interact and assess childhood development. Professional skills in this field will be examined. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

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 3-0-3

investigates the historical and current attitudes toward children and families, the history of childcare and economic, and cultural and political factors that influence child care practices. Comparisons are made between childcare in the United States and those of other selected cultures. This course requires five hours of classroom observation experience to be arranged with the instructor. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

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 3-0-3

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.

**(prerequisite: eligibility for ENGL 101 and completion of ECE 101 or permission from the Early Childhood Education Professor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### ECE221 - Teaching Strategies for Special Needs 3-0-3

explores knowledge and skills-based survey of special needs issues including managing disruptive behavior, communicating with and helping the individual learn to communicate, choosing and implementing specialized teaching strategies, positioning and handling techniques, and collaborating with the family and professionals in social service agencies. Hands-on clinical experiences (5 to 8 hours) will be required in an inclusive and a special needs classroom. Offered as needed.

**(prerequisite: eligibility for ENGL 101 or permission from the Early Childhood Professor and/or Dean)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### ECE290 - Work Experience Practicum & Seminar (Variable Credit) 1-10-1 to 3

affords the student in the Early Childhood Education program the opportunity to apply the principles learned in other courses to the work situation through employment in or observation of activities necessary for the operation of a child care agency. Employment or observation activities are coordinated with the student's course work. One of the requirements of this course will be a one-hour seminar to be arranged for maximum convenience of the student. Credit is determined at enrollment based on the ratio of five or more hours per week in the employment setting for a regular-length semester for one semester hour of credit. Students planning to enroll in this course must request an application from the Early Childhood Education Professor 30 days or more prior to the first day of registration for the semester during which the student desires to participate in this course. Practicum assignments are allowed in the Richland Learning Child Care Center and any center working on NAEYC accreditation. Each student serving a practicum in a licensed child care center must furnish current proof of a physical examination including a statement of his/her physical and emotional ability to work with children. Credit is determined at enrollment based upon hours per semester in the school setting: 1-15 clock hours = 1.0 credit hour; 16-20 clock hours = 2.0 credit hours; 21+ clock hours = 3.0 credit hours. Due to education-related course observation requirements, this course may be repeated as necessary. Offered in Fall, Spring, and Summer.

**(prerequisite: eligibility for ENGL 101, completion of a sufficient portion of the Early Childhood program to justify a learning experience in the employment setting, and permission from the Early Childhood Education Professor and/or Dean)**

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

offers an introductory study of physical geography and is designed to develop a basic understanding of the Earth, its landscapes and its climates. It concentrates on the earth as a system and on the variety of physical environments with which humans must deal. Lab activities include working with various types of geographical data, such as topographic maps, climate classification, and weather. Offered in Fall and Spring.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural/Physical Science

Area of Concentration - Earth Science

### EASCI220 - Intro to Physical Geology (IAI: P1 907L) 3-2-4

is an introduction to the study of physical geology and will give students a basic understanding of the processes that shape the earth. Topics include plate tectonics, volcanism, rocks and minerals, landforms and the various processes that shape landforms. Lab activities include the hands-on study of rocks and minerals, as well as the use of topographic maps and computer simulations. Offered in Fall.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural/Physical Science

Area of Concentration - Earth Science

### EASCI230 - Intro to Meteorology (IAI: P1 905L) 3-2-4

is an introduction to the study of weather. Students will acquire a basic understanding of meteorology, weather terminology and atmospheric science, including global weather patterns and climatic change. Lab activities include working with a variety of atmospheric data and weather maps. Offered in Fall and Spring.

**(prerequisite: eligibility for ENGL 101 and MATH 091)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Natural/Physical Science

Area of Concentration - Earth Science

## Economics

### ECON 225 - Comparative Economic Systems 3-0-3

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS and ALS only)

Area of Concentration - Economics, International Business

### ECON 231 - Macroeconomics (IAI: S3 901) 3-0-3

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science

Area of Concentration - Business, Economics, International Business, Social Science

### ECON 232 - Microeconomics (IAI: S3 902) 3-0-3

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.

**(prerequisite: ECON 231)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science

Area of Concentration - Business, Economics, International Business, Social Science



# Education

## **ED 100 - Introduction to Public Education** 3-0-3

is designed for students considering a career in teaching and for individuals who wish to become better informed about the foundations of American education. The course reviews changing concepts in public education in America and examines the duties and responsibilities of the classroom teacher. Discussion of current issues and problems in education is included. Students are required to complete fifteen hours of observation in a classroom setting. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS, ALS and AAT only)

Area of Concentration - Teacher Education: Elementary/Secondary/Special/Early Childhood

## **ED 101 - The Community of Higher Education** 3-0-3

is designed to introduce and foster a mature understanding of learning, its importance, its methodologies, and its applications. Specifically, the course will entail reading, viewing, and discussing selected readings. The course will focus on the application of academic success strategies introduced through the text and class activities. The course has been organized around the concept of community: 1) the RCC community, 2) the broader academic community, and 3) the community beyond college. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS, ALS, and Certificates only)

Area of Concentration - Not Applicable

## **ED 102 - Field Experience in Education (Variable Credit)** 1-10-1 to 3

is designed to provide the student with practical, hands-on experience in the public or private schools or in educational agencies for the purpose of exploring the potential of teaching as a career. This experience and seminar class emphasizes visiting and working in various classroom settings of interest to the student. Class seminars are also conducted in which experiences are shared with students and the instructor. Observation experiences are coordinated with the student's course work. Experiences are arranged by the student and instructor cooperatively and a one-hour per week seminar is a requirement of the course. Credit is determined at enrollment based upon hours per semester in the school setting: 1-14 clock hours = 1.0 credit hours; 15-20 clock hours = 2.0 credit hours; 21+ clock hours = 3.0 credit hours. Due to education-related course observation requirements, this course may be repeated as necessary. Students may be required to provide a criminal background check to school districts before participating in field experiences. Offered as needed.

**(prerequisite: ED 100 or current enrollment in ED 100)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS and ALS only)

Area of Concentration - Teacher Education: Elementary/Secondary/Special/Early Childhood

## **ED 105 - Using Technology in the Classroom I** 3-0-3

is an introduction to the basic skills and resources necessary to develop and improve the knowledge and skills of current and future P-12 educators. This course will focus upon the use of a selection of basic technology tools and methods for integrating those tools into the instructional process in a P-12 classroom. Students will be provided with hands-on activities utilizing technology both professionally and personally to demonstrate proficiency. Topics include word processing, spreadsheets, databases, multimedia, Internet, web page design, and portfolio development. This course requires two hours of formal classroom field experiences in a K-12 computer lab. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS, ALS and AAT only)

Area of Concentration - Teacher Education: Elementary/Secondary/Special/Early Childhood

## **ED 107 - Art for Elementary School Teachers** 3-0-3

provides the student an opportunity to become involved in the study of child-level art and examination of practices in teaching art and art appreciation in the elementary school. This course may require formal classroom field experiences to be arranged with the instructor. Offered as needed.

**(prerequisite: successful completion of ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS and ALS only)

Area of Concentration - Teacher Education: Elementary/Secondary

## **ED 108 - The Multicultural Classroom** 3-0-3

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.

**(prerequisite: successful completion of ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS, ALS and AAT only)

Area of Concentration - Teacher Education: Elementary/Secondary

## **ED 109 - Principles of Reading** 3-0-3

is designed for students considering a career in teaching and for those working with children in grades P-12 to develop reading skills. The course discusses various methods of teaching reading, including whole language, interpretation and analysis of test results, development of language, reading disabilities, remediation plans, and methods of evaluation. Students will be required to complete a minimum of 10 hours of clinical experience in the public school district. Criminal background check may be required for clinical experiences. This course may require formal classroom field experiences to be arranged with the instructor. Offered as needed.

**(prerequisite: successful completion of ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS, ALS and AAT only)

Area of Concentration - Teacher Education: Elementary/Secondary/Special/Early Childhood

## **ED 199 - Topics in Education (Variable Credit)** 1-0-1 to 3

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.

**(prerequisite: successful completion of ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS and ALS only)

Area of Concentration - Teacher Education: Elementary/Secondary/Special/Early Childhood

## **ED 200 - Educational Psychology** 3-0-3

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 ten field experience hours in a classroom setting. A student may not receive credit for both ED 200 and PSYCH 200. Offered in Fall, Spring, and Summer.

**(prerequisite: PSYCH 110)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS, ALS and AAT only)

Area of Concentration - Teacher Education: Elementary/Secondary/Special/Early Childhood

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

is a study of problems facing teachers, students, and educational institutions in multicultural communities. Includes discussion of the role of bilingual education, linguistically and culturally effective teaching strategies, and resources for multicultural teaching. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science (AAS and ALS only)

Area of Concentration - Education





### **ED 220 - The Exceptional Child** **3-0-3**

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 requires ten (10) hours of formal classroom field experience. Offered in Fall.

**(prerequisite: successful completion of ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS, ALS and AAT only)
- Area of Concentration - Education

### **ED 999 - Illinois Basic Skills Test Preparation (Variable Credit) 2-0-1 to 3**

is based on the Illinois Basic Skills Test framework and is designed to prepare prospective teachers to take and pass the Illinois Basic Skills Test (IBST) by refreshing and/or improving skills and abilities required in the areas of Reading, Language Arts, Writing, Mathematics, and Test-Taking Strategies. Students should possess basic computer skills. Offered in Fall and Spring.

**(prerequisite: consent of instructor)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS, ALS, and AAT)
- Area of Concentration - Teacher Education

## Electronics

### **ELTRN110 - Intro to Electricity & Electronics** **1-3-2**

is a laboratory-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 as needed.

**(prerequisite: MATH 091 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

### **ELTRN111 - Circuit Analysis** **2-2-3**

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 as needed.

**(prerequisite: ELTRN 110 and MATH 091 or concurrent enrollment or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

### **ELTRN140 - Solid State Fundamentals for Electronics** **2-2-3**

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.

**(prerequisite: ELTRN 110 and ELTRN 111)**

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**

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 as needed.

**(prerequisite: ELTRN 110 and ELTRN 111)**

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**

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 logic 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.

**(prerequisite: ELTRN 109 or previous motor control experience)**

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** **0-10-2**

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.

**(prerequisite: admittance into the Electrician Apprenticeship program)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - AAS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **ELTRN251 - Electrician Internship** **0-10-2**

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.

**(prerequisite: ELTRN 250)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - AAS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **ELTRN252 - Electrician Internship** **0-10-2**

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.

**(prerequisite: ELTRN 251)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - AAS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **ELTRN253 - Electrician Internship** **0-10-2**

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.

**(prerequisite: ELTRN 252)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - AAS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **ELTRN254 - Electrician Internship** **0-10-2**

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.



(prerequisite: ELTRN 253)

Applicable toward graduation where program structure permits:

- Certificate or Degree - AAS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

## Emergency Medical Technology

### EMT100 - First Responder Trng. Course 2-2-3

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.

(prerequisite: HLTH 110 CPR or valid BLS Healthcare Provider CPR certification for the length of the course)

Applicable toward graduation where program structure permits:

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

### EMT120 - EMT - Basic 5-3-6

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.

(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)

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

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.

(prerequisite: current BLS Health Care provider CPR certification, current EMT-Basic license for the length of the course)

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

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.

(prerequisite: current BLS Health Care provider CPR certification, current EMT-Basic license for the length of the course, and completion of EMT 140 EMT)

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 5-6-7

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.

(prerequisite: current BLS Health Care provider CPR certification, and current EMT-B or higher license)

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 4-6-6

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.

(prerequisite: currently licensed as EMT-B or higher, and completion of EMT 200)

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

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.

(prerequisite: currently licensed as EMT-B or higher, and completion of EMT 220)

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

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.

(prerequisite: currently licensed as EMT-B or higher, and completion of EMT 240)

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

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.

(prerequisite: currently licensed as EMT-B or higher, and completion of EMT 260)

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

## **EDTL 101 - Lineman Apprentice 1** **3-6-6**

provides instruction to prepare students to fulfill basic OSHA training requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be instructed and then tested (passing grade required for apprenticeship). Students will be able to identify hand tools, line-related tools, various cutter tools, connectors, preformed materials, anchors & extensions, wire, repair sleeves and line material. The required knowledge for installing proper grounding, down guys, various pole hardware, street lights, sidewalk guys, cutouts, lightning arresters, etc. The proper operation and maintenance of line trucks, trouble trucks, ladders, lifting hoist and chains, climbing tools, forklifts and chainsaws. Proper care and testing of rubber gloves, sleeves and other personal safety equipment. Finally, the student will be able to employ all required basic safety (OSHA, OQ and NESC) rules to electric distribution construction methods employed by him or her.

Applicable toward graduation where program structure permits:

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

## **EDTM 101 - Polyphase Meter Apprentice 1** **6-2-7**

provides instruction to prepare students to fulfill basic OSHA training requirements and demonstrate proper use of personal protective equipment. Students will be able to identify and demonstrate proper use of hand tools, construction tools, conduit, conduit fittings, and related materials. Students will be able to describe the transformation of electric power and display proficiency in the use of electrical measuring instruments. Students will demonstrate an understanding of the fundamentals of electricity metering. Students will gain familiarization with the organization of the Illinois Power Electric Meter Standards as well as sections pertaining to single-phase metering.

**(prerequisite: MATH 104 or permission of AmerenIP Training Coordinator)**

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** **5.5-1-6**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Students will be introduced to natural gas, including its composition, emergency procedures, ignition sources, conditions causing open flame ignition, electrical spark, and sources resulting from work on piping. Also covered in the course are recognizing and reporting natural gas leaks, use of personal protective equipment, power tool safety, proper firefighting techniques, controlling the accidental release of gas and gas standards.

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 Engineering Apprentice 1** **7-2-8**

provides instruction to prepare students to fulfill basic OSHA training requirements and demonstrate proper safety protocols for both gas and electric power distribution. Students will be able to use township survey information, maps, easement and right-of-way information to design basic residential gas and electric services. Students will be able to locate underground facilities using both the inductive and conductive processes. Finally, the student will be able to employ corrosion control techniques for buried metal.

**(prerequisite: MATH 091 or satisfactory score on the mathematics placement exam)**

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** **2-4-4**

prepares the student to be a hands-on team member of the substation maintenance or construction crew. Training modules included are mobile radio procedures, how to identify and use hand and power construction tools, OSHA 1910.269 compliance training, including substation entry training, use of bucket trucks, bucket truck rescue, AC-DC and OHMs laws, or secured area use of electrical test instruments, electrical safety and use of high voltage rubber gloves, sleeves and cover-up materials.

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** **3-4-5**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator

Qualification) requirements for electric power distribution construction will be followed during class and any construction that is performed by the student. Students will enter an enclosed space (as defined by OSHA) and practice confined space rescue (as defined by OSHA). Students will be able to articulate (practice) proper Pole top rescue and PCB Clean up. Students will learn the basics of underground electric construction (methods and practices). Students will learn the basics of overhead electric construction (methods and practices).

**(prerequisite: EDTL 101)**

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**

prepares students to demonstrate proficiency of bucket truck operation, related personal protective equipment, and rescue from ground controls. Students will understand and demonstrate the application and installation of single phase self-contained electricity metering. Students will learn the basics of investigation 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.

**(prerequisite: EDTM 101)**

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** **5-2-6**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction, and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Students will be introduced to natural gas hazards, proper leak investigation, and resolution. Emergency response and customer leak investigation will be introduced.

**(prerequisite: EDTN 101)**

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 Engineering Apprentice 2** **7-2-8**

provides instruction to prepare students to fulfill basic OSHA training and demonstrate proper safety protocols for designing both gas and electric power distribution services and basic extensions. Students will be expected to use basic township survey information, maps, easement and right-of-way information to support basic residential gas and electric service designs. Students will expand their knowledge of locating underground facilities using both the inductive and conductive processes. Students will be able to employ basic corrosion control techniques for buried metal on basic gas services.

**(prerequisite: EDTP 101)**

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** **2-4-4**

prepares the student to be a hands-on team member of the substation maintenance or construction crew. Training Modules include use of precision tools, ridged, thin wall and PVC conduit bending, use of oxygen/acetylene torch, transformer identification, identification and replacement of substation power fuses, substation inspections, and steel structure rescue.

**(prerequisite: EDTS 101)**

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** **4-2-5**

concentrates on the applications, installations, and accuracy testing of self-contained polyphase metering, including socket and A-base types. Demand and time-of-use metering concepts are introduced at this level. Instruction also includes the transformation of single-phase and three-phase power, three-phase phasor concepts, and recording voltmeter operation. Applicable portions of the Illinois Power Electric Meter Standards are included. Safe work practices are emphasized.

**(prerequisite: EDTM 105)**

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** **5.5-3-7**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Students will be introduced to natural gas service requirements to customers (appliance maintenance, adjustments, repairs and safety requirements).

**(prerequisite: EDTN 105)**

Applicable toward graduation where program structure permits:

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

**EDTP 110 - Power Engineer Apprentice 3** **5-1-5**

provides instruction to prepare students to fulfill basic OSHA training and demonstrate proper safety protocols for designing both gas and electric power distribution primary and main; use basic township survey information, maps, easement and right-of-way information to support basic residential/commercial (small) gas and electric primary/main extension design; practice locating underground facilities; employ basic corrosion control techniques for buried metal on basic gas services; gain an understanding of rotary gas meters relative to their practical/economical use; study high pressure gas metering concepts; apply appropriate surveying techniques to cross sections of rail roads, state highways, and waterways; and acquire basic knowledge of three-phase transformers, vertical/horizontal clearances, three-phase extensions and single-phase rebuilds.

**(prerequisite: EDTP 105)**

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** **2-4-4**

familiarizes students with major substation transmission and distribution equipment. Training modules include power transformer no-load tap changer operation, installation and adjustment of disconnect and air break switches, safe handling of compressed gases, substation batteries, installation of transformer and circuit breaker fall protection, and mobile substation training.

**(prerequisite: EDTS 105)**

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** **3-4-5**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be followed during class and any construction that is performed by the student. Students will continue Pole Top Rescue practice and proper pole climbing methods II. The student will study and practice bucket rescue from the ground. Students will extend their knowledge of UG distribution construction and OH distribution construction methods and practices. Introduction of trouble outage work, interpretation of circuit maps, and working energized conductors.

**(prerequisite: EDTL 110)**

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**

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.

**(prerequisite: EDTM 110)**

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** **1-12-7**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Student will be introduced to job site protection, locating and marking, flagging, construction equipment - excavating & shoring safety, competent person program and confined space entry. Basic construction and maintenance of gas facilities along with proper welding techniques will be learned by the student throughout length of class.

**(prerequisite: EDTN 110)**

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**

provides instruction to prepare students to fulfill basic OSHA training and demonstrate proper safety protocols for designing both gas and electric power distribution primary and main; use basic township survey information, maps, easement and right-of-way information to support basic residential/commercial (small) gas and electric primary/main extension design; practice locating underground facilities; employ basic corrosion control techniques for buried metal on gas extensions; apply knowledge of rotary gas meters, high pressure gas metering to designs; apply appropriate surveying techniques and cross sections of construction sites to designs; articulate proper gas regulator design and basic testing requirements of gas distribution system design; apply knowledge of three phase transformers, vertical/horizontal clearances, single/three-phase extensions rebuilds and three-phase electric theory to designs; gain a broader understanding of basic three-phase metering, electric underground extensions (three phase/single phase); and create an initial electric and gas distribution system design for a 10-400 lot residential subdivision.

**(prerequisite: EDTP 110)**

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** **3-2-4**

consists of 30% classroom and 70% practical exercise at the Training Center Substation. Tasks included in this module are switching and clearance procedures, personal protective grounding, energized hot work safety and cover up techniques, operation of air break and transfer switches, and working with one-line diagrams.

**(prerequisite: EDTS 110)**

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** **2-4-4**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be followed during class and any construction that is performed by the student. Students will continue Pole Top Rescue practice and proper Pole climbing methods II. The student will study and practice bucket rescue from the ground. Student will extend their knowledge of UG distribution construction and OH distribution construction methods and practices. Introduction of trouble outage work, interpretation of circuit maps and working energized conductors.

**(prerequisite: EDTL 115)**

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**

instructs students in concepts, applications, and accuracy testing of VAR and Q electric metering. Principles of meter data re-transmittal and customer energy management systems will be studied. Students will gain proficiency in concepts and applications



of specialized solid-state metering and remote metering interrogation equipment. Principles, applications, and accuracy testing of electric interchange metering will be instructed. In this course, students will complete the journeyman polyphase meter final examination. Safe work practices are emphasized.

**(prerequisite: EDTM 115)**

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**

**1-8-5**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for gas distribution construction and maintenance. OQ (Operator Qualification) requirements for gas distribution construction will be followed during class and any construction that is performed by the student. Students will be introduced to natural gas basic regulation, inspecting pressure regulating and limiting stations and system uprating procedures/requirements. The proper procedure to inspect and maintain valves and safe vault entry will be learned.

**(prerequisite: EDTN 115)**

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**

prepares students to apply basic law of physics to electric and gas power distribution systems. Students will take field notes, locate existing facilities, perform field surveys, prepare commercial and industrial power distribution designs, bill customers, order materials, and perform cost estimates as dictated by appropriate design standards, building codes, and customer need. In addition, each student will complete an advanced design electric and gas power distribution system project. This project will include advanced problems on many aspects of utility design, and all requirements for design will be need to be completed in order for the student to receive credit.

**(prerequisite: EDTP 115)**

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**

**1-4-3**

prepares students for most aspects of substation breaker maintenance and performance tests. Tasks include vacuum pump set up and operation; maintenance of pneumatic, hydraulic and solenoid mechanisms; circuit breaker tests including timing, contact penetration, contact wipe or compression, breaker stroke; and high potential testing (doctor).

**(prerequisite: EDTS 115)**

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**

**2-4-4**

provides instruction to prepare students to fulfill basic OSHA requirements and demonstrate proper safety protocols for electric power distribution. OQ (Operator Qualification) requirements for electric power distribution construction will be followed during class and any construction that is performed by the student. Students will identify substation equipment, its operation and maintenance - methods and practices. Review overhead and underground construction and maintenance methods.

**(prerequisite: EDTL 120)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **EDTN 125 - Gas Distribution Apprentice 4**

**2-2-3**

prepares and evaluates gas apprentices to comply with the requirements of the operator qualification rule within the Minimum Federal Safety Act, part 192 sections 192.801 through 192.809. Students will review the code, covered task summary, and performance evaluation criteria guide and then be evaluated using the performance evaluation form.

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 Engineering Apprentice 6**

**3-2-4**

provide instruction for students to prepare a natural gas and electric power design project from scratch. To do so, the student will employ data collection and previous learning from all prior experiences using field notes, locating techniques, field survey data, material data, cost estimate data as dictated by appropriate design standards, building codes, and customer need. The project design will include the relocation of gas and electric lines, extension of new gas and electric lines, surveying and research to ensure that all safety, building codes, and standards are met. Calculations and related information will be noted for grading and review, and all requirements for design will be need to be completed in order for the student to receive credit.

**(prerequisite: EDTP 120)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **EDTS 125 - Substation Apprentice 6**

**4-4-6**

prepares trainees for complex diagram and schematic use for construction or trouble shooting. Modules included are identifying electrical symbols and electrical devices, component change-out or additions, wiring of control panels, wiring techniques and proper wiring devices, transformer load tap changer maintenance and back up relay devices, and single-phase step regulator theory and maintenance.

**(prerequisite: EDTS 120)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **EDT290 - Distribution Internship 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.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **EDT291 - Distribution Internship 2**

**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.

**(prerequisite: EDT 290)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **EDT292 - Distribution Internship 3**

**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.

**(prerequisite: EDT 291)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable



### **EDT297 - Emerging Technologies** 1-25-6

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.

**(prerequisite: successful completion of Ameren Training modules or consent of the Dean)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## Engineering

### **ENGR 110 - Engineering Graphics(IAI: EGR 941)** 1-4-3

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.

**(prerequisite: DRAFT 101 or permission of the instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Engineering, Drafting

### **ENGR 211 - Statics(IAI: EGR 942)** 4-0-4

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.

**(prerequisite: PHYS 151 and MATH 122 and concurrent enrollment in or completion of MATH 221)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - General Science, Physics, Mathematics, Engineering

### **ENGR 212 - Dynamics(IAI: EGR 943)** 4-0-4

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.

**(prerequisite: ENGR 211 and concurrent enrollment in or completion of MATH 221)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - General Science, Physics, Mathematics, Engineering

## Engineering Technology

### **ENGT 100 - Industrial Processes(IAI: IND 913)** 3-0-3

is designed to give a basic understanding of the various processes used in industry. The student will understand how processes of component manufacturing relate to product design and business decision-making. This course covers several process categories including metal fabrication, casting, welding, machining, plastics molding, surface finishing, heat treatment, and assembly. Bulk processing methods common to the food, chemical, and petroleum industries are also explored. Upon completion of this course, students will understand how people, processes, information, and materials are successfully integrated to produce sellable products. Course information is delivered using lectures, videos, field trips, and demonstrations. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Manufacturing Technology/Machining

### **ENGT 101 - Motor Control Fundamentals** 3-3-4

is a practical, hands-on class, centered on the study and application of controls and systems in the industrial environment. This course begins at the introductory level and progresses through advanced manual and automatic electromechanical and solid-state controls. Quizzes will be given regularly and will include lab activities. Selected lab activities will be taken for grades. The course emphasizes the on-the-job knowledge and skills required to troubleshoot and maintain modern industrial control systems. Safe work habits are emphasized throughout the course. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 102 - Blueprint Reading** 3-0-3

provides experiences in reading industrial prints and some sketching of orthographic and pictorial drawings. Topics covered include the interpretation of detail and assembly drawings; auxiliary views; sections, dimensions, and tolerances; lists of materials; notes; drawing change systems; threads; callouts for machine processes; positional and form tolerances; gears; splines; CNC documents; and sheet metal, welding, and control diagrams. Students will produce engineering drawings using manual drafting tools and computer-aided design systems. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 103 - Fluid Power Fundamentals** 2-2-3

is a hands-on course in the fundamentals of industrial fluid power systems. This course covers both hydraulic and pneumatic systems; however, most discussions and laboratory work will focus on industrial hydraulic systems. Pneumatic systems are discussed near the end of the course where an emphasis is placed on air compression and air preparation. Initial discussions show how energy, force, pressure, and flow relate to hydrostatic systems. Subsequent discussions cover the design of various components and circuits. Industry-grade cylinders, valves, motors, and pumps are used in all laboratory experiments and students will disassemble these components to gain a better understanding of their operation. Schematic symbols are presented throughout the course and students are required to generate circuit diagrams using both manual drawing and computer software. Offered in Fall and Spring.

**(prerequisite: eligibility for MATH 091)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 104 - CNC Fundamentals** 2-2-3

is an introduction to CNC machinery as it applies to the operator. CNC (computer numerical controlled) Fundamentals is a hands-on course in the setup, operation, and basic programming of CNC machines including both turning (lathes) and milling machines. Topics will include an introduction to basic CNC program codes, set up, tooling, and operation. The MDI mode will be utilized for manual axis control and basic machine functions. Work shift and tool offsets will be programmed. Offline programming will be used to create basic CNC programs. The programs will be downloaded, called up, edited, and tool path code graphically verified before being run. Machine operation will include basic fixturing, feed and speed rates, machine maintenance, and adjustments to meet part quality requirements. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Manufacturing Technology/Machining

### **ENGT 105 - Occupational Safety** 3-0-3

is an introductory course and is appropriate for operators, technicians, supervisors, and managers desiring to learn the fundamentals of occupational safety and health. Most topics discussed relate to the General Industry Standards established by the Occupational Safety and Health Administration (OSHA). This course identifies common hazards in business and industry and investigates various methods of controlling those hazards. This is primarily a lecture and discussion course; however, several hands-on demonstrations are used to enhance instruction. Presentations are similar to shop floor safety meetings. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 107 - BioFuel Manufacturing Fundamentals** 2-2-3

provides a broad overview of the Biofuel production process from biomass feedstock to finished product. The equipment and process controls associated with the batch and continuous process modes of operation used in the production of biodiesel and ethanol



will be introduced. An emphasis will be placed on the physical processes and variables that affect the efficiency of operation and field quality. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 108 - Principles of Renewable Energy** **3-0-3**

is an introductory course designed to provide an overview of clean energy resources and accompanying technology. The principle types of renewable energy are covered, including biomass energy, solar energy, geothermal energy, wind energy, and hydro energy. An investigation into the environmental, social, and political forces behind sustainable energy production is undertaken. A brief look at alternative vehicle technology is also included. Offered in Fall.

**(prerequisite: eligibility for MATH 091)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Manufacturing Technology/Machining

### **ENGT 111 - Motor Control Applications** **3-3-4**

is a practical, hands-on class, centered on the study and application of controls and systems in the industrial environment. This course 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.

**(prerequisite: ENGT 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 114 - Wind Turbine Mechanical Systems** **3-2-4**

will enable an understanding of the components of a wind turbine. Students will be able to apply their knowledge toward attaining skills to maintain the efficient operation of the wind turbine system. Mechanical skills will utilize an appropriate understanding of heat generation and control, coatings, fasteners, torque, lubricants, gears, shafts, and other topics that will enable students to identify and troubleshoot technical problems. Offered in Spring.

**(prerequisite: ENGT 108)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 118 - Wind Turbine Electrical Systems** **2-2-3**

will provide an understanding of the generation and transmission of electrical power through the wind turbine system. Students will analyze a typical wind turbine electrical schematic. Each sub-system will be discussed. DC power generation, excitation circuits, voltage control, DC to AC conversion, filtering and harmonics, and line synchronization will be discussed and analyzed. Students will also receive hands-on experience working with the type of equipment found in wind power generation and delivery 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

### **ENGT 120 - Process Control Fundamentals** **2-2-3**

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.

**(prerequisite: ENGT 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 125 - BioProcess Operation Fundamentals** **1-2-2**

provides a broad introduction to the technology of the bioprocess industry including the economic basis of the technologies and their historical development with an emphasis on fundamental applications common to most process industries. Basic concerns of the bioprocess industry such as safety, security and utilities will be introduced. Includes study of topics in the following areas; vehicle and transportation hazards;

physical security and cyber security; fire, rescue and emergency response equipment; environmental control equipment; potable water; fire water, service/utility water, waste water; cooling water; nitrogen, natural gas, fuel gas; auxiliary equipment; and material storage. Offered in Spring Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 130 - Power Transmission Fundamentals** **3-2-4**

is an introduction to mechanical drives. Systems that are common in factories and processing plants are discussed. Topics include rotating equipment mounting, shaft alignment, couplings, AC motors, torque, rotary mechanical power, belt drives, gear drives, and chain drives. Students will work with handbooks, manufacturers' catalogs, and trade literature to solve mechanical power transmission problems. Theory gained in the classroom is applied in laboratory exercises. Offered in Spring.

**(prerequisite: MATH 091 and eligibility for ENGL 101 or approval of the instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **ENGT 150 - Machining Fundamentals** **1-2-2**

provides a hands-on introduction of the basic principles of introduction to the various machining operations, setups, and procedures. The course focuses on traditional machining methods including lathes, mills, drills, cut-off saws and grinders. Topics include machine capabilities, basic process planning, setup, and machine operation. Additional topics include bench work, the use of hand tools, basic measurement tools, and layout tools. Shop safety is covered in every operation. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Manufacturing Technology/Machining

### **ENGT 151 - Cutting & Workholding** **1-2-2**

introduces the theory and operation of metal cutting tools used manual and CNC machining. Tools covered include drills and reamers, end mills, mill cutters, tool bits, single-point turning tools, indexable tooling, and thread tap and dies. Topics also include tool selection, machinability of different materials, calculation of speeds and feeds, and spindle horsepower requirements. Elementary heat treatment of metals and case hardening are covered as to how they effect tool selection. Work holding topics include the operation, selection and proper use of chucks, vises, clamps, and custom fixturing. Students will also perform simple operations such as basic grinding, face, turn, bore, knurl, chamfer, center drill, tap, groove, cut tapers, adjust feeds and speeds, mill flat, square surfaces, and make slots. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Manufacturing Technology/Machining

**ENGT 160 - Metrology** 1-2-2

is a hands-on introduction to precision measurement. Topics include an overview of measuring instruments, including their advantages and limitations. Tools include micrometer and vernier tools, dial indication instruments, gauge blocks, hand tools, layout tools and layout methods. Advanced technologies are utilized including coordinate measuring machine (CMM) and vision inspection system. Measurement data is analyzed with basic statistical methods including control charts, and sampling plans. Data is analyzed to determine correction plans. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**ENGT 200 - Industrial Materials (IAI: IND 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 Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Manufacturing Technology/Machining

**ENGT 201 - Fundamentals of Solar Power** 2-3-3

focuses on the design, installation and troubleshooting of solar powered electrical production systems. The course emphasizes the hands-on skills required by industry for technicians interested in this exciting new field. Students will learn how light energy is converted to electrical energy, DC to AC conversion, installation principles, troubleshooting and optimization. Lab work will include experiments and troubleshooting with both small equipment in the lab and a fully functional system in the field. Offered in Fall.

(prerequisite: ENGT 108)

Applicable toward graduation where program structure permits:

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

**ENGT 202 - Fundamentals of Biomass Energy** 1-2-2

provides an overview of biomass resources and accompanying technology. The principle types of biomass energy are covered and include energy grasses, wood wastes, bio-solids, etc. An investigation into the actual operation of a small biomass furnace (force-air and re-circulating liquids) is undertaken. A brief look at alternative (emerging) biomass technology is also included (methane generation, etc.) Offered in Spring.

(prerequisite: ENGT 108 or instructor approval)

Applicable toward graduation where program structure permits:

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

**ENGT 204 - Fundamentals of Geothermal Energy** 3-0-3

focuses on the design, operation and troubleshooting of geothermal energy systems. The course emphasizes the knowledge required by industry for technicians interested in this exciting new field. Students will learn how geothermal energy is converted to electrical energy, heat, and air-conditioning. The economics and political issues of this green energy source will be discussed. Demonstrations will include experiments, troubleshooting and optimization with both small equipment in the lab and a fully functional system in the field. Offered in Spring.

(prerequisite: MATH 104 and ENGT 108 or approval of instructor)

Applicable toward graduation where program structure permits:

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

**ENGT 210 - PLC Fundamentals** 3-2-4

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.

(prerequisite: ENGT 111)

Applicable toward graduation where program structure permits:

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

**ENGT 211 - PLC Applications** 2-2-3

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.

(prerequisite: ENGT 210)

Applicable toward graduation where program structure permits:

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

**ENGT 212 - Motor Control Systems** 3-3-4

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.

(prerequisite: ENGT 111)

Applicable toward graduation where program structure permits:

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

**ENGT 213 - Robotic Fundamentals** 2-2-3

is a hands-on introduction to industrial robot systems including hardware, software, and system integration. Topics include operation, programming, troubleshooting, proper application, system integration, profitability analysis, and safety issues. The course covers an overview of current robotics industry, terminology, mechanical components, power sources, end effectors, robot controllers, and system sensors. A variety of robotic systems are studied, including servo and non-servo systems. Programming is done both on the PC and "teach" pendants. Robots will be integrated with CNC machines, programmable logic controllers and electrical controls to create a flexible manufacturing system (FMS). Offered in Spring.

(prerequisite: ENGT 104 or ENGT 210)

Applicable toward graduation where program structure permits:

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

**ENGT 214 - Motion Control Applications** 2-2-3

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.

(prerequisite: ENGT 111)

Applicable toward graduation where program structure permits:

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



**ENGT 215 - Motion Control Systems 2-2-3**

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.

**(prerequisite: ENGT 214)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 218 - Wind Turbine Repair & Maintenance 1-2-2**

will provide the necessary skills to provide troubleshooting, routine maintenance, and repair of wind turbine electrical and mechanical systems. Students will review the procedures and mechanisms associated with the installation and operation, while emphasizing safe work practices and equipment. Additional study will include technical manuals, maintenance schedules, predictive maintenance procedures, and identification of faulty electrical components and systems. Offered in Spring.

**(prerequisite: ENGT 118)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 220 - Process Control Applications 2-2-3**

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.

**(prerequisite: ENGT 120)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 225 - BioProcess Operation Application 2-4-4**

provides an introduction to the control technology of the bioprocess industry with an emphasis on operation of systems common to bioprocess industries. Basic theory of various bioprocess applications, and the products produced, will be introduced. A laboratory component of the course will introduce students to operations procedures. Includes study of topics in the following areas: steam turbines, heat exchangers, boilers, turbines, engines, separation equipment, reactors, solids handling equipment, steam generation and distribution systems, reaction systems, separation systems, extraction systems, distillation systems, stripping systems, dehydration systems, and filtration 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

**ENGT 226 - BioProcess Operation Systems 2-2-3**

provides further study of the control technology of the bioprocess industry with an emphasis on operation of systems common to bioprocess industries. Operations, manipulation and optimization of various bioprocesses will be covered. A laboratory component of the course will introduce students to advanced operations procedures. Includes study of topics in the following areas: system economics and optimization, procedure writing, normal operations, abnormal operations, system startup, system shutdown, system operation, alarm handling, turnarounds and on-the-job training. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - Not Applicable

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 230 - Power Transmission Applications 2-2-3**

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.

**(prerequisite: ENGT 130 and eligibility for MATH 091 or approval of instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 231 - Piping Fundamentals 1-2-2**

is designed to give students the skills to specify and assemble basic pipe, tube, and hose systems. Topics include pipe materials, pipe schedules, pipe threading, fittings, valve operation and maintenance, schematic interpretation, tube bending, and hose construction. This course also covers the operation and performance of steam distribution systems. Skills are acquired using hands-on laboratory exercises. Offered in Spring.

**(prerequisite: eligibility for MATH 091 and ENGL 101 or approval of the instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 232 - Rigging & Cranes 1-2-2**

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.

**(prerequisite: eligibility for MATH 091 and ENGL 101 or approval of the instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 233 - Lubrication Systems 1-2-2**

investigates the function of lubrication in mechanical systems. It also provides students with the skills to operate series/progressive and piston distributor central lubrication systems that are furnished with Lubriquip Maxi-Monitor controllers. Troubleshooting principles are covered in detail and primarily applied to lubrication systems; however, troubleshooting of other electro-mechanical systems is also discussed. Analysis of oil samples will be undertaken to determine viscosity, metallic wear rates, level of degradation, and level of foreign substance contamination. Complex components, such as divider valves, will be disassembled to give students a clear understanding of their operation. Offered in Fall.

**(prerequisite: eligibility for MATH 091 and ENGL 101 or approval of the instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 234 - Pump Applications 1-2-2**

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.

**(prerequisite: eligibility for MATH 091 and ENGL 101 or approval of the instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

**ENGT 235 - Industrial Machinery Repair 1-2-2**

allows students to solve mechanical problems by combining skills obtained from other mechanical courses; therefore, students are encouraged to enroll for this course during their second year of study. Machine tools are the center for most discussions in this class. Topics include leveling, anchoring, axis alignment, gib adjustment, chip conveyors, and ball screws. Planned maintenance of equipment is emphasized, and initial lectures cover preventive and predictive maintenance practices. Students will perform predictive maintenance techniques such as oil analysis, vibration analysis, and thermography. Offered in Spring.

**(prerequisite: ENGT 230 or approval of instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS



Group Requirement - Not Applicable  
Area of Concentration - Not Applicable

#### **ENGT 240 - Hydraulic Applications** **2-2-3**

applies those concepts learned in ENGT 103, Fluid Power Fundamentals. This course focuses entirely on industrial hydraulics with emphasis on circuit design. Students will design hydraulic circuits using computer simulation software and validate each virtual design by creating an equivalent physical circuit. Students will also be required to interpret hydraulic schematics associated with complex industrial machinery. 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.

**(prerequisite: ENGT 103 and eligibility for MATH 091)**

Applicable toward graduation where program structure permits:

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

#### **ENGT 241 - Pneumatic Applications** **2-2-3**

provides comprehensive instruction in the area of industrial pneumatics. Pneumatic concepts not covered in ENGT 103, Fluid Power Fundamentals, will be discussed. The role of pneumatics in industrial automation will be emphasized. Topics covered include air-logic circuits, vacuum systems, air bearings, pneumatic actuators, pneumatic valves, schematics, compressor sizing and maintenance, air drying, air filtration, and electronic sensors. Students will incorporate computer simulation in the design and validation of electro-pneumatic circuits. 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.

**(prerequisite: ENGT 103 and eligibility for MATH 091)**

Applicable toward graduation where program structure permits:

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

#### **ENGT 242 - Fluid Power Systems** **2-2-3**

provides advanced training in the area of industrial hydraulics with emphasis placed on system performance and troubleshooting. Initial activities require students to accurately adjust and measure the performance of an integrated hydraulic system. Advanced exercises require students to troubleshoot and repair single and multiple system faults. Students will become proficient in diagnosing problems and implementing solutions. Offered in Spring.

**(prerequisite: ENGT 103 and eligibility for MATH 091 or approval of instructor)**

Applicable toward graduation where program structure permits:

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

#### **ENGT 250 - CNC Turning** **2-2-3**

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.

**(prerequisite: ENGT 104, ENGT 150, ENGT 151)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Not Applicable  
Area of Concentration - Manufacturing Technology/Machining

#### **ENGT 251 - CNC Milling** **2-2-3**

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.

**(prerequisite: ENGT 104, ENGT 150, ENGT 151)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Not Applicable  
Area of Concentration - Manufacturing Technology/Machining

#### **ENGT 252 - CAM Applications** **2-2-3**

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.

**(prerequisite: DRAFT 236 or DRAFT 215 and ENGT 104 or consent of full-time Engineering Technology instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Not Applicable  
Area of Concentration - Manufacturing Technology/Machining

#### **ENGT 260 - Quality Fundamentals(IAI: IND 914)** **2-2-3**

is an introduction to industrial quality control systems and the development of the concept of total quality control engineering, process improvement, and quality information systems. An analysis of the step-by-step process for quality assurance and improvement is studied. Topics include Total Quality Management (TQM), Total Quality Control (TQC), Statistical Process Control (SPC), Continuous Improvement Processes (CIP), Six Sigma, Organizations Development, Supplier Quality, benchmarking, and the economic impact of quality costs to provide for a complete view of manufacturing today. The course includes quality systems selection, project implementation including sampling plans, data gathering, data analysis, problem solving, interpretation, X-R charts, and attribute charts. Emphasis is placed on how the quality process is utilized to determine the process refinements necessary to improve quality, process capability, improve productivity, and determine continuing improvement strategies. Offered in Fall.

**(prerequisite: ENGT 160 or approval of instructor)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees  
Group Requirement - Not Applicable  
Area of Concentration - Manufacturing Technology/Machining

#### **ENGT 270 - BioFuel Manufacturing Applications** **2-2-3**

provides a focused study emphasizing the biochemical processes employed by various organisms in the biofuels and sustainable energy disciplines. Acid-base chemistry, enzymatic, and the general properties of carbohydrates, amino acids, lipids and nucleic acids will be emphasized. Additional topics include: composition of lignocellulose; energy crops; chemical pretreatment; enzymatic pretreatment; degradation of lignocellulose by fungi and bacteria; degradation of lignin; degradation of cellulose; and comparison with degradation of high starch crops. Hands-on activities will demonstrate the biochemical properties of biomolecules and introduce the learner to batch preparation techniques used in the biofuel industry. Offered in Fall.

Applicable toward graduation where program structure permits:

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

#### **ENGT 271 - BioFuel Manufacturing Techniques** **2-2-3**

provides a focused study on the metabolism of carbohydrates, amino acids, lipids and nucleic acids, with an emphasis on ethanolic fermentation and lipid biosynthesis as it relates to biofuels feedstocks. Additionally, the student will be introduced to the principles of genetics, gene regulation, and recombinant DNA techniques. Hands-on activities will include an in-depth exploration of the American Society for Testing and Manufacturing with Materials (ASTM) approved analytical testing methods for the composition, purity, and physical properties of biofuels. Offered in Spring.

Applicable toward graduation where program structure permits:

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



### **ENGT 290 - Work Experience Practicum & Seminar** 1-10-3

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.

**(prerequisite: approval of instructor)**

Applicable toward graduation where program structure permits:

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

### **ENGT 295 - Workplace Simulation & Project** 1-10-3

is to provide for supervised independent projects in Engineering Technology and is only for students in their last semester. The student will keep a log of progress, prepare written reports, and present an oral report at the end of the semester. The student will apply classroom knowledge to a workplace situation in the form of a hands-on technical project. The project will provide advanced students with the opportunity to integrate and practice previous coursework in a simulated work environment under the supervision of an instructor. The work project will be developed cooperatively with the instructor and each student to provide a variety of technical experiences directly related to the student's career goals. Offered as needed.

**(prerequisite: student should be in last semester of study)**

Applicable toward graduation where program structure permits:

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

### **ENGT 299 - Systems Integration** 1-4-3

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 as needed.

**(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.)**

Applicable toward graduation where program structure permits:

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

## English

### **ENGL 088 - Reading + 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 may be computer enhanced. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

- Certificate or Degree - Basic Certificates
- Group Requirement - Preparatory to other studies
- Area of Concentration - Preparatory to other studies

### **ENGL 090 - Reading + Study Skills 2** 3-0-3

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 may be computer enhanced. Offered in Fall, Spring, and Summer.

**(prerequisite: "C" or better in ENGL 088)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - Basic Certificates
- Group Requirement - Preparatory to other studies
- Area of Concentration - Preparatory to other studies

### **ENGL 095 - Developmental Writing 1** 3-0-3

is designed for those students who desire or need additional preparation in English composition prior to taking ENGL 097. The course reviews those elements of mechanics and grammar necessary in all writing and provides intensive practice in construction of sentences and paragraphs. Much of the writing is done in a supervised laboratory setting. This course may be computer enhanced. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

- Certificate or Degree - Basic Certificates
- Group Requirement - Preparatory to other studies
- Area of Concentration - Preparatory to other studies

### **ENGL 097 - Developmental Writing 2** 3-0-3

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 essays. Much of the writing is done in a supervised laboratory setting. This course may be computer enhanced. Offered in Fall, Spring, and Summer.

**(prerequisite: "C" or better in ENGL 095)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - Basic Certificates
- Group Requirement - Preparatory to other studies
- Area of Concentration - Preparatory to other studies

### **ENGL 101 - Composition 1 (IAI: C1 900)** 3-0-3

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.

**(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 Sentence Skills and Reading Comprehension placement tests; or 4) evidence of equivalent competencies)**

Applicable toward graduation where program structure permits:

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

### **ENGL 102 - Composition 2 (IAI: C1 901R)** 3-0-3

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.

**(prerequisite: ENGL 101 with "C" or better)**

Applicable toward graduation where program structure permits:

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

### **ENGL 110 - Communicating in the Workplace** 3-0-3

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Communications (AAS and ALS only)
- Area of Concentration - Not Applicable

**ENGL 115 - Introduction to Literature (IAI: H3 900) 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 124 - Introduction to Fiction (IAI: H3 901) 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 126 - Introduction to Poetry (IAI: H3 903) 3-0-3**

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 as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 128 - Introduction to Drama as Literature (IAI: H3 902) 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 140 - Introduction to Film Art (IAI: F2 908) 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 150 - Topics on Literature 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 160 - Literature and Gender (IAI: H3 911D) 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 200 - Literary Theory 3-0-3**

provides exposure to diverse issues confronting the fields of literary scholarship and of literary criticism. Literary criticism, the overall term for studies concerned with defining, classifying, analyzing, interpreting, and evaluating works of literature has always involved theoretical criticism, ranging at least as far back as Longinus's *Peri hupsous* [Tr: On the Sublime] in the first century A.D. and continuing through the present. Offered as needed.

**(prerequisite: completion of ENGL 115)**

Applicable toward graduation where program structure permits:

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

**ENGL 201 - American Literature to 1900 (IAI: H3 914) 3-0-3**

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.

**(prerequisite: ENGL 101, 124, 126, 128, 140, or 150)**

Applicable toward graduation where program structure permits:

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

**ENGL 202 - American Literature in the 20th Century (IAI: H3 915) 3-0-3**

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.

**(prerequisite: ENGL 101, 124, 126, 128, 140, or 150)**

Applicable toward graduation where program structure permits:

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

**ENGL 220 - Introduction to Creative Writing 3-0-3**

offers instruction and practice in writing fiction, poetry, and creative nonfiction. 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 as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 222 - Advanced Creative Writing 3-0-3**

offers students the opportunity to develop advanced skills in one of the genres presented in ENGL 220. Each student will be expected to produce a significant body of writing such as a collection of poems, a full-length play, a major part of a novel, or a collection of short stories. Offered as needed.

**(prerequisite: ENGL 220 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

**ENGL 231 - Masterpieces of Western/World Literature 1 (IAI: H3 906) 3-0-3**

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.

**(prerequisite: ENGL 101, 124, 126, 128, 140, or 150)**

Applicable toward graduation where program structure permits:

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


**ENGL 232 - Masterpieces of Western/World Literature 2 (IAI: H3 907) 3-0-3**

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.

**(prerequisite: ENGL 101, 124, 126, 128, 140, or 150)**

Applicable toward graduation where program structure permits:

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

**ENGL 240 - Film and Literature (IAI: HF 908) 3-0-3**

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.

**(prerequisite: ENGL 101, 124, 126, 128, 140, or 150)**

Applicable toward graduation where program structure permits:

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

**ENGL 241 - Film History (IAI: F2 909) 3-0-3**

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.

**(prerequisite: ENGL 101, 124, 126, 128, 140, or 150)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Fine Arts (AAS and ALS only)
- Area of Concentration - English

**ENGL 251 - English Literature to 1800 (IAI: H3 912) 3-0-3**

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.

**(prerequisite: ENGL 101, 124, 126, 128, 140, or 150)**

Applicable toward graduation where program structure permits:

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

**ENGL 252 - English Literature 19th-20th Century (IAI: H3 913) 3-0-3**

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.

**(prerequisite: ENGL 101, 124, 126, 128, 140 or 150)**

Applicable toward graduation where program structure permits:

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

**ENGL 253 - Introduction to Shakespeare (IAI: H3 905) 0-0-3**

will include reading, discussion, and analysis of selected Shakespearean plays and sonnets. Includes biographical information, the influence of his times, and secondary resources. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 260 - Science Fiction 3-0-3**

will introduce major writers and works of science fiction, including poetry, short stories, novels, and films. Students will examine the genre through its literary history and contexts, its major themes, devices, writers, and adaptation into films. Offered as needed.

**(prerequisite: completion of ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 261 - Fantasy & Mythology (IAI: H9 901) 3-0-3**

will study the nature of mythology through the study of folklore and legendary narratives, themes, archetypal figures/situations, symbolism, and figurative language. Offered as

needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 270 - Literature and the Bible (IAI: H9 900) 3-0-3**

introduces students to the Bible as a literary and historical document and to the use of the Bible by writers of English and American literature. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

**ENGL 280 - Non-Western Literature (IAI: H3 908N) 3-0-3**

is an introduction to literature in English by writers from non-western cultures-Asian, South Asian, African, Caribbean, Middle-Eastern. This meets the non-western course requirements. Offered as needed.

**(prerequisite: eligibility for English 101)**

Applicable toward graduation where program structure permits:

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

## Fire Science

**FIRE 110 - 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

**FIRE 111 - Techniques of Firefighting 1 (Module B) 4-0-4**

is designed to teach and to develop the knowledge and manipulative skills needed by the firefighter. This course includes water supply operations, fire streams, ventilation techniques, rescue operations, emergency medical care, forcible entry techniques, overall operations, and building construction. Offered in Fall.

Applicable toward graduation where program structure permits:

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

**FIRE 112 - Techniques of Firefighting 2 (Module C) 4-0-4**

is designed to expand the knowledge to a higher skill level. This course includes communications, sprinkler systems, salvage operations, fire prevention activities, rope operations, and hazardous materials awareness. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**FIRE 113 - Techniques of Firefighting 3 (Module C Extension) 3-0-3**

is designed to teach, develop, and train the student in the specialized areas of Firefighting 2. This course includes hazardous materials, awareness, terrorism training, firefighter safety and survival, and live firefighting operations. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**FIRE 120 - Fire Prevention Principles 1 3-0-3**

is a course required of eligible candidates pursuing Fire Officer I certification. This course is designed to meet the needs of individuals who are expanding their knowledge about fire department operations within the fire service. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**FIRE 130 - Fire Service Laws and Regulations 3-0-3**

enables the student to acquire a basic knowledge of the laws that directly or indirectly affect the fire service by providing a basic knowledge of methodology through which to



locate, read, and comprehend the various statutes, regulations, and cases that are the framework of the law. Offered 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 140 - Fire Service Instructor-Basic** **3-0-3**

meets the guidelines of the Office of the State Fire Marshal to qualify fire service personnel to conduct training and educational courses for the fire service. This course is designed to give students the knowledge and ability to teach from prepared materials that are predominantly 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

#### **FIRE 170 - Rescue/Roadway Extrication** **t2-2-3**

is designed to develop student skills in the use of extrication techniques needed to perform rescue, extrication, and hazardous control functions. This course qualifies students for state certification as a Roadway Extrication Specialist. Offered in Fall.

Applicable toward graduation where program structure permits:

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

#### **FIRE 200 - Tactics and Strategy** **3-0-3**

is an introduction to the basic principles and methods associated with fire ground operations as required of the company officer. The course emphasizes size-up, fire ground operations, pre-fire planning, and engine company and truck company operations. Offered in Fall.

Applicable toward graduation where program structure permits:

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

#### **FIRE 210 - Tactics & Strategy II** **3-0-3**

is designed for the fire officer who is responsible for commanding a fire or emergency operation involving multiple companies. Areas covered are strategic concepts in firefighting, responsibilities of command officers, multi-company operations, high rise operations, disasters, and critical incident stress. Offered 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

#### **FIRE 220 - Fire Instructor II** **3-0-3**

emphasizes teaching formalized lessons from materials prepared by the instructor including relating information from one lesson or class to the next. This course qualifies the student for certification as Fire Instructor 2. Offered as needed.

Applicable toward graduation where program structure permits:

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

#### **FIRE 230 - Fire Service Hydraulics** **4-0-4**

is designed for those beginning the operation of fire pumps and those who wish to expand their knowledge in pump operations. Practical evolution of pump operations will be performed. This course qualifies the student for certification as a Fire Apparatus Engineer. Offered in Spring.

Applicable toward graduation where program structure permits:

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

#### **FIRE 250 - Hazardous Materials** **3-0-3**

is designed to provide the basic skills needed to evaluate and work defensively at an incident involving the release of hazardous materials. The student will understand the relevance of standard operating guidelines and how they play a role in hazardous materials operations. Offered in Spring.

Applicable toward graduation where program structure permits:

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

#### **FIRE 260 - Fire Investigation** **3-0-3**

covers techniques and procedures for the investigation of fires. This course includes determining the cause and origin of fire, fire behavior, detection of arson, investigation techniques, and the legal aspects of arson investigation. Offered in Fall 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 270 - 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

#### **FIRE 280 - 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 - Fire Service Management III** **3-0-3**

is designed to acquaint the student with the role of the company officer and provides an introduction to organizational management, social service, capital resources, public finance, and public relations. This course is a requirement for Fire Officer II. This course follows all requirements set forth by the Office of the State Fire Marshal. Offered as needed.

Applicable toward graduation where program structure permits:

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

#### **FIRE 286 - Fire Service Management IV** **3-0-3**

is designed to acquaint the student with the role of the company officer and provides knowledge of personnel management, health & safety, labor relations, and information management. This course is a requirement for Fire Officer II and follows all requirements set forth by the Office of the State Fire Marshal. Offered as needed.

Applicable toward graduation where program structure permits:

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

#### **FIRE 297 - Fire Science Technologies (Variable Credit)** **3-0-1 to 3**

offers an introduction to what is current and what is coming in fire science practice and technology. Specific topics will change to reflect the state of the art. Three credit hours may be used as directed electives in the AAS Fire Science Degree. Offered as needed.

**(prerequisite: firefighting experience or previous Fire Science course recommended)**

Applicable toward graduation where program structure permits:

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



## French

### **FREN 101 - 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.

Together with FREN 102, 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 as needed.

Applicable toward graduation where program structure permits:

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

### **FREN 102 - Beginning French 2** **4-0-4**

is a continuation of FREN 101. Offered as needed.

**(prerequisite: FREN 101 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

### **FREN 111 - Conversational French** **3-0-3**

is an introduction to conversational French skills with intensive oral practice in listening and speaking. The communicative approach in instructions will emphasize repetitions for natural language acquisition, conversational patterns, idiomatic vocabulary, basic grammar and syntax, cultural information, and selected readings. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **FREN 201 - Intermediate French 1** **4-0-4**

includes readings in French, intensive aural-oral practice, and review of grammar and writing skills. Offered as needed.

**(prerequisite: FREN 102 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

### **FREN 202 - Intermediate French 2 (IAI: H1 900)** **4-0-4**

is a continuation of FREN 201, with increased attention to composition and conversation. Offered as needed.

**(prerequisite: FREN 201 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

## German

### **GERM 101 - Beginning German 1** **4-0-4**

includes elementary grammar, pronunciation, and reading of graded texts. The aural-oral approach is utilized toward acquiring skills in speaking, understanding, and reading German. Together with GERM102, it is designed for students with no previous study of German.

Applicable toward graduation where program structure permits:

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

### **GERM 102 - Beginning German 2** **4-0-4**

is a continuation of GERM 101. Offered as needed.

**(prerequisite: GERM 101 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

### **GERM 115 - Conversational German 1** **0-0-3**

includes development of conversational German skills with intensive oral practice in listening and speaking. The communicative approach in instruction will emphasize functional conversational patterns, idiomatic vocabulary, basic grammar and syntax, cultural information, and readings/writing of the script for travel, career development, cultural outreach, or personal enrichment. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **GERM 201 - Intermediate German 1** **4-0-4**

includes reading of intermediate texts (Novellen and essays) and a review of grammar utilizing aural-oral practice in the classroom and laboratory. Offered as needed.

**(prerequisite: GERM 102 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

### **GERM 202 - Intermediate German 2 (IAI: H1 900)** **4-0-4**

is a continuation of GERM 201, with increased attention to composition and conversation. Offered as needed.

**(prerequisite: GERM 201 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

## Health

### **HLTH 040 - Nurse Assistant Competency Skills Assessment** **0-1-0-5**

is designed to assess the basic nursing skills of a certified nursing assistant who has not worked for a period of 8 hours during a 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.

**(prerequisite: student must have completed an approved Basic Nurse Assistant Training program and be listed on the Illinois Health Care Worker Registry.)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates in General Studies except Personal Development
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **HLTH 100 - First Aid Training** **1-0-1**

will train students in lifesaving and first aid techniques. Students will be able to differentiate between emergency care and first aid treatment. Topics to be covered include life-threatening conditions - airway obstruction, shock, asthma, bleeding, diabetes, drowning, electric shock, head injuries, poisoning; non life-threatening conditions - abrasions, minor skin wounds, bites, blisters, bruises, burns, eye injuries, fractures, frostbite, heat exhaustion/stroke; nosebleeds, seizures, splinters, sprains tick bites, tooth emergencies; and written emergency plans and procedures. Offered as needed.

Applicable toward graduation where program structure permits:

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



### **HLTH 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 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

### **HLTH 111 - Introductory Seminar on Alcoholism** **2-0-2**

prepares the alcohol health professional and interested people to deal with the problems of alcoholics. The course includes an overview of alcoholism, pharmacology, the progression of the disease process, and a review of special populations. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates  
in General Studies except Personal Development, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **HLTH 115 - Introduction to Health Careers** **1-0-1**

is designed to train students to become familiar with and learn about the many allied health occupations and the organizational structure within the health care delivery system. Students will learn about various career descriptions, educational requirements, job skills, job availability, and career hierarchy. Students will evaluate health careers most suited to their individual interests, abilities, and goals. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **HLTH 120 - Wellness and Healthful Living** **3-0-3**

is designed to provide students with concepts and skills for wellness and healthful living. Students will learn about past and current health trends, as well as new health discoveries that will have an effect on health care in the future. The course covers the topics of physical health, emotional health, intellectual health, nutrition, social health, relationships, communicable diseases, substance abuse, emergency care, death and dying, community health programs, and environmental issues relating to optimal health. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **HLTH 130 - Phlebotomy** **4-3-5**

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 in Fall and Spring.

**(prerequisite: high school diploma or GED certificate, eligibility for MATH 091, eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **HLTH 140 - Medical Terminology** **3-0-3**

focuses on vocabulary used in medicine, nursing, and other allied health occupations. Students will learn structures, functions, and terms related to diagnosis, pathology, and treatments for each body system. This course is recommended for students entering any Health Professions program. Student cannot receive credit for both HLTH 140 and OT 140. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

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

### **HLTH 141 - Nurse Assistant Training** **6-4-8**

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 in Fall, Spring, and Summer.

**(prerequisite: meet eligibility requirements for admission to the College, be at least 16 years of age, and successfully complete Nurse Assistant reading pre-test or demonstrate 8th grade reading level by an approved exam. All students who register for the program must complete the Illinois Healthcare Worker Background Check-Uniform Conviction Information Act (Public Act#89-197).)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates  
in General Studies except Personal Development, AAS, ALS
- Group Requirement - Not Applicable
- Area of Concentration - Basic Certificate in Development

### **HLTH 197 - Special Topics in Healthcare (Variable Credit)** **1-0-1 to 3**

enables the student to explore a topic of special interest in healthcare. The course provides an opportunity to explore a new area of interest. A student may enroll in and receive credit up to four times for this course to have an opportunity to emphasize a different area during each enrollment. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

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

### **HLTH 220 - Nutrition and Diet Therapy** **3-0-3**

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.

**(prerequisite: completion of ENGL 090 with a grade of "C" or above, or tested out of ENGL 090)**

Applicable toward graduation where program structure permits:

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

### **HLTH 297 - Advanced Topics in Healthcare (Variable Credit)** **1-0-1 to 3**

enables the student who is or has been enrolled in a health professions course or who is a graduate of a health professions program an opportunity to explore a topic of special interest in health care. Students will build on prior learning and apply knowledge and concepts learned in other courses as they explore new/expanded topics. A student may enroll in and receive credit for this course up to four times to have an opportunity to emphasize a different area during each enrollment. Offered in Fall, Spring, and Summer.

**(prerequisite: permission of the instructor)**

Applicable toward graduation where program structure permits:

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

## **Health Information Technology**

### **HIT101 - Intro to Hlth Information Technology** **3-0-3**

focuses on the roles of the health information manager; the content, function, structure and uses of health information; and how health information is managed. It looks at the environment in which HIT professionals work, essentially, the U.S. healthcare delivery system. It will also introduce concepts and principles of organization and supervision at the HIT level. 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





### **HIT115 - Computers in Healthcare** 3-0-3

introduces information technology concepts and provides a broad view of how IT supports the functions of healthcare delivery. This course will help students conceptualize the various components necessary for development of a total health information system. Offered in Spring.

**(prerequisite: CIS 110)**

Applicable toward graduation where program structure permits:

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

### **HIT190 - Coding Professional Practice Exp** 1-3-2

provides students with coding practices in a hospital, physician office, claims payer, ambulatory clinic or other healthcare setting with directed projects common to a clinical coding specialist on the job. It is a 40-hour professional practice experience. Offered as needed.

**(prerequisite: HIT 101, OT 143, OT 243)**

Applicable toward graduation where program structure permits:

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

### **HIT195 - Coding Workplace Simulation** 1-3-2

designed to give students the opportunity to apply their technical coding skills, demonstrate learning and thinking skills and to develop individual resourcefulness. The student will work independently to complete a minimum of 40 hours of authentic coding. Students will use a logic-based encoder and coding reference software. Offered as needed.

**(prerequisite: HIT 101, OT 143, OT 243)**

Applicable toward graduation where program structure permits:

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

### **HIT210 - Advanced ICD-10 Coding** 2-2-3

Students will build on their knowledge of International Classification of Diseases, 10th edition (ICD-10) code assignments and conventions. Students will gain an understanding of prospective payment system applications such as Medicare Severity Diagnostic Related Groups (MS-DRGs). Students will code complex case studies using records and resources from the American Health Information Management Association's (AHIMA) Virtual Lab. Offered in Fall.

**(prerequisite: OT 143)**

Applicable toward graduation where program structure permits:

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

### **HIT215 - Electronic Health Records** 2-2-3

covers the key elements of the electronic health record (EHR) planning and implementation process. This course will cover EHR history, trends, and common pitfalls. Students will learn to develop a migration pathway to implementation and ongoing management of EHR related systems. Learning will take place through lecture and hands-on applications. This course will also introduce students to health information exchange (HIE) and personal health records (PHR). Offered in Fall.

**(prerequisite: HIT 115)**

Applicable toward graduation where program structure permits:

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

### **HIT220 - Classifications & Indexing Systems** 2-2-3

covers standard classifications, taxonomies, nomenclatures, terminologies and clinical vocabularies in the health information environment. This course will also provide an introduction to data set and data interchange standards related to electronic health records. Students will also cover non-acute care prospective payment systems such as Skilled Nursing Facility Resource Utilization Groups (RUGS) and Home Health Resource Groups (HHRG). This course will provide students the opportunity to build on their knowledge of CPT coding as a classification system through the use of real-world case studies. Offered in Fall.

**(prerequisite: OT 243)**

Applicable toward graduation where program structure permits:

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

### **HIT240 - Quality Improvement in Healthcare** 3-0-3

covers trends in healthcare quality control and performance. It serves as solid source on Performance Improvement (PI) foundations, fundamentals and core principles. It will reinforce understanding of performance improvement concepts and issues with case studies and real-world scenarios. Offered in Fall.

**(prerequisite: HIT 101)**

Applicable toward graduation where program structure permits:

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

### **HIT245 - Health Info Law & Ethics** 3-0-3

helps students understand the legal issues of health records, electronic health records (EHRs) and Health Insurance Portability and Accountability Act (HIPAA). It will address topics critical to effective health information management (HIM) practice, including privacy, security, confidentiality, ethical issues and legal policies and procedures. The course will focus on procedures involved in court disclosure of medical records, laws pertaining to release of information from medical records and medical record requirements for accrediting, approving, licensing and certifying agencies. Offered in Spring.

**(prerequisite: HIT 101)**

Applicable toward graduation where program structure permits:

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

### **HIT290 - HIT Professional Practice Exp** 1-10-3

provides students with hands-on experience in applying their knowledge to a variety of health information technology procedures. Students will gain valuable insight into the role of the health information professional. The professional practice experience will include admission and discharge procedures, collection of health and vital statistics, coding and abstracting, following up on incomplete records, tumor registry, release of information and utilization review. This experience may be located in one or more diverse settings such as long-term care, hospital, correctional facility, ambulatory care, psychiatric and/or drug rehabilitation. The student will also take a mock Registered Health Information Technologist (RHIT) exam, which will constitute part of the course grade. This course is a 120-hour professional practice internship and lecture. Offered as needed.

**(prerequisite: sophomore standing and a minimum completion of 45 credit hours toward the Health Information Technology degree or approval from the Health Information Technology full-time faculty)**

Applicable toward graduation where program structure permits:

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

## **Heating, Ventilation, Air Conditioning**

### **HVAC 100 - Refrigeration Fundamentals** 3-0-3

focuses on safety hazards, principles of refrigeration physics, temperature and pressure measurement, heat content, composition of refrigerants, refrigeration compressors, metering devices, and refrigerant recovery techniques. Offered in Fall.

Applicable toward graduation where program structure permits:

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

### **HVAC 102 - Refrigeration Applications** 2-2-3

concentrates on applying the fundamentals learned in Refrigeration Fundamentals. Emphasis is on refrigerant recovery, pressure testing, evacuation, proper system charging, and acquisition of certification in the E.P.A. Section 608 refrigerant management laws. Offered in Fall.

**(prerequisite: HVAC 100 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

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

### **HVAC 106 - Tools & Piping** 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

### **HVAC 130 - Electricity Fundamentals** 2-2-3

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

### **HVAC 132 - Control Applications** **2-2-3**

Covers 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.

**(prerequisite: HVAC 130)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 140 - Troubleshooting Air Conditioning Systems** **2-2-3**

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.

**(prerequisite: HVAC 132 or ENGT 111; and HVAC 102 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 202 - Residential and Self-Contained Refrigeration** **2-2-3**

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.

**(prerequisite: HVAC 140 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 204 - Commercial Refrigeration** **2-2-3**

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.

**(prerequisite: HVAC 202 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 206 - Troubleshooting Refrigeration Systems** **2-2-3**

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.

**(prerequisite: HVAC 102 and HVAC 132)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 230 - Motors and Controls** **2-2-3**

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.

**(prerequisite: HVAC 132)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 240 - Residential Air Conditioning** **2-2-3**

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.

**(prerequisite: HVAC 140 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 242 - Residential Heating Systems** **2-2-3**

Explores procedures and principles used in the service of residential heating systems, emphasizing the heating properties, combustion, burners, controls, ignition systems, safety and operating controls, installation, venting combustion, air & troubleshooting for both gas-fired and electric furnaces. Offered in Fall.

**(prerequisite: HVAC 132 or ENGT 111)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 250 - Commercial Air Conditioning** **2-2-3**

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.

**(prerequisite: HVAC 132 or ENGT 111 and HVAC 140 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 252 - Commercial Heating Systems** **2-2-3**

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.

**(prerequisite: HVAC 242 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HVAC 290 - Work Experience and Seminar** **1-10-3**

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.

**(prerequisite: minimum completion of 45 credit hours toward the HVAC degree)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable



### **HVAC 295 - Workplace Simulation & Project** 1-10-3

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.

**(prerequisite: HVAC 140 and sophomore standing)**

Applicable toward graduation where program structure permits:

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

## History

### **HIST 101 - United States to 1877 (IAI: S2 900)** 4-0-4

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - History, Social Science

### **HIST 102 - United States since 1877 (IAI: S2 901)** 4-0-4

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - History, Social Science

### **HIST 105 - History of Illinois** 3-0-3

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - History, Social Science

### **HIST 111 - European Civ to Reformation (IAI: H2 901)** 4-0-4

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **HIST 112 - European Civ: The Modern Era (IAI: H2 902)** 4-0-4

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **HIST 201 - Or & Dev of Imp China & Japan (IAI: H2 903N)** 4-0-4

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **HIST 202 - Modern East Asia (IAI: H2 903N)** 4-0-4

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **HIST 203 - The History of Women in America** 3-0-3

is a multicultural survey of the roles, experiences, and problems of American women from the colonial period to the present. The course will cover such topics as the images and ideals of womanhood, nineteenth-century feminism, the Victorian woman and female sexuality, women at work, women at war, suffrage movement, and the new feminism. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - History

### **HIST 270 - History of Non-Western Civilization: China (IAI: H2 903N)** 4-0-4

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **HIST 271 - History of Japan (IAI: H2 908)** 4-0-4

is an introduction to the history of the Japanese people, their social and cultural systems, politics, and economy, from the earliest time to the mid-twentieth century. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **HIST 290 - Selected Topics in History** 3-0-3

deals with a particular topic in History. The topic is specified in the subtitle of the course listed in the class schedule. It is specifically designed to address topics that necessitate a broader scope, a greater depth, and a fuller assimilation of the course methods and materials. The student may take this course three times for credit as long as a different topic is selected. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS and ALS only)
- Area of Concentration - Not Applicable

## Horticulture

### **HORT 100 - Horticulture Science (IAI: AG 205)** 3-2-4

provides a general background in horticulture plant growth and development. Areas include the production, utilization, and marketing of fruits, vegetables, ornamentals, floriculture, landscaping, turf, and nursery. Offered in Fall.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural Science (AAS and ALS only)



Area of Concentration - Agriculture

### **HORT 110 - Turf Management** **2-2-3**

emphasizes general types of turf grasses, their growth habits, and the establishment of turf. Fertilizers, diseases, insects, weeds, and some turf equipment are included. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 115 - Soils & Fertility** **2-2-3**

covers the chemical properties of fertilizers, types, production and use in relation to soil properties, environmental conditions, crop requirements, applications, and economic factors of liming and nutrient applications. Students will be introduced to basic principles of soil formation, texture, structure, moisture and organic matter and how soils and fertility relates to agriculture and horticulture practices. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 116 - Sustainable Agriculture Fundamentals** **2-2-3**

provides a clear perspective on the principles, history and practices of sustainable agriculture in our local and global communities. Students will be introduced to the economic, environmental and social impacts of agriculture. Upon completion, students should be able to identify the principles of sustainable agriculture as they relate to basic production practices. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 120 - Landscape Plant Identification** **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

### **HORT 121 - Landscape Design Principles** **2-2-3**

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.

(prerequisite: HORT 120)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 125 - Integrated Pest Management** **2-2-3**

emphasizes the building and maintaining of healthy soil, plant and insect biological cycles as the key to pest and disease management. Course content includes study of major pests and diseases, including structure, life cycle, and favored hosts; and biological and least toxic methods of chemical control. Upon completion, students should be able to identify and recommend control methods of selected insects and diseases. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 126 - Small Scale Livestock Management** **2-2-3**

covers the integration of livestock as part of a sustainable farming system with emphasis on small-scale production for niche markets and pasture. Topics included are breed selection, nutrition and living requirements for livestock such as goats, hogs, sheep, poultry, rabbits and honey bees. Upon completion, students should recognize appropriate breeds for their farm needs and demonstrate knowledge of small-scale livestock production. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 128 - Small Farm Equipment** **2-2-3**

is a study of farm machinery and agricultural equipment for the small farm. Topics include selection and operation of tractors, material handling equipment, tillage and harvesting equipment and irrigation systems. Upon completion, students should be able to identify equipment parts and explain the basic principles of machinery operation and management. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 145 - Floral Design Principles** **2-2-3**

introduces students to the principles of design applied to floral arrangements, including color, forms, and lines, balance, types of floral arrangements, floral materials and accessories, and production techniques. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Agriculture

### **HORT 146 - Contemporary Floral Design** **2-2-3**

applies the principles of form, style, and composition to the design of silk and dry floral arrangements. Offered in Spring.

(prerequisite: HORT 145)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 200 - Perennial Plant Material** **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

### **HORT 202 - Vegetable Crop Production** **2-2-3**

includes summer sustainable crop production practices, including vegetables and culinary herbs. Topics include variety selection, production methods and record keeping procedures. Students will actively participate in their learning experience by working on Richland's Student Farm, participating in the production, harvesting, and distribution of sustainable crop products. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 211 - Horticulture Mechanics** **2-2-3**

covers topics related to the maintenance and operation of turf equipment. Offered in Spring.

(prerequisite: HORT 110 or previous turf experience)

Applicable toward graduation where program structure permits:

Certificate or Degree - Turf Grass Management

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 215 - Landscape Design Applications** **2-2-3**

introduces students to a comprehensive and practical application of landscape design skills. Students will learn design applications involving computer aided design, landscape photo imaging, plant selection, site-plan analysis, cost estimating and proposal presentation. Offered in Fall.

(prerequisite: HORT 120, HORT 121, HORT 221 or consent of instructor)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 221 - Landscape Construction** **2-2-3**

emphasizes the techniques and materials used in landscape construction. Students will



also learn to use standard practices in estimating the costs of landscape construction projects. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 225 - Tree & Shrub Maintenance** 2-2-3

studies the techniques of ornamental tree and shrub care, including plant biology, planting and transplanting, pruning, fertility, pest control, and equipment use and safety. On completion, the student should be able to properly prune trees and shrubs and perform arboriculture practices. Offered in Fall.

(prerequisite: HORT 120)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Agriculture

### **HORT 226 - Fruit Production** 2-2-3

covers the science and practice of growing, harvesting, handling, storing, processing, and marketing of fruits. Crops include apples, pears, peaches, blackberries, raspberries, strawberries, grapes, and other fruits commonly grown in the area. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 230 - Greenhouse Operations** 2-2-3

includes a study of greenhouse construction and operation. Special emphasis is given to temperature, light, soils, gases, nutrition, and the growth of bedding plants. Offered in Fall.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 231 - Bedding and Plant Production** 2-2-3

introduces students to identification and commercial production of bedding plants. Offered in Spring.

(prerequisite: HORT 230)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 235 - Small Farm Business Management** 2-2-3

introduces hands-on techniques and procedures for planning and opening a small business, including the personal qualities needed for entrepreneurship. Emphasis is placed on market research, finance, time management, and day-to-day activities of owning/operating a small farm business. Offered in Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 245 - Sympathy Design Techniques** 2-2-3

focuses on sympathy floral tributes and the proper mechanics for construction of these specialty designs. Etiquette, business management, and delivery will also be discussed. Offered in Fall.

(prerequisite: HORT 145)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 246 - Wedding Flowers** 2-2-3

applies the principles of form, style, and composition to the design of bridal arrangements and theme development. Offered in Spring.

(prerequisite: HORT 145)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 290 - Work Experience Practicum & Seminar** 1-10-3

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.

(prerequisite: minimum completion of 30 credit hours toward a Horticulture degree or approval from Horticulture faculty)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **HORT 295 - Workplace Simulation & Project** 1-10-3

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.

(prerequisite: minimum completion of 30 credit hours toward a Horticulture degree or approval from the Horticulture faculty)

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**

### **HOSP 110 - Food Service Sanitation** 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, cleanliness of facilities and equipment, sanitation and the customer, personnel training, and detailed procedures for self-inspection by the food service manager. 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

## **Humanities**

### **HUMAN100 - Introduction to the Arts (IAI: HF 900)** 3-0-3

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.

(prerequisite: eligibility for ENGL 101)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Humanities, Fine Arts

Area of Concentration - Not Applicable

### **HUMAN104 - Intro to Latin American Culture and Civilization (IAI: HF 904N)** 3-0-3

is an interdisciplinary survey of the significant intellectual and artistic achievements of several non-Western cultures through selected works of literature, philosophy, visual art, music and other performing arts, as well as a comparative examination of their values, motifs and aesthetics with those of Western cultural expression. This meets the non-western course requirements. Offered as needed.

(prerequisite: eligibility for ENGL 101)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Humanities, Fine Arts

Area of Concentration - Not Applicable

### **HUMAN106 - Cultures of the Islamic Middle East (IAI: HF 904N)** 3-0-3

explores the people and cultures of Sub-Saharan Africa through discussion and texts focusing on areas of research such as major forms of subsistence, social and religious organization, ecology, geography, language, music, and art. Africa's historic realities and traditional cultures will be analyzed with an eye toward continuity and change within the impact of colonization, westernization, modernization, and globalization. Offered as needed.

(prerequisite: eligibility for ENGL 101)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Humanities, Fine Arts

Area of Concentration - Not Applicable

### **HUMAN107 - People and Cultures of Sub Saharan Africa (IAI: HF904N)** 3-0-3

explores the people and cultures of Sub-Saharan Africa through discussion and texts focusing on areas of research such as major forms of subsistence, social and religious organization, ecology, geography, language, music, and art. Africa's historic realities and traditional cultures will be analyzed with an eye toward continuity and change within the impact of colonization, westernization, modernization, and globalization. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities, Fine Arts
- Area of Concentration - Not Applicable

**HUMAN201 - Humanities Honors Seminar(IAI: HF 900) 3-0-3**

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.

**(prerequisite: completion of or concurrent enrollment in ENGL 101, either admission to the Honors Opportunities Program or a 3.0 GPA, and permission of the instructor)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities, Fine Arts
- Area of Concentration - Not Applicable

**HUMAN280 - Interdisciplinary Field Experience in the Humanities 3-0-3**

offers students travel opportunities 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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Humanities/Fine Arts (AAS and ALS only)
- Area of Concentration - Art/Drama/English/Humanities/Fine Arts/Music/Philosophy

## Information Technology

**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 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

**IT 120 - Spreadsheet Applications 2-2-3**

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.

**(prerequisite: CIS 110 or OT 116 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 130 - Word Processor Applications 2-2-3**

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.

**(prerequisite: CIS 110 or OT 114 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 131 - Programming Logic 2-2-3**

is an introduction to the program development and design process, including computer-based concepts of problem-solving, structured programming logic and techniques, algorithm development and program design. Topics include program flowcharting, algorithms, input/output techniques, control structures (sequence, selection/decision, and repetition/looping), modularization, procedures/functions/methods, file handling, control breaks, pseudocoding, and user documentation. Basic concepts of object-oriented programming are also introduced (classes and objects). Course offers students an opportunity to apply skills in a laboratory environment. Offered in Fall. (Visual Logic and Visio 2007)

Applicable toward graduation where program structure permits:

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

**IT 141 - Networking Fundamentals 2-4-4**

provides foundational education in local networking and internetworking, as well as specific training using Cisco technology. This is the first of four preparatory courses for the Cisco Certified Network Associate (CCNA) exam. Topics include networks and layered communications, network service layers of OSI model, networking device, IP addressing, basic routing protocols, media and network design, topology, structured cabling, electrical issues in networking, IP addressing, IP address subnetting, and basic network management. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**IT 151 - Internet Technologies 2-2-3**

presents the student with an introduction to the Internet and its services, applications, and tools. Topics include Internet history, a survey of Internet-based facilities and applications (e.g., e-mail, web browsers, file transfer utilities, list servers, etc), and Web-based research and information resources. The World Wide Web service is emphasized, and basic Web page creation with HTML is introduced. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**IT 153 - Web Development 2-2-3**

introduces students to the fundamentals of web site creation. Students will develop, manage, and maintain professional web sites using HTML, XHTML and Cascading Style Sheets. The complete production process including pre-production planning, layout and design considerations (including site maps and navigation), testing, uploading and implementing the site, maintenance and applicable legal and ethical issues are covered. Professional web design software and production tools are used for graphics development, image manipulation, and page/site layout in the hands-on laboratory exercises. Offered in Spring.

**(prerequisite: student must possess fundamental computer skills in a Windows environment or approval of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 173 - A+ Computer Technologies 2-4-4**

prepares a student for the A+ Certification exam. The course covers computer architecture, memory, storage, printers, local area networks, operating systems and troubleshooting techniques. 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

**IT 205 - Help Desk Techniques 2-2-3**

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.

**(prerequisite: IT 105 and CIS 110)**

Applicable toward graduation where program structure permits:

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

**IT 210 - Presentation Graphic Applications 2-2-3**

presents students with presentation graphics techniques using MS PowerPoint. Students learn how to design a professional slideshow, format text, change background color, rotate, crop, and size graphics, create design templates, incorporate graphics and sound, create column and organization charts, create diagrams, hyperlinks and buttons, create automatic presentations, change transitions, add animations, integrate data from other programs, present a slide show, and use online collaboration. This course is designed for those students pursuing training in office productivity software and/or MOUS certificate preparation. Offered in Fall.

**(prerequisite: CIS 110 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 220 - Data Management Applications 2-2-3**

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.

**(prerequisite: CIS 110 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 221 - Database Design Using SQL 2-2-3**

is an introductory course on database concepts, design, and implementation. This course incorporates both theoretical concepts and the practical application of those concepts through lectures, text assignments, case studies and projects. The course content focuses on the three phases of database design: logical design, physical implementation, and application development. Students will learn how to analyze a business problem, model data flow, create a conceptual Entity-Relationship model of a database to solve the problem and develop the database application using modern software tools. Students will participate in project teams to resolve the final case project. Microsoft Visio will be used as the modeling software and Microsoft Access will be used as the relational database management software in this course. As a second-year course, IT 221 requires that a student possess fundamental computer skills in a Windows environment. This is not an entry-level course. Offered in Spring.

Applicable toward graduation where program structure permits:

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

**IT 230 - Project Management 2-2-3**

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.

**(prerequisite: CIS 110 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 241 - Network Routing Technologies 2-4-4**

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.

**(prerequisite: IT 141 with a grade of "C" or better)**

Applicable toward graduation where program structure permits:

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

**IT 242 - Wireless Networking 2-2-3**

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.

**(prerequisite: IT 141 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 243 - Network Switching Technologies 2-4-4**

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.

**(prerequisite: IT 241 with a grade of "C" or better or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 244 - Wide Area Networks 2-4-4**

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.

**(prerequisite: IT 243 with a grade of "C" or better)**

Applicable toward graduation where program structure permits:

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

**IT 245 - Network Security 2-2-3**

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.

**(prerequisite: IT 141 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

**IT 246 - Voice Over IP Fundamentals 2-2-3**

introduces the student to the technologies used to implement and support data and voice integration solutions. Through lectures, demonstrations, textbook exercises and classroom labs, students will learn how to implement basic IP telephony, IP phone installation, router configurations, and feature sets using Cisco IP Communications Express. Students will also learn troubleshooting techniques that are valuable for the maintenance of the VOIP environment. Offered in Fall.

**(prerequisite: IT 141 or consent of the full-time Information Technology instructor.)**

Applicable toward graduation where program structure permits:

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

**IT 271 - Windows Server Operating Systems 2-2-3**

introduces the student to the fundamentals of implementing, administering, and troubleshooting Windows Network Operating Systems (NOS). Based on a typical



heterogeneous WAN with multiple servers, students will learn strategies and skills in planning network protocols, server hardware, installation of server operating systems, server configuration, Active Directory implementation, storage configuration, backup maintenance, managing clients through groups and accounts, security management, configuring Internet and intranet services, and network troubleshooting. The materials used in this course prepare the student for Microsoft's server certifications. This course contains a lab component that provides students with the opportunity to apply their knowledge through hands-on learning in real-world case study exercises. Offered in Spring.

**(prerequisite: IT 116 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

#### **IT 273 - Managing Windows Networks** **2-2-3**

is an intermediate-level course that introduces the student to the theory and skills involved in installing, configuring, monitoring and troubleshooting Windows Server 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 server certifications. Students will have an opportunity to apply their knowledge through hands-on projects and case study assignments. Offered in Fall.

**(prerequisite: IT 271 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

#### **IT 280 - Advanced Systems Development** **3-2-4**

is a course in advanced programming techniques designed to prepare students for large-scale program and system design and implementation. Topics include single and multi-dimensional array processing, string manipulation, exception handling, sorting and searching techniques, on-line/interactive programming, subprogramming and program linkage, program verification and complexity analysis, advanced file processing, multiple form usage, comprehensive file updating involving both sequential and random access, and database linkage and manipulation. Intensive lab experiences are involved to code large-scale programs with both COBOL and Microsoft Visual Basic programming languages. Offered in Spring.

**(prerequisite: CS 161 and CS 230)**

Applicable toward graduation where program structure permits:

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

#### **IT 282 - Dynamic Web Development** **2-2-3**

presents the student with a comprehensive introduction to Dynamic HTML client-side website development using scripting (JavaScript, VBScript, and ActionScript) and coding to enhance the performance and functionality of a website. Particular attention is given to client-side applications of JavaScript and ActionScript (via Flash applications). An introduction to AJAX (Asynchronous JavaScript and XML) will also be presented. Students will also be given an opportunity to utilize website development tools including web-authoring, graphics, and multimedia tools. Students will learn to use these tools to add new functionality and design flare to their websites. This course requires the student to build multiple web pages and implement at least one major website design. Offered in Fall.

**(prerequisite: student must possess fundamental computer skills in a Windows environment or approval of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

#### **IT 284 - Web Programming** **2-2-3**

presents the student with a comprehensive introduction to web programming technologies including CGI/Perl, Active Server Pages (ASP), PHP, C#, JavaApplets, Asynchronous JavaScript and XML (AJAX), ActionScript, and Web databases to enhance the performance and functionality of a website. This course requires the student to build multiple WebPages and implement at least one major website design that interacts with a database. Particular attention is given to server-side applications. Offered in Spring.

**(prerequisite: IT 282 or consent of full-time Information Technology instructor)**

Applicable toward graduation where program structure permits:

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

#### **IT 285 - Systems Analysis and Design** **2-4-4**

is an intermediate-level course that introduces the student to a practical approach to information technology and systems development. Students will learn how to use the Systems Development Life Cycle (SDLC) model to translate business requirements into information systems that support a company's short-and long-term objectives. Real-world case studies and assignments teach analytical, 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.

**(prerequisite: sophomore standing and a minimum completion of 45 credits hours toward an IT degree, or approval from the full-time Information Technology faculty)**

Applicable toward graduation where program structure permits:

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

#### **IT 290 - Work Experience Practicum** **1-10-3**

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 as needed.

**(prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an IT degree, or approval from the full-time Information Technology faculty)**

Applicable toward graduation where program structure permits:

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

#### **IT 295 - Workplace Simulation & Projects** **1-10-3**

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.

**(prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an IT degree or approval from the full-time Information Technology faculty)**

Applicable toward graduation where program structure permits:

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

#### **IT 297 - Emerging Technologies** **3-2-2**

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 once 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**

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.

**(prerequisite: eligibility for ENGL 101 and typing ability)**

Applicable toward graduation where program structure permits:

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

#### **JOURN102 - News Reporting** **3-0-3**

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.

**(prerequisite: JOURN 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS, AA, AS
- Group Requirement - Not Applicable





Area of Concentration - Journalism

### **JOURN110 - Introduction to Mass Media (IAI: MC 911) 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Journalism, Communication

### **JOURN220 - Introduction to Television Production 2-2-3**

is an introduction to television production, including terminology, basic script writing, and direction, audio, lighting, camera operation, and video editing. Course will examine program types, television criticism, and creative treatment of visual, artistic, and non-verbal elements of communications in television. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Journalism, Communication

### **JOURN221 - Introduction to Radio Production 2-2-3**

examines workings of radio stations, coupled with hands-on experience in audio production techniques, operation of related equipment and systems, and sales and management. Radio production protocol, terminology, script writing, and editing will be studied to produce commercials, public service announcements, features, and news casting in a studio setting. Offered as needed.

**(prerequisite: completion of ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Journalism, Communication

### **JOURN222 - Radio/TV Broadcasting 2-2-3**

includes topics such as voice and diction, microphone training, news presentations, interviewing, commercial delivery, and ad-lib announcing. Time will also be spent on basic radio formats. Offered as needed.

**(prerequisite: completion of COMM 101 with a "C" or better)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Journalism, Communication

### **JOURN224 - Radio Sportscasting 2-2-3**

will prepare students to do radio broadcasts of sports events. Equipment operation, knowledge and terminology of various sports, research, and career and economic aspects of the industry will prepare for effective on-air broadcasts, including sports reports, interviews, and play-by-play announcing. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Journalism, Communication

## Leadership

### **LEAD 150 - Leadership Development 3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

## Leadership Development

### **LDEV 110 - Leadership Development 3-0-3**

is designed to help students develop leadership skills and techniques within a group setting. Students will explore various styles of leadership and learn about parliamentary procedure (Robert's Rules of Order). Offered as needed.

Applicable toward graduation where program structure permits:

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

### **LDEV 111 - Community Leadership 3-0-3**

will emphasize a holistic review and development of the critical aspects of leadership, linking its personal and professional dimensions, to broaden knowledge and skills, and to develop a style of positive, functional and visionary leadership for work, the community, state, nation, and the world. Classes will be held in numerous community settings in interaction with professionals and community leaders and with active engagement of students in lectures, discussions and applied practice. Topics will include collaborative management, marketing strategies, effective communications, innovation, finance and development strategies, politics, career assessment, civic engagement, global and intercultural diversity, conflict management, and personal wellness. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and 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 a prerequisite.

## **MATH 087 - General Mathematics Skills** **3-2-4**

is designed to teach basic operations with whole numbers, fractions, and decimals. The concepts of estimation, rounding off, percents, ratio and proportion, and measurement are discussed. Problem solving and simple average problems will be introduced. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

- Certificate or Degree - Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

## **MATH 090 - Pre Algebra** **4-0-4**

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.

**(prerequisite: both of the following: (1) MATH 087 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL 101 or concurrent enrollment in ENGL 090)**

Applicable toward graduation where program structure permits:

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

## **MATH 091 - Basic Algebra** **4-0-4**

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.

**(prerequisite: both of the following: (1) MATH 090 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

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

## **MATH 091A - Basic Algebra-Part 1** **2-0-2**

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 as needed.

**(prerequisite: both of the following: (1) MATH 090 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

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

## **MATH 091B - Basic Algebra-Part 2** **2-0-2**

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 as needed.

**(prerequisite: MATH 091A with a "C" or better grade)**

Applicable toward graduation where program structure permits:

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

## **MATH 095 - Basic Geometry** **4-0-4**

introduces topics such as lines and plane and solid figures with concepts of congruence, similarity, symmetry, and logic. Offered in Fall, Spring, and Summer.

**(prerequisite: both of the following: (1) MATH 091 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

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

## **MATH 096 - Developmental Mathematics** **0-8-4**

is designed for students who have placed into a developmental mathematics sequence.

Topics include whole numbers, fractions, mixed numbers, decimals, estimation, rounding, measurement, area the real number system, order of operations, elementary spatial geometry, first degree equations, signed numbers, integer exponents, graphing, products and quotients of algebraic expressions, radicals, quadratic equations, scientific notation, ratio problems, percent, variation, polynomials, rational expressions, inequalities, problem solving, complex numbers, systems of equations, functions, relations, and logarithms. Students taking this course receive individualized instruction in reaching their mathematics placement goals. This course is repeatable up to three times. Offered in Fall, Spring, and Summer.

**(is designed for students who have placed into a developmental mathematics sequence except MATH 095. This course is repeatable up to three times.)**

Applicable toward graduation where program structure permits:

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

## **MATH 098 - Intermediate Algebra** **4-0-4**

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.

**(prerequisite: all of the following: (1) MATH 091 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

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

## **MATH 098A - Intermediate Algebra-A** **2-0-2**

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 as needed.

**(prerequisite: all of the following: (1) MATH 091 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

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

## **MATH 098B - Intermediate Algebra-B** **2-0-2**

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 as needed.

**(prerequisite: MATH 098A with a "C" or better grade)**

Applicable toward graduation where program structure permits:

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

#### **MATH 104 - Technical Mathematics** **4-0-4**

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 and Spring.

**(prerequisite: both of the following: (1) MATH 091 with a "C" or better grade or satisfactory score on the mathematics placement exam and (2) eligibility for ENGL 101 or concurrent enrollment in ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS
- Group Requirement - Mathematics
- Area of Concentration - Engineering Technology, Drafting, HVAC, Fire Science, Automotive Technology, Information Technology, Welding

#### **MATH 106 - Mathematics for Health Careers** **2-0-2**

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 and Spring.

**(prerequisite: eligibility for MATH 091)**

Applicable toward graduation where program structure permits:

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

#### **MATH 110 - Concepts of Mathematics (IAI: M1 904)** **4-0-4**

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 and Spring.

**(prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

#### **MATH 111 - Math for Elem Sch Teaching 1** **4-0-4**

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.

**(prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

#### **MATH 112 - Math for Elem Sch Teaching 2 (IAI: M1 903)** **4-0-4**

is a continuation of MATH 111. Topics include geometry and geometric figures, probability and statistics, graphing, measurement, and basic computer literacy. Students are introduced to some of the current literature, innovations, methods, and proposals for the modern elementary mathematics curriculum. A graphing calculator is required. Offered in Spring.

**(prerequisite: MATH 111 with a "C" or better grade or equivalent competencies and eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Mathematics

Area of Concentration - Teacher Education:Elementary

#### **MATH 113 - Introduction to Applied Statistics (IAI: M1 902)** **4-0-4**

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 and Spring.

**(prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, and (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

#### **MATH 116 - College Algebra** **4-0-4**

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 and Spring.

**(prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

#### **MATH 117 - Trigonometry** **3-0-3**

helps students develop skills sufficiently to write and use the definition of trigonometric functions; sketch the graph of the trigonometric functions; prove identities; solve trigonometric equations; learn and then apply the law of the sines and cosines; learn how to write a complex number in trigonometric form and find all the roots of a complex number; learn polar coordinates system and the graphs of some simple equations in polar; learn about conic sections (rectangular & polar), vector (applications & operations), and the exponential and logarithmic functions with applications and modeling. A graphing calculator is required. Offered in Fall and Spring.

**(prerequisite: all of the following: (1) MATH 098 with a "C" or better grade or satisfactory score on the mathematics placement exam, (2) MATH 095 with a "C" or better grade or one year of high school geometry, and (3) eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

#### **MATH 121 - Calculus & Analytic Geometry 1 (IAI: M1 900-1, MTH 901)** **5-0-5**

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 and Spring.

**(prerequisite: successful completion of both MATH 116 with a "C" or better grade and MATH 117 with a "C" or better grade or satisfactory score on the mathematics placement exam)**

Applicable toward graduation where program structure permits:

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

#### **MATH 122 - Calculus & Analytic Geometry 2 (IAI: M1 900-2, MTH 902)** **4-0-4**

includes the different methods of integration. Students study transcendental functions, L'Hopital'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.

**(prerequisite: MATH 121 with a "C" or better grade or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

#### **MATH 160 - Finite Mathematics for Business and Social Sciences (IAI: M1 906) 4-0-4**



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 and Spring.

**(prerequisite: MATH 116 with a "C" or better grade or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

#### **MATH 170 - Introduction to Statistics (IAI: M1 902.BUS 901) 4-0-4**

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 and Spring.

**(prerequisite: MATH 160 with a "C" or better grade)**

Applicable toward graduation where program structure permits:

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

#### **MATH 171 - Concepts of Statistics (IAI: M1 902.BUS 901) 4-0-4**

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 and Spring.

**(prerequisite: MATH 116 with a "C" or better grade)**

Applicable toward graduation where program structure permits:

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

#### **MATH 190 - Calculus for Business & Social Science (IAI: M1 900-B) 4-0-4**

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 Spring.

**(prerequisite: successful completion of MATH 116 with a "C" or better grade or satisfactory score on the mathematics placement exam)**

Applicable toward graduation where program structure permits:

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

#### **MATH 210 - Discrete Mathematics 4-0-4**

provides an overall view of mathematics for students whose primary interests are in computer science and mathematics. The course is designed to fulfill requirements for computer science and mathematics majors preparing to transfer to a four-year institution. This course focuses on mathematical reasoning and the solving of real-life problems rather than on routine skills. Mathematical modeling and projects are included as part of the course. Offered as needed.

**(prerequisite: MATH 121 with a "C" or better grade or concurrent enrollment)**

Applicable toward graduation where program structure permits:

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

#### **MATH 221 - Calculus & Analytic Geometry 3 (IAI: M1 900-3, MTH 903) 4-0-4**

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.

**(prerequisite: MATH 122 with a "C" or better grade or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

#### **MATH 230 - Differential Equations (IAI: MTH 912) 4-0-4**

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.

**(prerequisite: MATH 122 with a "C" or better grade or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

#### **MATH 240 - Introduction to Linear Algebra 3-0-3**

is an introductory course in vectors, matrices, vector spaces, and linear transformations. The concepts discussed in this course not only serve as an introduction to the more abstract courses a mathematics or engineering student meets at the junior-senior level but also have many useful applications outside of mathematics. The course begins with a review of algebra, followed by a study of vectors, vector spaces and subspaces, linear transformations, linear dependence and independence, basis and dimension, rank of a matrix, kernel and range, eigenvalues and eigenvectors, diagonalization, and applications of concepts covered in an introductory linear algebra course. If time permits, the student will learn additional topics such as least squares fitting to data, applications to differential equations, angle and orthogonality in inner product spaces, and quadratic surfaces. Offered as needed.

**(prerequisite: successful completion of MATH 122 with a "C" or better grade)**

Applicable toward graduation where program structure permits:

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

## Music

#### **MUSIC100 - Music Appreciation (IAI: F1 900) 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 and Degrees
- Group Requirement - Fine Arts
- Area of Concentration - Music

#### **MUSIC101 - 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 Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Music

#### **MUSIC102 - Class Piano 2 2-0-2**

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.

**(prerequisite: MUSIC 101 or consent of the instructor)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and 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 correlated with the rhythmic, melodic, and harmonic activity. Offered as needed.

Applicable toward graduation where program structure permits:

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

#### **MUSIC104 - Theory and Ear Training 2 3-2-4**

is a continuation of MUSIC 103 and provides instruction in the rudiments of music: scales, intervals, triads; rhythm and melody in singing, writing, playing, and dictation;



diatonic harmony including analysis and part writing; and sight singing and ear training correlated with the rhythmic, melodic, and harmonic activity. Offered as needed.

**(prerequisite: MUSIC 103)**

Applicable toward graduation where program structure permits:

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

### **MUSIC105 - Music Fundamentals** **3-0-3**

includes basic principles of interpreting and understanding the language of music. Introduces study of notation, meter and rhythm, scales, keys, intervals, triads, basic forms, musical terms, and introduction to keyboard. (Designed for pre-teaching and non-music majors, or music major with insufficient background in theory.) Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Fine Arts (AAS and ALS only)
- 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 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 Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Music

### **MUSIC123 - Jazz Band** **0-5-1**

is preparation and performance of a variety of jazz literature to develop abilities in reading and listening to music and to provide an opportunity for instrumentalists with some background to perform in a jazz combo. Jazz music techniques and improvisation, musical role awareness, and interpretation of lead sheets will be emphasized. Registration will be subject to an audition. This course may be repeated for credit a maximum of three times. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **MUSIC150 - Class Guitar 1 (pending ICCB approval)** **2-0-2**

introduces guitar playing basics and techniques, including chords, conventional strumming, finger picking, and notes in first positions, tuning, note reading, melody playing, arpeggio study, and melody and accompaniment type textures along with the proper sitting positions, hand positions, and nail care. Students will practice basic musicianship to discover ways to interpret musical ideas and play various classical and selected popular, unaccompanied guitar styles.

- Applicable toward graduation where program and structure permits:
- Certificate or Degree - All Certificates and All Degrees

Group Requirement - Not Applicable

Area of Concentration - Music

### **MUSIC180 - Non-Western Music(IAI: F1 903N)** **3-0-3**

explores the basic elements of music (melody, rhythm, harmony, and form) and perceptive listening as they relate to non-Western music. Examines the music culture of non-Western societies. This meets the non-western course requirements. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **MUSIC190 - Introduction to American Music(IAI: F1 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 as needed.

Applicable toward graduation where program structure permits:

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

### **MUSIC192 - Rock and Roll** **3-0-3**

will study a survey of the styles and personalities in popular music from the 1950's to the present. Included will be discussions of the concepts and aesthetics of popular music, as well as comparisons of rock styles, genres, and stylistic traits with other musical forms. The development of rock music, its multicultural roots, its connections with the other arts, and interrelationships with the political and economic conditions of its time will be explored. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **MUSIC200 - Computer Aided Music Composition** **3-0-3**

uses structured projects in instrumental composition based on studies using specific compositional techniques to establish abilities in counterpoint, harmony, and instrumentation in historical and contemporary idioms, and develop awareness of new ideas and aesthetics. Theory, techniques, and ideas will be applied toward the development of a personal methodology of composition, while establishing a focused pattern of experimentation. Offered as needed.

**(prerequisite: MUSIC 103, completion or concurrent enrollment in MUSIC 104, or consent of instructor)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Fine Arts (AAS and ALS only)
- Area of Concentration - Music

### **MUSIC201 - Class Piano 3** **2-0-2**

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.

**(prerequisite: MUSIC 102 or consent of the instructor)**

Applicable toward graduation where program structure permits:

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

### **MUSIC202 - Class Piano 4** **2-0-2**

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.

**(prerequisite: MUSIC 201 or consent of the instructor)**

Applicable toward graduation where program structure permits:

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

## **Nursing**



### **NURS 111 - Introduction to Nursing** **1-0-1**

is a self-esteem and introspective course that will help students to understand their own personal strengths and skills capabilities so they can be better prepared for success in the nursing program. Team building exercises, time management, and test taking skills are introduced in this class. Offered in Fall and Spring.

**(prerequisite: admission to Associate Degree Nursing Program)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **NURS 112 - Medical-Surgical Nursing I Concepts Basic to Nursing Practice** **6-9-9**

describes the roles of the ADN graduate as member of the healthcare team, provider and manager of care, and member of the profession. This course introduces and utilizes the program's conceptual framework for nursing practice: nursing, individual, environment, health, nursing process, critical thinking, communication, professionalism, legal/ethical concepts, teaching, and learning, systems theory, stress, adaptation, responses to illness, and caring. It outlines the role of the nurse in promoting, maintaining, and restoring health and in assisting clients and families with adaptation to health problems. Respect for diversity is fostered. Accountability and commitment to excellence in nursing skills for meeting needs related to safety, principles of mobility, fluid and electrolytes, ambulation, nutrition, elimination, medication administration, asepsis, and infection control are the goals. Clinical experiences involving adult health care consumers and hospitals require outside class and clinical preparation and provide nursing experience. Offered in Fall and Spring.

**(prerequisite: completion of NURS 111 and completion of or concurrent enrollment in BIOL 201, PSYCH 110, and ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **NURS 152 - Psychiatric Mental Health Nursing** **2-6-4**

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.

**(prerequisite: completion of NURS 112 and completion of or concurrent enrollment in NURS 154, NURS 155, PSYCH 145, BIOL 202)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **NURS 154 - Pharmacological Principles for Nursing Practice** **3-0-3**

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.

**(prerequisite: must be accepted into the ADN or LPN nursing program, or have current LPN licensure, or approval of the Nursing Program Director.)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **NURS 155 - Medical-Surgical Nursing II Care of the Chronically Ill Client** **3-6-5**

focuses on the use of the nursing process and critical thinking to manage adult clients with chronic and increasingly complex alterations in neurological, oncological, immune, hematological, endocrine and musculoskeletal functioning in medical health care delivery systems. Students will function in the roles of healthcare team member, provider of care, and manager of care. Clinical experience will be in oncology, acute phase of chronic illness, home health, and hospice care. Students will develop insight about the effects of chronic illness on an aging population as it relates to nursing roles and the health care delivery systems. Oncology and Home Health rotations will be included as an observational experience. Offered in Fall and Spring.

**(prerequisite: completion of NURS 112 and completion of or concurrent enrollment in NURS 152, NURS 154, PSYCH 145, BIOL 202)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **NURS 203 - LPN Bridge Course** **6-0-6**

presents the philosophy of Associate Degree Nursing and provides the nursing knowledge, cognitive and clinical skills from NURS 112, 152, and 155 that allows the transition of LPNs into the Associate Degree Nursing program. The class will be conducted in three modules. Module I (3 credit hours) focuses on the nursing process, critical thinking, the teaching and learning process, physical assessment, fluid and electrolytes, acid base, and transition from the LPN to RN role. Module II (2 credit hours) will be the management of the chronically ill adult patient. The management of the psychiatric patient and corresponding modalities will be covered in Module III (1 credit hour). All students are required to take Module I. Results of the HESI pre-tests determine which other modules must be completed. A student scoring 850 or better on the HESI pre-tests and paying the appropriate fee for proficiency by exam, will be awarded credit for NURS 152 and NURS 155. Upon successful completion of this course and paying the appropriate fee for credit by advanced placement, student will receive credits for NURS 112, NURS 152, and/or NURS 155 depending on the modules successfully completed. Credits: 6 hours. Offered in Fall and Spring.

**(prerequisite: Admission to LPN-Bridge Program.)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable



### **NURS 206 - Family Health Nursing** **4-6-6**

examines issues relevant to the promotion of sexual and reproductive health throughout the life span and the management of developmental needs and health problems that may occur from infancy through adolescence. Then nursing process and critical thinking are applied to the management of clients and families 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.

**(prerequisite: completion of NURS 152, NURS 154, NURS 155, and completion of, or concurrent enrollment in NURS 250, BIOL 220, SOCIO 110, or admission to the LPN Bridge Program)**

Applicable toward graduation where program structure permits:

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

### **NURS 250 - Medical-Surgical III Care of the Surgical Client** **3-6-5**

focuses on the nursing management of clients experiencing surgery and the management of cell injury, inflammation, fluids and electrolytes. The nursing process, critical thinking, and systems theory are applied in the management of clients with alterations in the integumentary, urinary, and gastrointestinal systems. Students will demonstrate the roles of healthcare team member, provider of care and coordinator of patient care. Clinical nursing and physical assessment skills will be emphasized. Clinical experiences provide opportunities to use the nursing process, communication, critical thinking, and decision making in caring for adults in hospital settings. Offered in Fall and Spring.

**(prerequisite: completion of NURS 152, NURS 154, NURS 155, and completion of or concurrent enrollment in NURS 206, BIOL 220, SOCIO 110, or admission to the LPN Bridge Program)**

Applicable toward graduation where program structure permits:

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

### **NURS 252 - Medical-Surgical IV Care of the Acutely Ill Client** **3-6-5**

nursing process, systems theory, and critical thinking are applied in the management and care of adult clients with acute alterations in the respiratory, cardiovascular, integumentary (burns), and the neurological system. Physical assessment and advanced nursing skills will be emphasized. The student will demonstrate the roles of health care team member, healthcare provider, and manager of care. Clinical experiences provide opportunities to use the nursing process, critical thinking, communication, and decision-making in caring for adult clients who are acutely/critically ill. Offered in Fall and Spring.

**(prerequisite: completion of NURS 206, NURS 250, BIOL 220, SOCIO 110, and completion of or concurrent enrollment in NURS 254, Fine Arts elective, and HLTH 197/297)**

Applicable toward graduation where program structure permits:

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

### **NURS 254 - Transition from Education to Practice** **3-9-6**

introduces nursing students to the work setting by involving them in as many situations common to everyday clinical practice as possible while providing support and guidance from a nurse preceptor and instructor. Students work one eight-hour day and/or evening shift per week, provide direct care to a group of clients, and manage care given by other health care workers. The course presents concepts and issues pertinent to the effective entry into nursing practice. Students are prepared to perform in their expected role in regard to leadership, time management, and patient care management. The concepts of conflict management, accountability, quality assurance, employment, the health care delivery systems, diagnosis-related groups, and legal/ethical issues are also discussed. Opportunities and challenges related to lifelong learning and professional responsibilities are identified. Offered in Fall and Spring.

**(prerequisite: completion of NURS 206, NURS 250, BIOL 220, and SOCIO 110 and completion of or concurrent enrollment in NURS 252, Fine Arts elective, and HLTH 197/297)**

Applicable toward graduation where program structure permits:

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

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.

**(Note: no previous keyboarding skills required. Recommended course for Business, Information Technology, and Office Technology students and all students needing keyboard skills.)**

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** **0-2-1**

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.

**(prerequisite: touch-keyboarding skills of 20 net words a minute)**

Applicable toward graduation where program structure permits:

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

### **OT 113 - Editing and Proofreading** **3-0-3**

review basic errors dealing with capitalization, plurals, possessives, punctuation, statistical and technical information, and grammar. Proofread and edit realistic business documents such as e-mail messages, newsletters, itineraries, expense reports, letters, memorandums, databases, and spreadsheets. Offered in Spring.

**(prerequisite: OT 114 and OT 119)**

Applicable toward graduation where program structure permits:

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

### **OT 114 - Word Processing & Presentation** **2-2-3**

prepares students to learn and develop efficient skills in producing business and personal documents using Microsoft Word concepts and applications. Students learn to create, edit, print, and maintain documents in a computerized word processing environment. Speed and accuracy development are stressed. PowerPoint is introduced with an emphasis on creating, editing, formatting, modifying and refining a presentation, and inserting text from a Word document. Student must demonstrate typing speed of 35 NWAM with five or fewer for five minutes errors to pass this course. Offered in Fall and Spring.

**(prerequisite: touch-key minimum skills of 25 NWAM for five minutes with five or fewer errors.)**

Applicable toward graduation where program structure permits:

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

### **OT 116 - Database Applications** **2-2-3**

introduces students to computer and software applications. Students will be introduced to the Windows operating system and basic spreadsheet features of Excel focusing on designing and creating spreadsheets, entering data, and editing data. Students will also be introduced to the database management features of Access used in designing, creating, saving, editing, sorting, querying, and preparing and printing reports. Offered in Spring.

**(Access and Excel 2007)**

Applicable toward graduation where program structure permits:

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

### **OT 118 - Introduction to Medical Transcription** **2-2-3**

prepares students for the medical transcription curriculum. Computer skills such as saving and transferring files, autotext, and autocorrect will be covered. The Book of Style is utilized in this course so students can become familiar with guidelines for medical transcription including formatting medical records, acceptable abbreviations in the medical field, drug terminology, grammar, and acceptable editing. Students will also be required to download medical transcription CDs to prepare them for Transcription 1. Offered in Fall.

Applicable toward graduation where program structure permits:

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

### **OT 119 - Business English** **3-0-3**

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

## Office Technology

### **OTK100 - Keyboarding** **0-2-1**



advancing in any business or technical career. Offered in Fall and Spring.

**(prerequisite: eligibility for ENGL 090 and ENGL 097)**

Applicable toward graduation where program structure permits:

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

#### **OT 120 - Business Communications** **3-0-3**

applies standard English to business communication documents. While completing written assignments using electronics technology, students become proficient in organizing and composing business letters, memorandums, reports, and e-mail messages. The course also includes an overview of oral, interpersonal, and intercultural business communication. Offered in Spring.

**(prerequisite: OT 114 (or concurrent enrollment) and OT 119)**

Applicable toward graduation where program structure permits:

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

#### **OT 140 - Medical Terminology** **3-0-3**

designed to provide the student with knowledge of the meaning of word parts, pronunciation, correct spelling of medical terms, along with some anatomy. Special emphasis is placed on the medical terminology as it relates to the human body. Students cannot receive credit for both OT 140 and HLTH 140. To transfer to Richland, the course must have been completed at an AHDI (Association for Healthcare Documentation)-accredited institution and must have been completed within the previous five (5) years from the time of transfer. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

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

#### **OT 141 - Anatomy and Physiology Fundamentals** **3-0-3**

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. To transfer to Richland, the course must have been completed at an AHDI (Association for Healthcare Documentation)-accredited institution and must have been completed within the previous five (5) years from the time of transfer. Offered in Fall and Spring.

**(prerequisite: OT 140 or HLTH 140)**

Applicable toward graduation where program structure permits:

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

#### **OT 142 - Medical Transcription 1** **0-6-3**

involves transcription of medical reports dictated by real physicians. Beginning, intermediate, and advanced dictation is transcribed. Students will transcribe approximately 15 hours of dictation, which includes chart notes, history and physical examinations, consultations, operative reports, discharge summaries, radiology and pathology reports. This course will build upon the previous study of medical terminology, anatomy, and English courses with in-depth coverage of English usage, editing, grammar, punctuation, spelling, and formatting techniques for medical records. In Transcription 1, students will transcribe reports from the following body systems: dermatology, ENT, ophthalmology, pulmonary, cardiology, gastroenterology, and endocrine. To transfer to Richland, the course must have been completed at an AHDI (Association for Healthcare Documentation)-accredited institution and must have been completed within the previous five (5) years from the time of transfer. Offered in Fall and Spring.

**(prerequisite: OT 118, OT 141 (or concurrent enrollment))**

Applicable toward graduation where program structure permits:

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

#### **OT 143 - Basic ICD-10 Coding** **2-2-3**

provides an overview of ICD-10-CM/PCS coding. Students will gain an understanding of the organization and format of the ICD-10-CM/PCS manual, coding conventions, guidelines, and basic steps in coding. This course will cover coding application for diseases and procedures in each body system. After a review of the coding guidelines for each body system, students will code assigned patient scenarios/medical reports using their ICD-10-CM/PCS code book. Offered in Spring.

**(prerequisite: OT 141 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

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

#### **OT 150 - Records Management** **3-0-3**

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.

**(prerequisite: OT 114 (or concurrent enrollment) and OT 116)**

Applicable toward graduation where program structure permits:

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

#### **OT 160 - Office Accounting** **3-0-3**

emphasizes the use of accounting in keeping financial records with special emphasis on the income, statement of owner's equity, and balance sheet. The course also covers payroll calculations, banking procedures, and petty cash operations. Offered in Spring.

Applicable toward graduation where program structure permits:

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

#### **OT 170 - Professional Office Procedures** **3-0-3**

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.

**(prerequisite: OT 114 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

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

#### **OT 205 - Voicing & Transcription** **2-2-3**

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.

**(prerequisite: OT 113, OT 114, and OT 119 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

#### **OT 210 - Statistical Keyboard Entry** **2-2-3**

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.

**(prerequisite: minimum touch-typing speed of 35 NWAM for five minutes with five or fewer errors)**

Applicable toward graduation where program structure permits:

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

#### **OT 215 - Document Production** **2-2-3**

emphasizes formatting and keying complex business documents using integration of Microsoft Word, Excel, Access, and PowerPoint. Speed and accuracy in the production of documents are emphasized. Offered in Fall.

**(prerequisite: IT 120 and IT 130)**

Applicable toward graduation where program structure permits:

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

#### **OT 230 - Legal Terminology and Writing** **2-2-3**

is a specialized course designed to acquaint students with legal terminology, definitions, and formatting of legal documents. Offered in Spring.

**(prerequisite: OT 114 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

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

#### **OT 232 - Legal Procedures** **3-0-3**

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.

**(prerequisite: OT 230 or equivalent competencies)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS





Group Requirement - Not Applicable  
Area of Concentration - Not Applicable

#### **OT 240 - Pharmacology Fundamentals 3-0-3**

provides an introduction to the principles of pharmacology and therapeutic use of drugs. Emphasis is placed on examination of body systems and the related drug therapy to treat diseases within each system. Medication actions, dosage forms, routes of administration, and adverse effects are covered. To transfer to Richland, the course must have been completed at an AHDI (Association for Healthcare Documentation)-accredited institution and must have been completed within the previous five (5) years from the time of transfer. Offered in Fall and Spring.  
**(prerequisite: OT 140 or HLTH 140 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

#### **OT 242 - Medical Transcription 2 0-6-3**

is an extension of Medical Transcription I. Students will continue to develop skills in transcribing actual physician dictation. Approximately 15 hours of beginning, intermediate, and advanced dictation are transcribed. Specialties covered include urology, OB/GYN, orthopedics, psychiatry, neurology, pathology, and radiology. To transfer to Richland, the course must have been completed at an AHDI (Association for Healthcare Documentation)-accredited institution and must have been completed within the previous five (5) years from the time of transfer. Offered in Fall and Spring.  
**(prerequisite: OT 142 with grade of "C" or better)**

Applicable toward graduation where program structure permits:

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

#### **OT 243 - Basic CPT Coding 2-2-3**

provides an overview of CPT coding. Students will gain an understanding of the organization and format of the CPT manual, coding conventions, guidelines, modifiers, E&M coding, and coding procedures in each body system. After a review of coding guidelines for each body system, students will code assigned patient scenarios/medical reports using their CPT code book. Offered in Fall.  
**(prerequisite: OT 141 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

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

#### **OT 244 - Interpreting Healthcare Records 2-2-3**

provides students with a deeper understanding of the structure and content of medical records. Students will utilize critical thinking and research skills to solve case studies, decipher medical records, as well as proofread and edit history and physicals, consultation reports, operative reports, and discharge summaries. Significance of electronic health records, HIPAA requirements, medicolegal terminology, as well as researching human diseases, x-rays, and scans, and laboratory tests/values are covered. To transfer to Richland, the course must have been completed at an AHDI (Association for Healthcare Documentation)-accredited institution and must have been completed within the previous five (5) years from the time of transfer. Offered in Fall and Spring.  
**(prerequisite: OT 140 or HLTH 140 and OT 141)**

Applicable toward graduation where program structure permits:

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

#### **OT 245 - Reimbursement Principles in Healthcare 2-2-3**

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.  
**(prerequisite: OT 140 or HLTH 140)**

Applicable toward graduation where program structure permits:

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

#### **OT 248 - Pathophysiology 3-0-3**

provides an introduction to the study of diseases. Students will understand chronic, acute, localized, and systemic disease processes including etiology, signs, symptoms, and prognosis. The predisposition of certain diseases based on heredity, baseline health status, and coexisting factors such as the use of medications, caffeine, tobacco, and alcohol will be discussed. Genetics and diseases that affect the human body throughout the life cycle will be explored; building upon concepts utilized in OT 241. Offered in Fall and Spring.  
**(prerequisite: OT 141 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable  
Area of Concentration - Not Applicable

#### **OT 290 - Work Experience Practicum & Seminar 1-10-3**

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.

**(prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an OT degree, or approval from the full-time Office Technology faculty. Students must also pass the typing requirement of 50 NWAM for five minutes with five or fewer errors prior to taking this course)**

Applicable toward graduation where program structure permits:

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

#### **OT 295 - Workplace Simulation & Project 1-10-3**

is a capstone course designed to give students the opportunity to apply their technical skills and ability to work successfully in the workforce, to demonstrate learning and thinking skills, and to develop individual resourcefulness. The student will have an opportunity to work independently and as a team member on a specific project(s) under the guidance of a faculty mentor. Students must demonstrate a typing speed of 50 NWAM for five minutes with five or fewer errors to pass this course. Offered as needed.  
**(prerequisite: sophomore standing and a minimum completion of 45 credit hours toward an OT degree, or approval from the full-time Office Technology faculty)**

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 - Seminar in College and Life Skills** **1-0-1**

provides motivation, access to inner resources as well as college and community resources, and specific, practical study skills and coping strategies to help each student take control of his or her lifelong self-education and personal development, which can lead to personal and academic success. Offered in Spring.

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 C DEV 112 and P DEV 109, 110, and/or 111.) Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

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

### **P DEV110 - Career Exploration** **0-2-0.5**

provides the individual with an opportunity to explore his or her interests, values, abilities, and other significant factors as they relate to vocational choice and the world of work. Various tests, career materials, guest speakers, and group discussion sessions are used to assist the individual in making educational and career plans. (Students may not receive credit for C DEV 112 and P DEV 109, 110, and/or 111.) Offered as needed.

Applicable toward graduation where program structure permits:

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

### **P DEV111 - Job Preparation** **1-0-1**

is designed to teach effective job search techniques to students. Students prepare a resume, and cover letter, prepare for an interview, practice interviewing skills, and organize a job search. The course includes a review of current job search literature. (Students may not receive credit for C DEV 112 and P DEV 109, 110, and/or 111.) Offered as needed.

Applicable toward graduation where program structure permits:

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

## Personnel Relations

### **P REL100 - Human Relations** **3-0-3**

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.

**(prerequisite: successful completion of OT 119 or eligibility for ENGL 101)**

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 REL110 - 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 as needed.

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

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.

**(prerequisite: acceptance into Pharmacy Technology Program and co-enrollment in PHRMT152 and Math 106)**

Applicable toward graduation where program structure permits:

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

### **PHRMT152 - Pharmacy Calculations (formerly HLTH 152)** **2-0-2**

is designed for students in the Pharmacy Technology program to learn the essential mathematics concepts and skills used on the job in a pharmacy. Offered in Fall.

**(prerequisite: acceptance into the Pharmacy Technology Program, [with a grade of "C" or above] and co-enrollment in PHRMT150 and Math 106)**

Applicable toward graduation where program structure permits:

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

### **PHRMT155 - Pharmacy Technician (formerly HLTH 155)** **6-0-6**

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.

**(prerequisite: completion of PHRMT150, PHRMT 152, and MATH 106, with a grade of "C" or above)**

Applicable toward graduation where program structure permits:

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

### **PHRMT156 - Pharmacy Technician Work Experience (formerly HLTH 156)** **1-3-2**

provides students the opportunity to apply the knowledge and skills learned in Pharmacology and Pharmacy Technician courses to the workplace. The students are assigned to complete a rotation of work experiences in several working environments available to a pharmacy technician. This course assists the student with transition from school to work. Offered in Spring.

**(prerequisite: PHRMT 150, MATH 106 and PHRMT 152 with a grade of "C" or above, completion of or co-enrollment in PHRMT155 and PHRMT157)**

Applicable toward graduation where program structure permits:

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

### **PHRMT157 - Pharmacy Technician Certification Review (formerly HLTH 157)** **1-0-1**

is designed to prepare the student who has completed the pharmacy technician course to take the national certification examination. Offered in Spring.

**(prerequisite: completion of [with a grade of "C" or above] or co-enrollment in PHRMT155 and PHRMT156)**

Applicable toward graduation where program structure permits:

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

## Pharmacy Technology

### **PHRMT150 - Pharmacology (formerly HLTH 150)** **4-0-4**



# Philosophy

## **PHIL 100 - Critical Thinking**(IAI: H4 906) **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities  
Area of Concentration - Philosophy

## **PHIL 106 - African-American Churches in America** **3-0-3**

will examine the socio-historical origins, theology, and practice of the African Americans' religious experience. The relationship between social issues and religiosity will be explored, along with the political and socio-cultural aspects of churches, their evolution in form and structures, major religious leaders, and the churches' impact on the community and the nation. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities (AAS and ALS only)  
Area of Concentration - Philosophy, African-American Studies

## **PHIL 110 - Introduction to Philosophy**(IAI: H4 900) **3-0-3**

surveys the major methods and systems of philosophy through discussion of questions such as what is really real, what is truth, does God exist, why is evil in the world, and how should moral issues be resolved. Students are encouraged to formulate their own answers to such questions through reading, discussion, and logical argument. Offered in Fall and Spring.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities  
Area of Concentration - Philosophy

## **PHIL 120 - Introduction to Ethics**(IAI: H4 904) **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities  
Area of Concentration - Philosophy

## **PHIL 200 - Symbolic Logic** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities (AAS and ALS only)  
Area of Concentration - Philosophy

## **PHIL 210 - Introduction to World Religions**(IAI: H5 904N) **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities  
Area of Concentration - Philosophy

## **PHIL 215 - Asian Philosophy**(IAI: H4 903N) **3-0-3**

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. This meets non-western course requirements. Offered in Spring and Summer.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities  
Area of Concentration - Philosophy

## **PHIL 220 - Current Issues in Ethics** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities (AAS and ALS only)  
Area of Concentration - Philosophy

## **PHIL 230 - Philosophy of Religion**(IAI: H4 905) **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Humanities  
Area of Concentration - Philosophy

# Physical Education

## **P ED 100 - 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:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Not Applicable  
Area of Concentration - Not Applicable

## **P ED 110 - Personal Fitness** **0-2-1**

is a class designed to emphasize the student's body development based on his or her abilities and fitness goals. The course uses stationary bicycles, treadmills, and stairclimbers along with universal weight machines and free weights. Repeatability - 3 times. Offered in 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 - Not Applicable

## **P ED 114 - Golf - Beginners** **0-2-1**

is an activity course designed to provide instruction in the basic skills used in the playing of golf. Special emphasis is placed on rules interpretation, terminology, and practice using the various clubs. Repeatability - 3 times. Offered as needed.

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Not Applicable  
Area of Concentration - Not Applicable

## **P ED 160 - Beginning Swimming** **0-2-1**

is designed to aid the non-swimmer in acquiring such fundamental skills as floating, treading water, bobbing, elementary crawl strokes, and the elementary backstroke. Offered as needed.

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Not Applicable  
Area of Concentration - Not Applicable

## **P ED 161 - Intermediate Swimming** **0-2-1**

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.

**(prerequisite: PED 160 or equivalent swimming skills as evaluated by the instructor)**

Applicable toward graduation where program structure permits:  
Certificate or Degree - All Certificates and Degrees  
Group Requirement - Not Applicable  
Area of Concentration - Not Applicable

## **P ED 162 - Advanced Swimming** **0-2-1**



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.

**(prerequisite: PED 161 or equivalent swimming skills as evaluated by the instructor)**

Applicable toward graduation where program structure permits:

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

#### **P ED 163 - Lifeguard Training** **0-2-1**

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.

**(prerequisite: PED 162 or equivalent swimming skills as evaluated by the instructor)**

Applicable toward graduation where program structure permits:

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

#### **P ED 214 - Golf - Intermediate** **0-2-1**

is designed to continue to develop the fundamental skills necessary to swing a golf club and to apply those skills strategically to improve play on the golf course. Repeatability - 3 times. Offered as needed.

Applicable toward graduation where program structure permits:

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

#### **P ED 215 - Wilderness Camping** **0-4-2**

provides, beginning with preparatory handouts and readings intended to familiarize the student with the skills, risks, and regulations associated with wilderness camping, a general overview of trip planning, equipment and clothing selection and packing, along with food selection and packaging. Field work will provide for hands-on learning experiences in primitive camping skills, food preparation, wilderness safety and survival, map reading, and backpacking. Repeatability - 3 times. Offered as needed.

Applicable toward graduation where program structure permits:

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

## Physical Science

#### **PHY S105 - Physics of Sound and Light (IAI: P9 900L)** **3-2-4**

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 as needed.

**(prerequisite: eligibility for ENGL 101 and successful completion of MATH 091 [with a "C" or better grade] or equivalent competencies)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural/Physical Science
- Area of Concentration - Not Applicable

## Physics

#### **PHYS 100 - Physics of the Modern World (IAI: P1 901)** **4-0-4**

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 in Fall and Spring.

**(prerequisite: eligibility for ENGL 101 and successful completion of MATH 091 [with a "C" or better grade] or equivalent competencies)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural/Physical Science
- Area of Concentration - General Science

#### **PHYS 101 - Introduction to Physics 1 (IAI: P1 900L)** **3-2-4**

is the first physics laboratory course introducing students to contents and methods useful for careers in engineering, bio-medicine, physics, or mathematics. It is an algebra-based study of the physical world, covering topics such as mechanics, matter,

work, energy, rotational dynamics, and sound. Student experiments in the laboratory are used to illustrate the concepts studied in the lecture and practiced in the problems. This course is also a useful introduction for students who have not had physics in high school but who plan to take the engineering physics sequence starting with PHYS 151. Offered in Fall, Spring, and Summer.

**(prerequisite: successful completion of MATH 098 [with a "C" or better grade] or equivalent competencies and eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural/Physical Science
- Area of Concentration - General Science

#### **PHYS 102 - Introduction to Physics 2** **3-2-4**

is the second laboratory course introducing students to contents and methods useful for careers in bio-medicine, physics, or mathematics. It is an algebra-based study of the physical world, covering topics such as electricity and magnetism, optics, wave interactions, and atomic and nuclear physics. Student experiments in the laboratory are used to illustrate the concepts studied in the lecture and practiced in the problems. Offered in Spring.

**(prerequisite: successful completion of PHYS 101 [with a "C" or better grade] or equivalent competencies and eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

#### **PHYS 151 - Mechanics and Wave Motion (IAI: P2 900L)** **3-2-4**

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.

**(prerequisite: MATH 121 or equivalent, MATH 122 or equivalent or concurrent enrollment, and one year of high school physics or PHYS 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural Science (AAS only)
- Area of Concentration - General Science, Physics

#### **PHYS 152 - Electricity and Magnetism** **3-2-4**

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.

**(prerequisite: PHYS 151 or equivalent competencies and MATH 122 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural Science (AAS only)
- Area of Concentration - General Science, Physics



### **PHYS 153 - Thermodynamics and Modern Physics** **3-2-4**

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.

**(prerequisite: PHYS 152 or equivalent competencies and MATH 122 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Natural Science (AAS only)
- Area of Concentration - General Science, Physics

### **PHYS 221 - Reactor Physics 1** **4-0-4**

provides, along with Reactor Physics II, understanding of the basic principles of reactor physics necessary for the safe operation of commercial power-producing reactors. Representative topics include nuclear structure, radiation and radioactive decay, nuclear reactions and neutron interactions, binding energy and the fission process, the six-factor formula, and prompt and delayed neutrons. Offered as needed.

**(prerequisite: MATH 098, PHYS 101, and PHYS 102)**

Applicable toward graduation where program structure permits:

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

### **PHYS 222 - Reactor Physics 2** **4-0-4**

is the second course in a two-part series that provides the understanding of the basic principles of reactor physics necessary for the safe operation of commercial power-producing reactors. Representative topics include neutrons sources in a reactor, subcritical multiplication, coefficients of reactivity, control rods, poisons, and reactor operational physics. Offered as needed.

**(prerequisite: PHYS 221)**

Applicable toward graduation where program structure permits:

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

## 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 Degrees
- Group Requirement - Social Science
- Area of Concentration - Not Applicable

### **POL S110 - American National Government (IAI: S5 900)** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Political Science, Social Science

### **POL S120 - Pol in States and Communities (IAI: S5 902)** **3-0-3**

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 Spring.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science

Area of Concentration - Political Science, Social Science

### **POL S290 - Internship in Political Science/Gov (Variable Credit)** **0-15-1 to 3**

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.

**(prerequisite: eligibility for ENGL 101 and instructor approval)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates, AAS, ALS, AA, AS
- Group Requirement - Social Science
- Area of Concentration - Political Science, Social Science

## Power Generation - Nuclear

### **P GEN101 - Intro to Power Plant Systems 1** **3-2-4**

is the first of a three-course sequence that gives the students an understanding of the function and integrated operation of the power generation systems and safety systems typically found in a commercial nuclear generation facility. This course has two distinct phases: The first phase will be a review of basic steam plant thermodynamic principles. Representative topics are basic thermodynamics, properties of steam, the general energy equation, heat transfer and fluid flow, thermodynamic cycles and cycle analysis and steam turbine and pump theories. The second phase will cover the major steam cycle systems in a boiling water reactor (BWR) nuclear generation facility. Representative topics are main steam system, extraction steam system, main turbine, main condenser, and feedwater delivery system. Offered in Spring.

**(prerequisite: PHYS 101 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

### **P GEN102 - Intro to Power Plant Systems 2** **3-2-4**

is the second of a three-course sequence that gives the student an understanding of the function and integrated operation of the power generation systems and safety systems typically found in a commercial nuclear generation facility. This course has two distinct phases: The first phase is a review of basic electrical theory. Representative topics include direct current and alternating current theory, battery theory, motor/generator theory, transformer theory, and electrical distribution theory. The second phase will cover the major electrical systems found in a boiling water reactor (BWR) nuclear generation facility. Representative topics include main generator, AC and DC electrical distribution, circuit breakers, and protective relaying. Offered in Fall.

**(prerequisite: MATH 117 and PHYS 102)**

Applicable toward graduation where program structure permits:

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

### **P GEN103 - Intro to Power Plant Systems 3** **3-0-3**

is the third in a three-course sequence that gives the student an understanding of the function and integrated operation of the power generation systems and safety systems typically found in a commercial nuclear generation facility. This course will cover the major nuclear steam supply systems (NSSS) and safety systems of a commercial boiling water reactor. Representative topics include reactor vessel and internals, nuclear fuel, reactor core spray, low pressure core spray, residual heat removal, primary and secondary containment, and standby liquid control. Offered in Spring.

**(prerequisite: P GEN102)**

Applicable toward graduation where program structure permits:

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

### **P GEN104 - Intro to Radiation Protection 1** **4-0-4**

provides the basic fundamentals of radiation protection. Topics include physical principles, atomic structure, radioactivity, radiation interactions with matter, sources of radiation, and biological effects of radiation. Offered in Spring.

**(prerequisite: MATH 098 and completion or concurrent enrollment in P GEN101)**

Applicable toward graduation where program structure permits:

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

### **P GEN202 - Intro to Radiation Protection 2** **3-0-3**



is a continuation of Radiation Protection 1. Topics will include discussion of radiation detection instruments, basic dosimetry, dose calculation, federal limits and implementation, power plant radiation analysis (practical problems), and protective clothing and equipment. Offered in Spring.

**(prerequisite: P GEN104)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **P GEN210 - Nuclear Codes-Standards & Regs** 3-0-3

is a review of the documents that contain the requirements governing nuclear plants.

This course will give the student the background needed to use and interpret these documents. Offered in Spring.

**(prerequisite: P GEN103 or concurrent enrollment)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## Practical Nursing

### **PN 101A - Transitions I Introduction to Practical Nursing** 1-0-1

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.

**(prerequisite: admission to the Practical Nursing Program, and completion of or concurrent enrollment in BIOL 202 and NURS 154)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **PN 102A - Wellness Across the Lifespan I** 4-6-6

is the study of basic concepts, principles, and skills that are fundamental to the practice of nursing. Students 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. Students will review the history and roles of the Licensed Practical Nurse, legal and ethical responsibilities, and health team relationships. Students 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.

**(prerequisite: completion of or concurrent enrollment in PN 101A, BIOL 202, and NURS 154)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **PN 103A - Wellness Across the Lifespan II** 2-6-4

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 caregiver, 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.

**(prerequisite: completion of PN 102A and completion of or concurrent enrollment in BIOL 202 and NURS 154)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **PN 104A - Transitions II Trends and Issues** 1-0-1

covers trends in the field of practical nursing regarding education and employment opportunities; preparation for licensure; job evaluation; legal responsibilities and the principles of a management of patient care will also be discussed. The clinical component provides experience in team building and leadership concepts. Offered in Spring.

**(prerequisite: completion of PN 103A and NURS 154)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **PN 105 - Alterations Across the Lifespan I** 4-9-7

facilitates the integration of knowledge from general education, previous PN courses through a focus on the adaptive responses of the both adults and children to external threats during acute and chronic illnesses, as well as decision-making and utilization of the nursing process in delivering care. Nursing focus is on assessment of adaptive responses to internal and external threats during acute illness, as well as decision-making and utilization of the nursing process in delivering care. The nurse demonstrates core values and serves as a caregiver, teacher, communicator, and advocate with growing independence in the care of the patient with acute illness. Behaviors demonstrating the core values are practiced and with growing independence. Supervised clinical experiences in various hospital settings are included. Offered in Spring.

**(prerequisite: grade of "C" or better in PN 104A)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **PN 106 - Alterations Across the Lifespan II** 3-9-6

facilitates the integration of knowledge from general education, previous PN courses through a focus on adaptive responses of both adults and children to external threats during acute and chronic illnesses. The nursing process and critical thinking are used in delivering care with a focus on assessment of adaptive responses to internal and external threats during acute, chronic and terminal illness. The core values, professional standards, and the roles of caregiver, teacher, communicator, and advocate are practiced with increasing independence. Supervised clinical experiences in various hospital settings are included. Offered in Spring.

**(prerequisite: grade of "C" or better in PN 105 and completion of or concurrent enrollment in ENGL 101 and a Special Topics in Healthcare Elective)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **PN 113 - PN Licensure Preparation** 1-0-1

is the concise review of the information necessary to pass the NCLEX-PN licensing examination. This review includes maternity nursing, pediatric nursing, medical/surgical nursing, care of the older adult, pharmacology, nutrition, and psychiatric-mental health nursing. The nursing content has been organized according to the nursing process to enable the student to study according to the patient needs. Test questions and answers with rationales for the correct and incorrect answers are provided for each chapter. Offered in Spring.

**(prerequisite: grade of "C" or better in PN 106, and completion of or concurrent enrollment in ENGL 101 and Special Topics in Healthcare elective)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## Psychology

### **PSYCH100 - 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 Degrees

Group Requirement - Social Science (AAS only)

Area of Concentration - Not Applicable

### **PSYCH110 - Introduction to Psychology (IAI: S6 900)** 3-0-3

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Social Science



Area of Concentration - Psychology, Social Science

**PSYCH130 - Psychology of Gender** **3-0-3**

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 as needed.

**(prerequisite: PSYCH 100 or 110 or equivalent introductory Psychology courses)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Psychology, Social Science

**PSYCH145 - Human Growth & Development (IAI: S6 902)** **3-0-3**

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.

**(prerequisite: PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Psychology, Social Science

**PSYCH150 - Child Psychology (IAI: S6 903)** **3-0-3**

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.

**(prerequisite: PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Psychology, Social Science,  
Teacher Education: Elementary/Secondary

**PSYCH200 - Educational Psychology** **3-0-3**

examines the application of psychological principles to education. Special emphasis is placed on understanding growth and development, the learning process, motivation, intelligence, evaluation, measurement, creativity, and the impact of culture on learning styles. The course requires formal classroom field experience to be arranged with the instructor. A student may not receive credit for both ED 200 and PSYCH 200. Offered as needed.

**(prerequisite: PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Psychology, Social Science,  
Teacher Education: Elementary/Secondary

**PSYCH210 - Social Psychology (IAI: S8 900)** **3-0-3**

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 Spring.

**(prerequisite: PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Psychology, Social Science

**PSYCH220 - Psychology of Death and Dying** **3-0-3**

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.

**(prerequisite: PSYCH 100 or PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Psychology, Social Science

**PSYCH250 - Human Sexuality** **3-0-3**

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 as needed.

**(prerequisite: PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Psychology, Social Science

**PSYCH260 - Theories of Personality** **3-0-3**

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 as needed.

**(prerequisite: PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Psychology, Social Science

**PSYCH280 - Abnormal Psychology (IAI: PSY 905)** **3-0-3**

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 and Spring.

**(prerequisite: PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Psychology, Social Science

## Radiography

**RADT 101 - Introduction to Radiography** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101 and MATH 098; may be currently enrolled in MATH 095)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 102 - Radiologic Patient Care** **3-1-3**

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.

**(prerequisite: admission to the Radiography Program and concurrent enrollment in RADT 108)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 108 - Radiographic Procedures I (Variable Credit)** **2-3-3**

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.

**(prerequisite: admission to the Radiography Program and concurrent enrollment in RADT 102)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 110 - Principles of Radiography I** **3-0-3**

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.

**(prerequisite: completion of RADT 101, RADT 102 and RADT 108 with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 115, RADT 116, RADT 118 and BIOL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 115 - Radiography Clinical I** **0-18-3**

includes content and clinical practice experiences designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Clinical practice experiences provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient preparatory to, during, and following the radiologic procedure. Offered in Fall.

**(prerequisite: completion of RADT 101, RADT 102 and RADT 108 with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 110, RADT 116, RADT 118 and BIOL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 116 - Radiation Physics** **3-0-3**

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.

**(prerequisite: completion of RADT 101, RADT 102 and RADT 108 with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 110, RADT 115, RADT 118, and BIOL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 118 - Radiographic Procedures II** **2-3-3**

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.

**(prerequisite: completion of RADT 101, RADT 102 and RADT 108 with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 110, RADT 115, RADT 116 and BIOL 101)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 120 - Principles of Radiography II** **3-0-3**

is designed to establish a knowledge base in factors governing and influencing imaging. 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.

**(prerequisite: completion of RADT 110, RADT 115, RADT 116, RADT 118 and BIOL 101 with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 125, RADT 126, RADT 128, and BIOL 201)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 125 - Radiography Clinical II** **0-18-3**

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.

**(prerequisite: completion with a grade of "C" or better in RADT 110, RADT 115, RADT 116, RADT 118 and BIOL 101 and concurrent enrollment in or completion with a grade of "C" or better in RADT 120, RADT 126, RADT 128 and BIOL 201)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

#### **RADT 126 - Imaging Equipment** **3-0-3**

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.

**(prerequisite: completion with a grade of "C" or better in RADT 110, RADT 115, RADT 116, RADT 118 and BIOL 101 and concurrent enrollment in or completion with a grade of "C" or better in RADT 120, RADT 125, RADT 128 and BIOL 201)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable





### **RADT 128 - Radiographic Procedures III** 2-3-3

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.

**(prerequisite: completion with a grade of "C" or better in RADT 110, RADT 115, RADT 116, RADT 118 and BIOL 101 and concurrent enrollment in or completion with a grade "C" or better in RADT 120, RADT 125, RADT 126 and BIOL 201)**

Applicable toward graduation where program structure permits:

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

### **RADT 155 - Radiography Clinical III** 0-21-3.5

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.

**(prerequisite: completion with a grade of "C" or better in RADT 120, RADT 125, RADT 126, RADT 128 and BIOL 201)**

Applicable toward graduation where program structure permits:

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

### **RADT 215 - Radiography Clinical IV** 0-24-4

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 Fall.

**(prerequisite: completion with a grade of "C" or better in RADT 155 and concurrent enrollment in or completion with a grade "C" or better in RADT 218, RADT 219 and BIOL 202)**

Applicable toward graduation where program structure permits:

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

### **RADT 218 - Radiographic Procedures IV** 2-3-3

is designed to provide a knowledge base necessary to perform standard radiographic procedures. This course includes positioning for special procedures including arthrography, hysterosalpingography, 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 Fall.

**(prerequisite: completion with a grade of "C" or better in RADT 155 and concurrent enrollment in or completion with a grade "C" or better in RADT 215, RADT 219 and BIOL 202)**

Applicable toward graduation where program structure permits:

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

### **RADT 219 - Radiation Protection & Radiobiology** 2-0-2

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 Fall.

**(prerequisite: completion with a grade of "C" or better in RADT 155 and concurrent enrollment in or completion with a grade of "C" or better in RADT 215, RADT 218, and BIOL 202)**

Applicable toward graduation where program structure permits:

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

### **RADT 225 - Radiography Clinical V** 0-24-4

includes content and clinical practice experiences designed for sequential development, application, critical analysis, integration, synthesis and evaluation of concepts and theories in the performance of radiologic procedures. Through structured sequential, competency-based assignments in clinical setting, concepts of team practice, patient-centered clinical practice and professional development are discussed, examined and evaluated. Clinical practice experiences provide patient care and assessment, competent performance of radiologic imaging and total quality management. Levels of competency and outcomes measurement ensure the well-being of the patient preparatory to, during, and following the radiologic procedure. Offered in Spring.

**(prerequisite: completion of RADT 215, RADT 218, and RADT 219, and BIOL 202 with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 228, RADT 230, ENGL 101, and PSYCH 110)**

Applicable toward graduation where program structure permits:

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

### **RADT 228 - Radiographic Image Analysis** 1.5-0-1.5

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.

**(prerequisite: completion of RADT 215, RADT 218, and RADT 219, and BIOL 202 with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 225, RADT 230, ENGL 101, and PSYCH 110)**

Applicable toward graduation where program structure permits:

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

### **RADT 230 - Radiography Seminar** 2-3-3

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.

**(prerequisite: completion of RADT 215, RADT 218 and RADT 219, and BIOL 202 with a grade of "C" or better and concurrent enrollment in or completion with a grade of "C" or better in RADT 228, RADT 225, ENGL 101, and PSYCH 110)**

Applicable toward graduation where program structure permits:

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



## Sequestration

### **CCS115 - Intro to Carbon Capture & Storage** 3-0-3

examines methods of reducing atmospheric CO<sub>2</sub> concentrations to mitigate the effects of global climate change. CO<sub>2</sub> absorption processes in oceans, forests, and soils, as well as carbon capture and geologic sequestration, are examined. CO<sub>2</sub> utilization and technical, legal, economic, and social conditions for geologic sequestration are also discussed. Offered in Fall.

**(prerequisite: eligibility for Engrl 101)**

Applicable toward graduation where program structure permits:

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

### **CCS275 - Advanced Sequestration Applications** 3-2-4

examines all U.S. Dept. of Energy -National Energy Technology Laboratory (NETL) Best Practices Manuals (BPMs), which have been developed for the design and implementation of large-scale field tests and commercial carbon capture, utilization, and storage (CCUS) projects. BPM lecture topics include classification of geologic formations, site selection, monitoring, public outreach, and risk analysis for CCUS projects. CO<sub>2</sub> utilization, including terrestrial carbon sequestration, is also discussed. Laboratory exercises will include groundwater, soil, and atmospheric CO<sub>2</sub> monitoring, seismic surveys, communications/public engagement, and group projects using Illinois Industrial Carbon Capture and Sequestration (IL ICCS) project data. Offered in Spring.

**(prerequisite: CCS 115)**

Applicable toward graduation where program structure permits:

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

## Service Learning

### **SLRN 293 - Service Learning Internship** 3-15-3

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 Student Engagement 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.

**(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 Student Engagement and a discipline-level faculty member or dean in an appropriate discipline)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Social Science, Sociology

### **SLRN 294 - Service Learning in the Discipline** 2-1-2

in this hybrid model, structured class meetings will emphasize theoretical perspectives of service learning, including leadership, citizenship, and community engagement, and will focus on application of discipline-related issues to the larger community. For a two-credit hour course, course requirements will include a minimum of 15 hours of volunteerism and 30 hours of classroom instruction. Within the context of the discipline for which credit is being applied, lecture and instructional activities will promote various aspects of responsible citizenship and will address how students can apply citizenship and leadership skills within their larger community. Lectures and classroom discussions will offer students the opportunity to analyze the relevance of discipline-related studies and the service learning experience. Class meetings will also include opportunities for students to reflect on their experiential learning. Repeatable - 3 times. Offered as needed.

**(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 Student Engagement and a discipline-level faculty member in an appropriate discipline)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and 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)**

**0-15-1 to 3**

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.

**(prerequisite: completion of at least 30 hours of course work at RCC or another college or university and approval of the Director of Student Engagement and a discipline-level faculty member in an appropriate discipline.)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Not Applicable
- Area of Concentration - Discipline-specific, based on the nature of the course

## Sign Language

### **SIGN 101 - Sign Language 1 (pending ICCB approval)** 1-0-1

introduces American Sign Language with emphasis on comprehension and production of basic language functions grammatical structures and beginning vocabulary, with an emphasis on communicative competence using the communicative approach. Information about the Deaf community and culturally appropriate behaviors will be presented. No prior experience in American Sign Language is needed. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS and ALS only)
- Area of Concentration - Not Applicable

## Social Science

### **SOC S199 - Topics/Issues in the Social Sciences** 1-0-1

provides the students an opportunity to participate in comprehensive discussion of a topic dealing with contemporary issue(s) in the social science (psychology, sociology, economics, history, political science, and public affairs). The course requires no prior depth of knowledge, but it is expected that the student has a particular interest in the seminar topic. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS and ALS only)
- Area of Concentration - Not Applicable

### **SOC S280 - Interdisciplinary Field Experience in the Social Science** 3-0-3

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS and ALS only)
- 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 SOCIO 110 should not register for this course except upon special approval of the Dean of Mathematics and Sciences and may receive credit toward graduation for only one of these two courses. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Not Applicable

### **SOCIO105 - Domestic Violence and Intervention Techniques** **2-0-2**

is an overview of historical and societal attitudes toward domestic violence issues.

Emphasis is on cycles of violence, abusive family patterns, crisis intervention, advocacy skills, and applicable state laws. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Social Science, Sociology

### **SOCIO110 - Introduction to Sociology (IAI: S7 900)** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Social Science, Sociology

### **SOCIO125 - Parenting** **3-0-3**

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 as needed.

**(prerequisite: one college-level course in sociology or psychology)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Social Science, Sociology/Psychology

### **SOCIO130 - Criminology (IAI: CRJ 912)** **3-0-3**

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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Social Science, Sociology

### **SOCIO135 - The Study of Substance Abuse** **3-0-3**

is the social-psychological study of the characteristics of substance abuse and the ramifications for society. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Social Science, Sociology/Psychology

### **SOCIO141 - Introduction to Social Work** **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 Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Social Science, Sociology

### **SOCIO142 - Social Service Field Experience** **1-10-3**

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.

**(prerequisite: completion of SOCIO 141 and permission of the Dean of Mathematics and Sciences or the class instructor)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS only)
- Area of Concentration - Social Science, Sociology

### **SOCIO150 - Social Problems (IAI: S7 901)** **3-0-3**

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 as needed.

**(prerequisite: SOCIO 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Social Science, Sociology

### **SOCIO155 - Inequality & Social Change in Africa** **3-0-3**

This interdisciplinary class will explore some of the major social problems that plague Africa. Theories from Sociology and Psychology will be used to analyze and understand the topics covered in this class. Functions of the basic social institutions in Africa will be reviewed and compared to social institutions in America. Social problems that will be explored will include but not be limited to tribalism, government conflict, sexism, rape, patriarchy, AIDS/HIV, health problems in general, poverty and its consequences, orphaned and vulnerable children, hunger, lack of water and sanitation, globalization and its effects. Social responses whether positive or negative will be reviewed.5p Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Social Science, Sociology/Psychology

### **SOCIO200 - Marriage and the Family (IAI: S7 902)** **3-0-3**

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.

**(prerequisite: SOCIO 110 or PSYCH 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science (AAS and ALS only)
- Area of Concentration - Social Science, Sociology

### **SOCIO210 - Sociology of Deviant Behavior** **3-0-3**

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.

**(prerequisite: SOCIO 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Sociology



### **SOCIO225 - Race, Class & Gender in the United States(IAI: S9 900) 3-0-3**

analyzes ways in which issues of race, class, and gender are embedded in ordinary communication and daily life in the United States. Topics include the social construction, economics, and consequences of difference, issues in U.S. law, maintaining hierarchies, and social control. Major sociological research and theory will be reviewed and applied. Offered as needed.

**(prerequisite: SOCIO 110)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Certificates and Degrees
- Group Requirement - Social Science
- Area of Concentration - Social Science, Sociology

## Spanish

### **SPAN 101 - Beginning Spanish 1 4-0-4**

integrates the acquisition of basic Spanish by the communicative approach employing cultural materials. Together with SPAN 102, it is designed for students with no previous study of Spanish. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **SPAN 102 - Beginning Spanish 2 4-0-4**

is a continuation of SPAN 101. Offered as needed.

**(prerequisite: SPAN 101 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

### **SPAN 110 - Spanish for Educators 3-0-3**

is 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.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **SPAN 111 - Spanish for Healthcare Professionals 3-0-3**

is designed for healthcare professional majors and provides functional basics in understanding and speaking Spanish in the medical field. Vocabulary, grammar, and structures relevant to medical situations and settings are emphasized. This is a one-semester career course; no prior Spanish is required. Offered as needed.

**(prerequisite: eligibility for ENGL 101)**

Applicable toward graduation where program structure permits:

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

### **SPAN 112 - Spanish for Public Service Professionals 0-0-3**

is designed for public service careers and provides functional basics in understanding and speaking Spanish along with cultural concepts impacting such interaction and work. Vocabulary, grammar, structures, and communication strategies relevant to neighborhood planning, community development, safety, and service 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 Degrees
- Group Requirement - Humanities (AAS and ALS only)
- Area of Concentration - Foreign Language

### **SPAN 113 - Spanish for Law Enforcement 0-0-3**

is designed for public service careers and provides functional basics in understanding and speaking Spanish along with cultural concepts impacting interaction and work in law enforcement and public safety. Vocabulary, grammar, and structures relevant to public safety and criminal justice 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 Degrees
- Group Requirement - Humanities (AAS and ALS only)
- Area of Concentration - Foreign Language

### **SPAN 114 - Spanish for the Fire and Emergency Services 0-0-3**

is designed for public service careers and provides functional basics in understanding and speaking Spanish along with cultural concepts impacting interaction and work in the fire and emergency services. Vocabulary, grammar, and structures relevant to fire, fire safety and emergency service 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 Degrees
- Group Requirement - Humanities (AAS and ALS only)
- Area of Concentration - Foreign Language

### **SPAN 115 - Conversational Spanish 1 3-0-3**

is an introduction to conversational Spanish skills with intensive oral practice in listening and speaking. The communicative approach in instruction will emphasize repetitions for natural language acquisition, conversational patterns, idiomatic vocabulary, basic grammar and syntax, cultural information, and selected readings. Offered as needed.

Applicable toward graduation where program structure permits:

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

### **SPAN 198 - Selected Topics in Spanish 4-0-4**

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 as needed.

**(prerequisite: six quarters or four semesters of college or four years of high school Spanish or consent of instructor)**

Applicable toward graduation where program structure permits:

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

### **SPAN 201 - Intermediate Spanish 1 4-0-4**

includes a wider range of reading selections than previous courses. Grammatical structure is reviewed, expanded, and incorporated in a communicative approach. Offered as needed.

**(prerequisite: SPAN 102 or consent of the instructor)**

Applicable toward graduation where program structure permits:

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

### **SPAN 202 - Intermediate Spanish 2(IAI: H1 900) 4-0-4**

is a school continuation of SPAN 201, with increased attention to composition and conversation. Offered as needed.

**(prerequisite: SPAN 101 or consent of the instructor)**

Applicable toward graduation where program structure permits:

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



# Surgical Technology

## **SURGT102 - Surgical Technology II** **4-9-7**

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.

**(prerequisite: SURGT 101 or approval of the Surgical Technology Director)**

Applicable toward graduation where program structure permits:

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

## **SURGT110 - Intro to Surgical Technology** **2-0-2**

introduces students to the role of a surgical technologist. Students will examine the profession's history and evolution and begin an overview as a member of the surgical team. Hospital management, the physical aspects of the operating suite, basic patient care concepts, safety and environmental issues, all-hazards preparation, ethical and legal issues, morals, and standards of conduct will be emphasized. Offered in Fall.

**(prerequisite: completion of BIOL 101, admission to Surgical Technology AAS Program, completion of or concurrent enrollment in BIOL 220, ENGL 101, and HLTH 140, with a "C" or better or approval of the Surgical Technology Program Director)**

Applicable toward graduation where program structure permits:

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

## **SURGT120 - Principles of Surgical Technology** **4-0-4**

introduces students to a basic overview in pharmacological drugs and anesthetics, biotechnical sciences application, patient consent, emergency situations, and death and dying during the surgical procedure. Principles of infection control are covered and emphasis is placed on surgical incisions, hemostasis, wound healing & closure, drains and dressings, grafts and tissue replacement material use and application, and an in-depth understanding of equipment used to perform basic surgical procedures. Offered in Spring.

**(prerequisite: completion of SURGT 110, completion of or concurrent enrollment in SURGT 125, SURGT 128, and BIOL 201 with a "C" or better)**

Applicable toward graduation where program structure permits:

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

## **SURGT125 - Fundamentals of Surgical Technology** **2-3-3**

provides students with knowledge base necessary to perform the fundamentals of patient care during surgical procedures. Students will demonstrate basic concepts in asepsis and sterile techniques, scrubbing, gowning and gloving, and the perioperative care process of the patient during the surgical procedure. Laboratory experience will be used to complement the didactic portion of the course. Offered in Spring.

**(prerequisite: completion of SURGT 100, concurrent enrollment in or completion of SURGT 120, SURGT 128, BIOL 201 with a "C or better")**

Applicable toward graduation where program structure permits:

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

## **SURGT128 - Intro to the Clinical Experience Pending** **0-3-1**

of theoretical and laboratory concepts in the hospital setting under the supervision of RCC faculty. Students will rotate through various surgical departments and will assist/observe staff in their roles/duties within the surgical arena. Students will demonstrate basic knowledge and application in patient identification, care, and transport. Methods of disinfection and sterilization, and environmental disinfection of the operating room will be applied. This course offers students clinical experiences in the hospital setting at the end of the spring semester following completion of SURGT 125. Offered in Spring.

**(prerequisite: completion of SURGT 100 and SURGT 125; concurrent enrollment in or completion of SURGT 120, BIOL 201 with a "C or better")**

Applicable toward graduation where program structure permits:

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

## **SURGT130 - Principles of Surgical Technology II** **3-0-3**

examines the knowledge, concepts, and principles that are fundamental to scrubbing surgical procedures. Students will examine the patient care, anatomy and physiology, diagnostics, pathophysiology, anesthetic, procedure classification, positioning, prepping, incision site, and step by step progression during the procedures required in general surgery, obstetrics and gynecological surgery, and genitourinary surgery. Offered in Summer.

**(prerequisite: completion of SURGT 120, SURGT 125, SURGT 128 concurrent enrollment in or completion of SURGT 135, SURGT 138 with a "C or better")**

Applicable toward graduation where program structure permits:

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

## **SURGT135 - Surgical Procedures I** **1-3-2**

facilitates student learning and laboratory hands-on development of surgical procedural setups. Students will demonstrate knowledge and competency in aseptic technique, surgical case room setup, selection and placement of required equipment, supplies, packs, instrumentation, counts, closure, and demonstrated time and motion efficiency. Cases focused on will be in general, obstetrics and gynecology, and genitourinary surgical specialties. Offered in Summer.

**(prerequisite: completion of SURGT 120, SURGT 125, SURGT 128 concurrent enrollment in or completion of SURGT 130, SURGT 138 with a "C or better")**

Applicable toward graduation where program structure permits:

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

## **SURGT138 - Basic Surgical Technology Clinical I** **0-9-3**

requires students to demonstrate theoretical and laboratory knowledge in the clinical setting. Under the supervision of RCC faculty, students begin experiences in the scrub role. Demonstrating safe practice, students will begin scrubbing in basic surgical cases in the second assistant scrub role and then the first scrub role. Clinical experiences will include Family Maternity Services, surgical centers, and hospital operating room. Offered in Summer.

**(prerequisite: completion of SURGT 120, SURGT 125, SURGT 128 concurrent enrollment in or completion of SURGT 130, SURGT 135 with a "C or better")**

Applicable toward graduation where program structure permits:

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



### **SURGT201 - Surgical Technology III** **8-15-13**

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.

**(prerequisite: SURGT 102 or approval of the Surgical Technology Director; concurrent enrollment in or completion of BIOL 202 with a "C" or better)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT202 - Work Experience Practicum** **2-21-9**

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.

**(prerequisite: SURGT 201 or approval of the Surgical Technology Director)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT240 - Principles of Surgical Technology III** **6-0-6**

builds on SURGT 130 and continues to examine the knowledge, concepts, and principles that are fundamental to scrubbing surgical procedures. Students will examine patient care, anatomy and physiology, diagnostics, pathology, anesthetic, procedure classification, positioning, prepping, incision site, and step-by-step progression during the procedures required in otorhinolaryngeal surgery, orthopedic surgery, oral and maxillofacial surgery, plastic, and ophthalmic surgery. Offered in Fall.

**(prerequisite: completion of SURGT 130, SURGT 135, SURGT 138 concurrent enrollment in or completion of SURGT 245, SURGT 248, BIOL 202 with a "C" or better)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT245 - Surgical Procedures II** **1-3-2**

builds on SURGT 135 by continuing student learning and participation with a laboratory hands-on development of surgical procedural setups. Students will demonstrate knowledge and competency in aseptic technique, surgical case room setup, selection and placement of required equipment, supplies, packs, instrumentation, counts, closure, and demonstrated time and motion efficiency. Cases focused on will be in otorhinolaryngeal, orthopedic, oral and maxillofacial, plastic, and ophthalmic surgical specialties. Offered in Fall.

**(prerequisite: completion of SURGT 130, SURGT 135, SURGT 138 concurrent enrollment in or completion of SURGT 240, SURGT 248, BIOL 202 with a "C" or better)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT248 - Int. Surgical Technology Clinical II** **0-0-3**

builds on SURGT 138 clinical experiences and requires students to demonstrate theoretical and laboratory knowledge in the clinical setting. Under the supervision of RCC faculty, students will demonstrate safe practice scrubbing in basic and intermediate surgical cases with more focus on the first scrub role rather than the assistant scrub role. Clinical experiences will include experiences in surgical centers, operating rooms, and vascular/cardiac centers. Offered in Fall.

**(prerequisite: completion of SURGT 130, SURGT 135, SURGT 138 concurrent enrollment in or completion of SURGT 240, SURGT 245, BIOL 202 with a "C" or better)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT250 - Principles of Surgical Technology IV** **2-0-2**

builds on SURGT 130 and 240 and continues to examine the knowledge, concepts, and principles that are fundamental to scrubbing surgical procedures. Students will examine patient care, anatomy and physiology, diagnostics, pathology, anesthetic, procedure classification, positioning, prepping, incision site, and step-by-step progression during the procedures required in cardiothoracic surgery, peripheral vascular surgery, and neuro surgery. Offered in Spring.

**(prerequisite: completion of SURGT 240, SURGT 245, SURGT 248, SURGT 259, concurrent enrollment in or completion of SURGT 255, SURGT 258, PSYCH 110 with a "C" or better)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT255 - Surgical Procedures III** **1-2-2**

builds on SURGT 135 and 245 by continuing with student learning and participation in a laboratory hands-on development of surgical procedural setups. Students will demonstrate knowledge and competency in aseptic technique, surgical case room setup, selection and placement of required equipment, supplies, packs, instrumentation, counts, closure, and demonstrated time and motion efficiency. Cases focused on will be in cardiothoracic, peripheral vascular, and neuro surgical specialties. Offered in Spring.

**(prerequisite: completion of SURGT 240, SURGT 245, SURGT 248 concurrent enrollment in or completion of SURGT 259, SURGT 250, SURGT 258, PSYCH 110 with a "C" or better)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT258 - Adv. Surgical Tech Clinical III** **0-18-6**

builds on SURGT 138 and 248 clinical experiences and requires students to demonstrate theoretical and laboratory knowledge in the clinical setting. Under the supervision of RCC faculty, students will demonstrate safe practice by scrubbing in basic, intermediate, and advanced surgical cases with focus on the first scrub role. Clinical experiences will include surgical centers, operating rooms, and vascular/cardiac centers. Offered in Spring.

**(prerequisite: completion of SURGT 240, SURGT 245, SURGT 248, concurrent enrollment in or completion of SURGT 259, SURGT 250, SURGT 255, PSYCH 110 with a "C" or better)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT259 - Professional Seminar** **1-0-1**

presents concepts and issues to prepare students for entrance into the profession. Students examine employment skills, interviewing skills, resume' writing, and career development including continuing education. Students will review and prepare information necessary to pass the certification exam. Offered in Spring.

**(prerequisite: completion of SURGT 240, SURGT 245, SURGT 248, concurrent enrollment in or completion of SURGT 250, SURGT 255, SURGT 258, PSYCH 110 with a "C" or better)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

### **SURGT290 - Internship in Surgical Technology** **1-20-5**

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 in Fall, Spring, and Summer.

**(prerequisite: permission of the Surgical Technology Program Director)**

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates, AAS, ALS

Group Requirement - Not Applicable

Area of Concentration - Not Applicable

## Theatre

### **THTRE150 - Theatre Appreciation (formerly DRAMA150) (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 Degrees

Group Requirement - Fine Arts

Area of Concentration - Theatre

#### **THTRE160 - Theatre Production (formerly DRAMA160)(Variable Credit) 1-4-1 to 3**

has as its primary activity the production of a complete play, including the analysis of script, interpretation, casting, rehearsal, and performance. Students may participate in four areas: 1) acting, assistant directing, and stage management; 2) set construction and lighting; 3) costuming, property construction, and makeup; 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 Degrees

Group Requirement - Not Applicable

Area of Concentration - Theatre

#### **THTRE170 - Introduction to Acting (formerly DRAMA170) (IAI: TA 914) 3-0-3**

is a study of the interpretative function and technique of the actor. Students are introduced to the principles of acting theory and are provided the opportunity to practice acting as a part of this course. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Theatre

#### **THTRE171 - Acting 2 (formerly DRAMA171) 2-2-3**

is a continuation of the study of the interpretative function and technique of the actor. Students will be instructed using backgrounds in various acting techniques to further their own acting development through advanced scene work, exercises, and script analysis. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Theatre

#### **THTRE180 - Stagecraft 1 (formerly DRAMA180) 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, and basic sound and lighting techniques. Field trips and guest speakers may supplement text and lecture materials. Attendance at two college productions and an accompanying written critique are required. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Theatre

#### **THTRE181 - Stagecraft 2 2-2-3**

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 Degrees

Group Requirement - Not Applicable

Area of Concentration - Theatre

#### **THTRE190 - Stage Makeup (formerly DRAMA190) 2-2-3**

introduces materials, equipment, and application of theatrical makeup. Includes role of makeup in portraying character and age. Specifically focused on two-dimensional makeup as well as color and fantasy/creativity. Offered as needed.

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Theatre

#### **THTRE210 - Theatre History (IAI: F1908) 3-0-3**

examines selected periods in the history of the theater from the classical Greek period through present day and the essential elements of theatre, performance, and production, including stage design, costumes, and makeup, acting styles, and key playwrights. The social role of theater and influences of political events and social mores; and interpretation and criticism will be explored. Offered as needed.

(prerequisite: THTRE 150 and eligibility for ENGL 101 or instructor approval)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Fine Arts

Area of Concentration - Theatre

#### **THTRE220 - Directing 3-0-3**

introduces principles, procedures, and problems of directing. Includes script selection, interpretation, casting, preparation of prompt script, stage composition and blocking, rehearsal techniques, communication and problem solving and performance. Offered as needed.

(prerequisite: THTRE 150 and eligibility for ENGL 101 or instructor approval)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Not Applicable

Area of Concentration - Theatre

#### **THTRE230 - Play Analysis for Production (IAI: TA 917) 3-0-3**

explores the relationship between dramatic text and the play in performance.

Representative plays are studied in their genre, historical and social contexts. An emphasis is placed on basic structural terminology and methodology. Offered in Fall.

(prerequisite: completion of ENGL 101 or instructor approval)

Applicable toward graduation where program structure permits:

Certificate or Degree - All Certificates and Degrees

Group Requirement - Fine Arts

Area of Concentration - Theatre

## Transportation

#### **CDL1000 - Tractor/Trailer Driver Training 3.5-7-7**

is designed to provide individuals who have little or no commercial driving experience with the knowledge and skills necessary to obtain a Commercial Driver's License Learner's Permit. At the end of the course, students will take a Class "A" License road test administered by the Illinois Secretary of State's personnel. This course will also cover endorsement preparation, state and federal regulation, log books, map reading, trip planning, and complete vehicle training to prepare the individual for an entry level position in the transportation industry. Offered in Fall, Spring, and Summer.

(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)

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 0.5-1-1**

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 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 certificate. Offered as needed.

(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)

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** **0-5-0-0-5**

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. Offered as needed.

**(prerequisite: possession of a valid class "A" License and an evaluation of the individual's current knowledge and skill level)**

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** **1-0-1**

is designed for individuals who currently possess a valid CDL License with a sixteen-hour overview of the knowledge and skills necessary to be employed in the transportation industry that requires a Class "A" License. Information reviewed will be in the areas of endorsement preparation, regulations, log books, map reading, trip planning and complete vehicle review including basic skill and driving control. Offered as needed.

**(prerequisite: possession of a valid Class "A" License and an evaluation of the individual's current knowledge and skill level)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **CDL1004 - CDL Refresher - 40 hours** **2-0-2**

is designed for individuals who currently possess a valid CDL License (or those who had a CDL license in the past) with a sixteen-hour overview of the knowledge and skills necessary to be employed in the transportation industry that requires a Class "A" License. Information reviewed will be in the areas of endorsement preparation, regulations, log books, map reading, trip planning, and complete vehicle review including basic skill and driving control. Offered as needed.

**(prerequisite: possession of a valid Class "A" License and an evaluation of the individual's current knowledge and skill level)**

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**

is designed to provide individuals with the knowledge necessary to obtain a Commercial Driver's License Learner's Permit. The course will cover endorsement preparation and transportation regulations, which will prepare students to take the CDL Learner's Permit Test administered by the Secretary of State. Offered as needed.

**(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)**

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

### **CDL1006 - Passenger Vehicle Lic. Trng. (Buses)** **1-1-1**

provides individuals with the knowledge and skills necessary to obtain a Commercial Driver's License for a Passenger Vehicle. The course will cover endorsement preparation, regulations and complete vehicle training to prepare the individual for an entry-level position in the transportation industry. Illinois Secretary of State's personnel will perform administration of the Passenger Vehicle road test. Upon successful completion of the course, students will receive certificates. Offered as needed.

Applicable toward graduation where program structure permits:

- Certificate or Degree - All Basic Certificates
- Group Requirement - Not Applicable
- Area of Concentration - Not Applicable

## **Welding**

### **WELD 100 - Oxy-Acetylene and Plasma Arc Cutting** **0-2-1**

is designed to prepare students to perform oxy-acetylene and plasma arc cutting for production and maintenance work. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

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

### **WELD 101 - Shielded Metal Arc Welding** **2-6-4**

is designed to prepare students to perform production welding, millwright work, and general maintenance welding. Offered in Fall, Spring, and Summer.

**(prerequisite: WELD 100 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

### **WELD 102 - Shielded Metal Arc Welding Advanced** **0-8-4**

is designed to prepare students to perform ASME code welds in the 2-G, 3-G, and 4-G positions. This class prepares students for pipe welding. Offered in Fall, Spring, and Summer. Offered in Fall, Spring, and Summer.

**(prerequisite: WELD 101 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

### **WELD 103 - Welding Tools & Safety** **2-2-3**

provides students with instruction covering essential, basic skills required for employment opportunities in all construction trade occupations. Subjects covered are safety, hand and power tool application and operation, introduction to blueprints, and rigging. Completion of this course will prepare the student to enter further instruction in the Journeyman Pipe Fitter/Pipe Welder course. Offered in Fall and Spring.

Applicable toward graduation where program structure permits:

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

### **WELD 190 - Maintenance Repair Welding** **0-4-2**

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.

**(prerequisite: WELD 100 and WELD 101 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

### **WELD 195 - Industrial Welding Fundamentals** **1-4-3**

introduces students to the basic welding processes commonly used in the mechanical maintenance areas where critical or certified welds are not required. The students learn the basic theory and application of the welding processes. The students become competent in flat position welding using the shielded metal arc welding and gas metal arc welding processes. Students also develop the basic ability to perform the following: oxy-acetylene welding and cutting; soldering and brazing; pipe repair welding; basic heat treat methods; periodic and preventative maintenance measures on welding equipment; and welding safety. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

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

### **WELD 201 - Gas Metal Arc and Flux Core Arc Welding (Mig)** **0-4-2**

is designed to prepare students to perform ASME code welds in the 1-G and 2-G positions using the GMAW and FCAW processes. Offered in Fall, Spring, and Summer.

Applicable toward graduation where program structure permits:

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



**WELD 202 - Welder Certification** **0-4-2**

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.

**(prerequisite: WELD 102, WELD 201 and WELD 204 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

**WELD 204 - Pipe Welding** **0-8-4**

allows students to develop the skills to weld pipe in 2-G, 5-G, and 6-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.

**(prerequisite: WELD 102 and WELD 205 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

**WELD 205 - Gas Tungsten Arc Welding** **0-6-3**

is designed to prepare students to perform maintenance and production welding using the gas metal arc process. Offered in Fall, Spring, and Summer.

**(prerequisite: WELD 101 or equivalent competencies)**

Applicable toward graduation where program structure permits:

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

**WELD 230 - Pipefitting Fundamentals** **1-4-3**

introduces students to many of the hand and power tools used to complete tasks associated with pipefitting. It also introduces the student to underground piping and excavations. Offered as needed.

**(prerequisite: WELD 103)**

Applicable toward graduation where program structure permits:

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

**WELD 231 - Pipefitting Applications** **2-6-4**

builds upon the skills developed in the WELD 103 by introducing the student to drawings, trade math, advanced rigging, and pipe and piping support fabrication. Offered as needed.

**(prerequisite: WELD 103 or approval of instructor)**

Applicable toward graduation where program structure permits:

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

**WELD 232 - Pipefitting Techniques** **2-6-4**

begins to show the student how to apply advanced trade math and advanced blueprint reading along with information covering standards and specifications. This will help students determine installation procedures and proper piping support measures.

Students will also become familiar with factors involved in route selection as well as testing systems and equipment. Offered as needed.

**(prerequisite: WELD 103 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

**WELD 233 - Pipe Fabrication** **1-4-3**

permits the student to gain knowledge and expertise needed to perform advanced pipe fabrication as well as tasks associated with special piping. Offered as needed.

**(prerequisite: WELD 103 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

**WELD 234 - Field Maintenance & Safety** **2-6-4**

permits the student to gain knowledge and expertise needed to perform supervisory level work as a pipe fitter/welder on issues ranging from quality control, material requisition, and crew safety. Offered as needed.

**(prerequisite: WELD 103 or consent of instructor)**

Applicable toward graduation where program structure permits:

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

**WELD 240 - Non-Ferrous Welding** **1-5-3**

expands on welding techniques and processes learned in earlier courses by using the GTAW process on aluminum plate and SMAW on stainless steel pipe. Students will make welds in the following positions: 1G, 2G, 3G, 5G, 6G, 1F, 2F, 3F, and 4F. Offered in Fall and Spring.

**(prerequisite: completion of basic Welding Certificate or consent of instructor)**

Applicable toward graduation where program structure permits:

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

**WELD 241 - GMAW/FCAW Pipe** **0-7-3**

expands on welding techniques and processes learned in earlier courses by using the GMAW and FCAW processes pipe. Students will making these welds in the following positions: 1G, 2G, 5G, and 6G. Offered in Fall and Spring.

**(prerequisite: completion of basic Welding Certificate or consent of instructor)**

Applicable toward graduation where program structure permits:

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

**WELD 242 - Aluminum Plate & Pipe** **1-5-3**

expands on welding techniques and processes learned in earlier courses by using the GTAW and GMAW processes on aluminum plate and pipe. Students will making these welds in the following positions: 1G, 2G, 3G, 5G, 6G, 1F, 2F, 3F, and 4F. Offered as needed.

**(prerequisite: completion of basic Welding Certificate or consent of instructor)**

Applicable toward graduation where program structure permits:

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



## Adult Education Courses

### Adult Basic Education

#### **ABE010 - Basic Reading 1 (Variable Credit) 4-0-0.5 to 10**

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

#### **ABE013 - Intermediate Reading 1 (Variable Credit) 4-0-0.5 to 10**

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

#### **ABE075 - Pre-beginning General Education Development (Variable Credit)**

**4-0-0.5 to 10**

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

#### **ABE078 - Pre-General Education Development 3 (Variable Credit) 4-0-0.5 to 10**

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

#### **ASE080 - General Educational Development 5 (Variable Credit) 10-0-0.5 to 10**

Applicable toward graduation where program structure permits:

- Certificate or Degree -
- Group Requirement -
- Area of Concentration -

### English as a Second Language

#### **ESL081 - Pre-Beginning (Variable Credit) 4-0-0.5 to 10**

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) 4-0-0.5 to 10**

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) 4-0-0.5 to 10**

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

#### **ESL084 - Advanced (Variable Credit) 4-0-0.5 to 10**

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

## Correctional Education Programs Division

Programs are available at selected correctional centers only and are not available to the general public.

#### **Decatur Correctional Center**

Programs: Commercial Custodial Services  
Food Service  
General Studies Courses  
Career Technologies

#### **Lincoln Correctional Center**

Programs: Commercial Custodial Services  
Construction Occupations  
General Studies Courses  
Career Technologies

#### **Logan Correctional Center**

Programs: Commercial Custodial Services  
Construction Occupations  
Food Service  
Horticulture  
General Studies Courses  
Career Technologies

#### **Pontiac Correctional Center**

Programs: Career Technologies



## Commercial Custodial Services

The Commercial Custodial Services Certificate is planned to provide educational experiences that will enable students to develop the competencies needed for employment as light cleaners and/or floor care technicians in the custodial field. The course sequence begins with health and safety procedures and covers floor and carpet care as well as general cleaning practices.

### DTMA 100 - Vocational-Technical Math 3-0-3

Covers the use of the following math skills in solving occupational problems: whole numbers, fractions, and decimals; percent; measurement; formulas and equations; lines, angles and shapes; positive and negative numbers; and ratios and proportions. 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

### DCUST120 - Introduction to Custodial Services 3-0-3

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. 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

### DCLEA121 - General Cleaning Practices 1-4-3

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. 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

### DFLCA122 - Hard Floor Care 1-6-4

Covers the identification of various types of flooring and the routine and restorative methods of floor care including: dust mopping, buffing/burnishing, machine scrubbing, removing and applying finishes. The proper use, care and maintenance of floor care equipment are emphasized throughout the course. 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

### DCARP123 - Carpet and Upholstery Care 1-6-4

Covers material and fiber identification for various types of carpets and upholstery fabrics along with the routine and restorative procedures to be used with each type. Students gain experience with various methods of carpet and upholstery care including shampooing, extraction, bonnet cleaning, dry absorbent compound cleaning, and spot/stain cleaning. Proper use, care and maintenance of carpet and upholstery equipment are also emphasized. 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

## Construction Occupations

The Construction Occupations Certificate is planned to provide educational experiences that will enable students to develop the competencies needed for immediate entry-level employment in occupations such as painter, carpenter, laborer, drywall finisher, roofer, or remodeler or as preparation for continued education in construction technology.

### DTMA 100 - Vocational-Technical Math 3-0-3

Covers the use of the following math skills in solving occupational problems: whole numbers,

fractions, and decimals; percent; measurement; formulas and equations; lines, angles and shapes; positive and negative numbers; and ratios and proportions. 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

### DCON 100 - Introduction to Construction Occupations 2-4-4

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. 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

### DCON 105 - Blueprint Reading 1-6-4

Teaches students to read and interpret construction symbols and blueprints, and to read and interpret appropriate building codes. Students will learn how to sketch and dimension rough drawings. 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

### DCON 110 - Basic Masonry & Concrete Finishing 0.5-7-4

Prepares students to identify masonry tools, materials, and procedures, to pour concrete, and to set brick and/or block. 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

### DCON 115 - Basic Carpentry I 0.5-7-4

Is the first of two carpentry classes that prepares the student to be able to perform basic rough carpentry skills and techniques used in the construction and remodeling industries. 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

### DCON 120 - Basic Carpentry II 0.5-7-4

Continues to build on the rough carpentry skills covered in Carpentry I and introduces basic finish carpentry knowledge and skills needed for entry-level employment in construction and remodeling. 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

### DCON 125 - Basic Plumbing 0.5-7-4

Introduces basic plumbing knowledge and skills utilized in the construction industry. 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

### DCON 130 - Residential Wiring 0.5-7-4

Introduces basic electrical knowledge and skills utilized in residential wiring applications. 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



### **DCON 135 - Painting and Finishing** **1-4-3**

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. 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

## **Food Service Technology**

The Food Service Certificate is planned to provide educational experiences that will enable student to develop competencies needed for immediate employment in the food service industry in careers such as cooks, bakers, prep cooks, servers, caterers, and in food-related sales. Emphasis is placed on public health sanitation and safety, food preparation, and presentation.

### **DTMA 100 - Vocational-Technical Math** **3-0-3**

covers the use of the following math skills in solving occupational problems: whole numbers, fractions, and decimals; percent; measurement; formulas and equations; lines, angles and shapes; positive and negative numbers; and ratios and proportions. 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

### **DFOOD130 - Introduction to Food Service** **3-0-3**

covers the basic work attitudes, characteristics, and skills needed to work in the food service industry. Food service terminology, equipment identification and usage, information about types of foods and trends in the food service industry, and the development of interpersonal and communication skills are stressed. Work behaviors and concepts covered here will be reviewed and reinforced throughout the rest of the program. 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

### **DSANI131 - Sanitation and Safety** **2-2-3**

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. 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

### **DFPRE132 - Food Preparation Methods** **1-4-3**

provides an introduction to food preparation and covers skills involved in preparing breakfast foods, sandwiches, starch products, eggs and dairy items. Offered as needed.

**(prerequisite: DFOOD130)**

Applicable toward graduation where program structure permits:

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

### **DBAK 133 - Baking II** **0.5-7-4**

covers the advanced principles of baking and leavening agents. The production of yeast items is also covered. Offered in Fall, Spring, and Summer.

**(prerequisite: DBAKI140)**

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

### **DPROD134 - Produce Preparation** **1-4-3**

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. Offered as needed.

**(prerequisite: DFPRE132)**

Applicable toward graduation where program structure permits:

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

### **DMEAT135 - Meat, Poultry and Fish Preparation** **2-4-4**

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. Offered as needed.

**(prerequisite: DFPRE132)**

Applicable toward graduation where program structure permits:

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

### **DSSS 136 - Stock, Soup and Sauce Preparation** **1-4-3**

teaches the student to prepare and use stocks, soups, and sauces. Offered as needed.

**(prerequisite: DFPRE132)**

Applicable toward graduation where program structure permits:

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

### **DFP 137 - Food Presentation** **1-2-2**

covers principles and preparation of the presentation of food from plating and garnishing through waiting on guests. Various serving styles are covered. Offered as needed.

**(prerequisite: DFPRE132)**

Applicable toward graduation where program structure permits:

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

### **DCFS 138 - Careers in Food Service** **1-0-1**

prepares students to seek job opportunities in the food service industry. 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

### **DBAKI140 - Baking I** **1-4-3**

covers fundamental principles of baking. Students learn to prepare biscuits, muffins, quick breads and a variety of types of pies. Offered in Fall, Spring, and Summer.

**(prerequisite: DFPRE132)**

Applicable toward graduation where program structure permits:

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

## **Horticulture**

The Horticulture Certificate is planned to provide educational experiences that will enable students to develop competencies needed for immediate employment as horticulture workers in careers such as landscape designer, landscape installer, landscape maintenance worker, lawn care worker, greenhouse worker, nursery worker, plant propagation, soil tester, interiorscaper, gardener, park or grounds keeper. Emphasis is placed on soils, pest control, greenhouse and nursery management, and landscape design and installation.

### **DTMA 100 - Vocational-Technical Math** **3-0-3**

covers the use of the following math skills in solving occupational problems: whole numbers, fractions, and decimals; percent; measurement; formulas and equations; lines, angles and shapes; positive and negative numbers; and ratios and proportions. 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

**DHRT 140 - Introduction to Horticulture** **2-2-3**

acquaints the student with a basic understanding of the form and function of plants. This course will cover employability opportunities and skills necessary for employment, which will be reinforced throughout the remainder of the program. 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

**DSOIL141 - Soils** **1.5-1-2**

gives the student an overview of soil structure, horizons textural classifications and chemical properties. It provides a basic knowledge of soil PH, nutrient requirements and water requirements. Concepts for soil analysis and recommendations for tilth improvement, fertility and conservation practices are also covered. 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

**DPEST142 - Pest Control** **2-2-3**

includes identification of major pests, their life cycles and the damage they cause. Feasibility and methods of horticultural pest control are covered, along with the proper identification and usage of pesticides. Proper safety procedures are emphasized throughout the course. At the conclusion of this course students will be able to pass the Illinois Commercial Pesticide Operator Core Test and the Private Pesticide Applicator Test. 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

**DGRHS143 - Greenhouse Operation** **1-6-4**

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. 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

**DTURF144 - Turfgrass Management** **2-2-3**

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. 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

**DNURS145 - Nursery Operations** **1.5-3-3**

includes principles of woody plant production from planning to salable plants. Cultural procedures for field and container nursery production will be introduced. Approved practices of fertilization, pest control, planting, irrigation, over-wintering and harvesting are introduced.

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

**DLPI 146 - Landscape Plant Identification** **1-6-4**

introduces students to woody and herbaceous perennials. Students will learn how to identify plants according to leaf, overall shape, size, and use. Plants will be grouped by deciduous or evergreen trees, shrubs, and ground covers. 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

**DLDI 147 - Landscape Design & Installation** **0.5-7-4**

covers basic principles of landscape design, sketching of the landscape, and techniques and materials used in the landscape. It includes basic structures and other non-plant materials used in the landscape and provides a basic knowledge of plant selection, planting procedures, and construction materials as presented in the landscape plan. 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

**DLPM 148 - Landscape Plant Maintenance** **2-2-3**

covers principles for maintaining landscapes through proper care, fertilization, irrigation, disease and pest control, pruning, and other techniques. 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

## College General Studies

**DTMA 100 - Vocational-Technical Math** **3-0-3**

covers the use of the following math skills in solving occupational problems: whole numbers, fractions, and decimals; percent; measurement; formulas and equations; lines, angles and shapes; positive and negative numbers; and ratios and proportions. 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

**DCART100 - Career Technologies** **1-6-4**

Provides the basics for the individual to seek, gain, and keep employment, emphasizing the areas of document development, applications, personal development, and consumer skills to transition effectively back to society. IN order to equip students with necessary skills to function effectively in the current workforce, a strong focus of this course will be on technological advancements and computer concepts. 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

**ETC 100 - Education-to-Careers Seminar** **3-0-3**

provides orientation for transitioning from education to careers including interview techniques, resume writing, personal growth, and finance. 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



## A

**Jack Adwell**, Professor, Information Technology (AAS, Richland Community College; BA, Mt. Vernon College; M.A., University of Illinois-Urbana)  
**Sally Anselmo**, Director, Database Systems (BA, BS, Eastern Illinois University; MS, Illinois State University)  
**Keith Ashby**, Professor, Hospitality Management (BS, University of Missouri)  
**Mary Atkins**, Director, Academic Success Center, Teaching and Learning Support Services (BS, Eastern Illinois University; MS, Illinois State University)  
**Steve Austin**, Associate Professor, History (BA, Brigham Young University; MA, Arizona State University)

## B

**Shelly Baldwin**, Instructor, Nursing (BS, Millikin University; MS, Walden University)  
**Juanita Ball**, Library Technical Asst., Learning Resources Center, Teaching and Learning Support Services  
**Donna Barnes**, Secretary, Academic Success Center/Testing, Teaching and Learning Support Services (Associate in Business, Southern Illinois University)  
**Mike Bartimus**, Maintenance (Certificate, Richland Community College; BA, Evangel College)  
**Yvonne Basden**, Secretary, Adjunct Faculty Office (AAS, Richland Community College)  
**Gail Bauer**, Reading and Developmental English Coordinator/Professor, Reading (BA, MA, Southern Illinois University)  
**Karen S. Becker**, Professor, English (BA, Kansas State University; MA, Kansas State University; ABD for Ph. D, University of Missouri)  
**Alex Berry**, Financial Aid Specialist (BA, Millikin University)  
**Sharon Beube**, Professor, Office Technology (BS, Eastern Illinois University; MS, University of Illinois)  
**Sheryl Blahnik**, Dean, Teaching and Learning Support Services (AA, Black Hawk College; BS, MS, Western Illinois University; EdS, Northern Illinois University)  
**Mary Blankenship**, Professor, Nursing, Nursing Program Director (BSN, Arkansas State University; MSN, Oral Roberts University)  
**Ethel Bond**, Executive Administrative Assistant, Finance & Administration (BC, AAS, Richland Community College)  
**Shirley Bond**, Administrative Assistant, Communications, Education, Humanities, and Fine Arts Division  
**David Bowman**, Coordinator, Biofuels Program  
**Gail Bowman**, Administrative Assistant, Enrollment Services (AAS, Richland Community College)  
**Douglas Brauer**, Vice President of Economic Development and Innovative Workforce Solutions, (BS Illinois State University; MS, University of Illinois; PhD, Colorado State University)  
**Faith Brenner**, Professor, Information Technology (BS, MS, Illinois State University)  
**Darbe Brinkoetter**, Dean, Continuing and Professional Education Division, BA, MS, EdS, Eastern Illinois University)  
**Leanne Brooks**, Coordinator, Mathematics Enrichment Center, Mathematics and Sciences Division (BA, Anderson University, MS, University of Illinois)  
**Marcus Brown**, Dean, Enrollment Services (BA, Quincy University; MA, University of Connecticut; MBA, Millikin University)  
**Diane Browning**, Secretary, Adult Education  
**Scott Broyles**, Program Coordinator, Fitness Center  
**Kim Brummett**, Director, Early Childhood Education Academy, Teaching and Learning Support Services (BS, Eastern Illinois University)  
**Debbie Buckley**, Technician, Duplication Center  
**Lester Burrell**, Coordinator, Lincoln Correctional Center (AA, Lincoln Land Community College; BA, Sangamon State University; MS, Southern Illinois University)  
**Jody Burtnett**, Assistant Director, Financial Aid and Veterans' Affairs (BS, Millikin University)

## C

**Adam Campbell**, Instructor, Career Technologies, Logan Correctional Center (AA, Lincoln College; BS, Illinois State University)  
**Ariel Campos**, Library Technical Asst. Learning Resources Center, Teaching and Learning Support Services (BA, Missouri University of Science and Technology)  
**Matthew Cardinal**, Instructor, Radiography Program Director (AS, Richland Community College)  
**Lisa Carr**, Director, Adult Education (BA, Millikin University)  
**Jody Chambers**, Administrative Assistant, Mathematics and Sciences Division (AAS, Richland Community College)  
**Kathy Chambers**, Administrative Assistant, Correctional Education Programs (AAS, Richland Community College)  
**Jim Chiligris**, Maintenance  
**Joyce Clay**, Professor, Nursing, (BSN, Illinois Wesleyan; MSN, University of Oklahoma)  
**Ellen Colbeck**, Dean, Health Professions Division (Certificate, School of Radiologic Technology; BA, Ed M, University of Illinois)  
**J.C. Collins**, Instructor, Career Technologies, Pontiac Correctional Center (BA, Olivet Nazarene University; MS, Illinois State University)  
**Stuart Coon**, Counselor, Enrollment Services (BA, MS, Drake University)  
**John Cordulack**, Dean, Mathematics and Sciences Division (AA, Lyons Township Junior College; BA, Illinois State University; MA, PhD, University of Illinois)  
**Tricia Cordulack**, Director, Scholarships and Alumni Relations, Richland Foundation (AA, Richland Community College; BS, Millikin University)

**April Cramer**, Accounting Technician, Accounts Receivable, Business Services  
**Marcella Cremer**, Assistant Professor, Mathematics (BS, M-Ed, University of Illinois)  
**Mary Crisler**, Instructor, Nursing (ADN, Richland Community College; BS, Western Illinois University)  
**Donna Curtner**, Instructor, Food Service, Decatur Correctional Center (BA, Southern Illinois University; MA, Sangamon State University)  
**Donna Curtner**, Instructor, Food Service, Decatur Correctional Center (BA, Southern Illinois University; MA, Sangamon State University)  
**Linda Cutright**, Instructor, Practical Nursing (ADN, Phoenix College; BS, University of Phoenix)

## D

**Laura Dale**, Administrative Information Systems Specialist (AAS, Richland Community College; BS, Millikin University)  
**Jenifer Dapper**, David Erlanson Art Gallery Facilitator (BFA, University of Illinois at Champaign-Urbana; MA, Courtauld Institute of Art at London, UK)  
**John Daum**, Professor, Engineering Technology (BS, University of Illinois; MBA, University of Illinois-Springfield)  
**Jeffrey L. Davison**, Director, Correctional Education Programs, (AS, Lincoln Land Community College; BS, Southern Illinois University; MS, Southern Illinois University)  
**Leslie DeVore**, Dean, Workforce Development (BA, Illinois College; MPA, University of Illinois-Springfield)  
**Michael Diggs**, Director, Career Services, Enrollment Services (BA, University of Illinois-Champaign; MSA, Central Michigan University)

## E

**Debbie Ellison**, Foundation Information and Projects Coordinator  
**Lisa Eskew**, Administrative Assistant, Continuing and Professional Education (AAS, Richland Community College)

## F

**Carolyn Fabian**, Evening College Receptionist, Enrollment Services  
**Dennis L. Farmer**, Instructor, Food Service, Logan Correctional Center (AAS, United Christian Faith School of Ministry)  
**Lazetta Farnham**, Director, Child Development Center, Teaching and Learning Support Services (AAS, Richland Community College; BA, University of Illinois-Springfield; M Ed, National-Louis University; Illinois Director Credential)  
**Jill Feinstein**, Associate Professor, Biology (BA, Knox College; MS, Northern Illinois University)  
**Joseph Feinstein**, Assistant Director of Technical Services (BA, Knox College)  
**Pixie Fennessey**, Professor, Psychology and Sociology (AA, Lakeland Community College; BA, MA, Eastern Illinois University)  
**Chris Ferrill**, Professor, Mathematics (BS, University of Illinois-UC; MS, University of Illinois-Springfield)  
**Wendy Filchak**, Child Care Teacher, Child Development Center, Teaching and Learning Support Services (AAS, Richland Community College)  
**Tina Finch**, Surgical Technology Lab Facilitator  
**Diane Fleming**, Switchboard Operator, Enrollment Services (AAS, Richland Community College)  
**Gregory E. Florian**, Vice President of Finance and Administration (BS, Tulane University; MBA, University of Illinois-Springfield)  
**Laquitta Ford**, Program Director, Student Support Services/TRIO, Enrollment Services (AA, Richland Community College; BA, University of Illinois Springfield)  
**Maire Foxx**, Farm Coordinator, Business & Technology Division, (BA, Missouri Southern College; MA, Pittsburgh State University)

## G

**Kelly Gagnon**, Adult Education Transitions Coordinator (BA, DePauw University)  
**Sean Gallagher**, Professor, English and Spanish (BA, St. John's University; MA, PhD, University of Minnesota)  
**Janean Garrett**, Admissions and Recruitment Specialist (AAS, Richland Community College)  
**Ruthie Gergeni**, Marketing Assistant (BA, Sangamon State University)  
**Clayton Gerhard**, Network Administrator I, Operations and Technical Services (BA, Millikin University)  
**Steven Gilbertz**, Assistant Professor, Business (BS, MBA, University of Illinois)  
**Diane Godin**, Professor, Biology (BS, MS, Colorado State University)  
**Vivian T. Goodman**, Executive Director, Decatur Community Partnership (AAS, Richland Community College; BA, MA, Anderson Theological Seminary)  
**Lisa Gregory**, Executive Director of Public Information and Chief of Staff (AA, Richland Community College; BA, Sangamon State University)  
**Louise Greene**, Director of Library Services, Learning Resources Center, Teaching and Learning Support Services (BA, University of the Pacific; MS, Texas A&M; MLS, University of Maryland, College Park)  
**Susan Grimm**, Assistant Professor, Radiography (AAS, College of Lake County)  
**Robert K. Grindy**, Professor, English (BA, California State University, Chico; MFA, Indiana University)  
**Richard Gschwend**, Director, Human Resources (BS, University of Wisconsin)  
**Gordon Gurley**, Instructor, Biology (BS, MS, Andrews University; PhD, Western Michigan University)

## H

**Joshua N. Hackett**, Instructor, Horticulture, Logan Correctional Center (AA, Lincoln Land Community College; BS, University of Illinois - Springfield)



**Jackie Hagan**, Secretary, Marketing Department (Certificate, Richland Community College; AAS, Jefferson Junior College; BS, Southeast Missouri State University)

**Beau Hanger**, Director, Outdoor Exposition Center and Special Events, EDIWS (BS, Millikin University)

**Kathy Hanks**, Enrollment Advocate, Enrollment Services (AA, Richland Community College)

**Curtis Happe**, Assistant Professor, Automotive Technology (AAS Business Mgmt., Columbia College, Lake of Ozarks, MO)

**Richard Harmon**, HPS Assistant Professor, Coordinator Human Simulator (MSN, Southern Illinois University; BSN, Olivet Nazarene University; ADN, Carl Sandburg College)

**Arthur Scott Hartman**, Maintenance

**Connie Hartman**, Administrative Assistant, Teaching and Learning Support Services (AAS, Southern Illinois University)

**Todd Hauser**, Multimedia Advisor for Student Media (BA, University of Wisconsin - Stevens Point; MA, University of Missouri)

**Evyonne Hawkins**, Assistant Professor, Education and African-American Studies (AAS, AS; Richland Community College; BA, MA, University of Illinois-Springfield)

**Debra Hays**, Secretary, Student Support Services/TRiO, Enrollment Services

**Linda Hays**, Executive Administrative Assistant, Economic Development and Innovative Workforce Solutions

**Jeanne Helm**, Professor, Early Childhood Education (BS, MS, Illinois State University)

**Bradley Hemenway**, Assistant Professor, Economics (BA, Eastern Michigan University; MA, Clemson University)

**Barbara S. Henson**, Instructor, Career Technologies, Decatur Correctional Center (AA, Richland Community College; BA, Millikin University)

**Dana Hildred**, Evening Secretary, Business and Technology Division

**Patti Hinthorn**, Child Care Teacher, Child Development Center, Teaching and Learning Support Service (AAS, Richland Community College)

**David Holtfreter**, Director, Operations and Technical Services (Certificate, Parkland College)

**Debra Holtfreter**, Human Resources Specialist (Certificate, Richland Community College)

**Carol Hood**, Assistant Professor, Accounting (BA, Millikin University)

**Gary Hornickel**, Coordinator, Logan Correctional Center (AA, Kankakee Community College; BS, Eastern Illinois University; MS, University of Illinois)

**Jana Howe**, Secretary, Health Professions (AAS, Scott Community College)

**Joseph Lynn Hudson**, Professor, HVAC&R (BA, Oakland City, Indiana University)

**Laurie Hughes**, Professor, English (BS, Vanderbilt University; MA, PhD, University of Tennessee)

**Sue Huskins**, Photo Lab Facilitator (AA, Richland Community College; BA University of Illinois-Springfield)

**Andrew Hynds**, Instructor, Mathematics (BS, Southern Illinois University; MS, Illinois State University)

## J

**Elizabeth A. Jackson**, CPS, Online Support Specialist (AAS, Richland Community College)

**Gloria Jackson**, Secretary, Academic Success Center/Tutoring, Teaching and Learning Support Services (AS, Richland Community College)

**Jo Jackson**, Evening Secretary, Adjunct Faculty Office, Student and Academic Services (AAS, Richland Community College)

**Patricia Jackson**, Administrative Assistant, Health Professions

**Patricia Jelks**, Executive Secretary to the President's Office (AAS, Richland Community College; BS, Indiana Wesleyan University)

**Jill Jenkins**, Secretary, Enrollment Services

**Meredith Johnson-Palmer**, Academic Advisor, Enrollment Services (AA, Richland Community College; BS, Southern Illinois University - Edwardsville)

**James D. Jones**, Professor, Mathematics (AS, Richland Community College; BA, Eastern Illinois University; MA, University of Illinois-Springfield)

**Kona Jones**, Director, Online Learning (BS, Eureka College; BS, MA, Illinois State University)

## K

**Gary Kilmartin**, Assistant Professor, Engineering Technology (AAS, Richland Community College)

**Heather Kind-Keppel**, Director of Student Engagement, Enrollment Services (BA, University of Wisconsin, Stevens Point; MS, Minnesota State University; ME, University of Missouri, Columbia)

**Rosemarie King-Grindy**, Professor, English (BA, College of Holy Cross; MA, Indiana University)

**David Kirby**, Professor, Information Technology (AS, Richland Community College; BS, Southern Illinois University, MS, University of Illinois, Springfield)

**Rebecca Kirk**, Accounting Technician, Financial Aid, Business Services

**Crystal Kitchens**, Professor, Office Technology (BS, Millikin University; MA, University of Illinois - Springfield)

**John Kleiss**, Supervisor, Maintenance Systems, Operations and Technical Services

**M. Larry Klugman**, Professor, Political Science (BS, Truman State University; MA, Central Missouri State University)

**Janilyn Kocher**, Professor, History (AA, Olney Central College; BA, MA, Southern Illinois University)

**Paul Krekel**, Technical Services Specialist II, Operations and Technical Services

## L

**Melissa Lane**, Child Care Teacher, Child Development Center, Teaching and Learning Support Service (BS, Eastern Illinois University)

**David Larrick**, Director, Sequestration Program (BS, MS, Southern Illinois University; Ph.D., Pennsylvania State)

**Katherine Lee**, Professor, Surgical Technology Program Director, Surgical Technology (BS, Eastern Illinois University; MS, Eastern Illinois University)

**Jean Litchfield**, Associate Professor, Nursing (BS, Millikin University; MSN, Indiana State University)

**Samuel London**, Education & Learning Specialist, TRiO (BS, Millikin University)

**Tonya Loveall**, Evening Secretary, Communications, Education, Humanities and Fine Arts Division (AAS, John Wood Community College)

**Craig A. Lucas**, Assistant Professor, Chemistry (BS, Colorado State University; MS, University of Cincinnati Medical College)

**Laurie Lyon**, Secretary, Continuing and Professional Education

## M

**Yolanda Mabry**, Senior Academic Advisor, Enrollment Services (BS, MS, Southern Illinois University)

**Judy Maloney**, Professor, Nursing (BS, Illinois Wesleyan; MSN, University of Illinois)

**Calvin Martin**, Instructional Lab Facilitator, Manufacturing (AAS, Richland Community College; BS, Millikin University; PhD, Capella University)

**Kathryn Mast**, Director, Student Success (AAS, Richland Community College; BA, MA, University of Illinois-Springfield)

**Deborah L. McGee**, Director, Student Development (AAS, Richland Community College; BA, MA, University of Illinois-Springfield)

**Richard McGowan**, Executive Director, Foundation and Development (BS, University of Nebraska; MBA, University of Houston)

**Kathy McIntyre**, Duplication Center Specialist (Certificate, Education Direct)

**Lori McKenzie**, Administrative Assistant, Business and Technology Division

**David McLaughlin**, Professor, Horticulture (AAS, Danville Community College; BS, Southern Illinois University; MS, University of Illinois)

**Peggy McLean**, Admissions and Records Representative, Enrollment Services

**Christopher Merli**, Assistant Professor, Instructor, Chemistry (BA, University of Missouri-Columbia; MS, University of Missouri-St. Louis; PhD, University of Illinois)

**Judy Miller**, Instructor, Basic Nurse Assistant Training (BS, Millikin University)

**Laura Mondt**, Coordinator, Instructional Services, Kitty Lindsay Learning Resources Center, Teaching and Learning Support Services (BA, MS, University of Illinois-Urbana-Champaign)

**Megan E. Moore**, Director, Accounting (BS, Illinois State University)

**Sterling Morrell**, Criminal Justice Coordinator (AAS, Richland Community College; BA, University of Illinois-Springfield)

**Thomas G. Morrow**, Professor, Philosophy (BA, Oklahoma State University; MA, Oklahoma State University)

**Peter Mortensen**, Instructor, Anthropology/Earth Science (BA, University of Wisconsin; MA, University of Minnesota)

**Barbara Mosier**, Administrative Assistant, Outdoor Exposition Center & Special Events, (AAS, Richland Community College)

**Hannah Musson**, Evening Secretary, Mathematics & Sciences

**Carol Myers**, Assistant Professor, Practical Nursing (BS, Southern Illinois University; MS, University of Illinois)

## N

**Benjamin Newton**, Sustainability Program Coordinator, Continuing and Professional Education (BA, University of Northern Iowa; MS, Evergreen State College; PhD, SIU)

## O

**Gary O'Connor**, Counselor/Professor, Enrollment Services (BA, MEd, University of Illinois)

**Jon Odell**, Professor, Mathematics (BA, MS, Illinois State University)

**Andrea Ohl**, Administrative Assistant, Project READ (BS, Purdue University)

**Brooke Oliver**, Instructor, Surgical Technology (AAS, Richland Community College)

**Johnathan Oliver**, Financial Aid Specialist, Enrollment Services (BS, MA, Murray State University)

**Virginia Ostermeier**, Associate Professor, Nursing (BSN, University of Illinois; MSN, St. Louis University)

## P

**Kristine Palmer**, Professor, Sociology (AS, Richland Community College; BA, Sangamon State University; MS, Friends University)

**Julie Pangrac**, Program Coordinator, Project READ (BA, University of Illinois)

**Kim Parkinson-Hahn**, SSS/TRiO Career and Transfer Specialist, Enrollment Services (BS, Illinois State University and Indiana University)

**Keith (Andy) Perry**, Director, Sustainability and Contract Training, Continuing and Professional Education, (BS & MS, Indiana State University)

**Samuel Perryman**, Technical Services Specialist II, Operations and Technical Services (AAS, Richland Community College)

**Jennifer Peterson**, Training Coordinator, Continuing and Professional Education

**Jessica Pickel**, Assistant to the Dean, Health Professions (BA, MEd, University of Illinois, Champaign-



Urbana)

**Lori Pumphrey**, Accounting Technician, Payroll, Business Services (AS, Richland Community College)  
**Greg Pyles**, Instructional Lab Facilitator, Biology/Chemistry (AS, Richland Community College)

## R

**Amy Rankin**, Multimedia Specialist, Operations and Technical Services (BA, Southern Illinois University)  
**Nora Reed**, Accounting Technician, Student Receivables, Business Services  
**Frank Richardson**, Maintenance  
**Sara Richardson**, Assistant Professor, Accounting/Office Technology (AS, Richland Community College; BS, MA, University of Illinois – Springfield)  
**Mary Ann Riedell**, Associate Professor, Nursing (BSN, Augustana College in Sioux Fall, South Dakota; MSN, University of Phoenix)  
**Andrew Robinson**, Evening Secretary, Academic Success Center/Tutoring, Teaching and Learning Support Services (AAS, Richland Community College)  
**Gilbert Rocha**, Art Coordinator/Professor, Art (BFA, MFA, Northern Illinois University)  
**Ryan Rogiers**, Instructor, Culinary Arts (ACA, California Culinary Academy)  
**Amanda Rooney**, Child Development Center Teacher, Teaching and Learning Support Services (AA, Indian Hills Community College; BA, Iowa Wesleyan University)  
**Carmin Ross**, Director, Financial Aid and Veterans' Affairs  
**Mary L. Rousey**, Secretary, Logan Correctional Center  
**Deborah Rowley**, Evening Test Proctor, Academic Success Center/Testing, Teaching and Learning Support Services (Certificate, Sparks Business College)  
**Maureen L. Ruski**, Assistant Professor, Business and Accounting (AS, Richland Community College; BA, University of Illinois-Springfield; MBA, University of Illinois -UIUC)

## S

**Aaron Sarff**, Radiography Program Director, Instructor (AAS, Illinois Central College; BS, Southern Illinois University, Carbondale; MA, University of Illinois-Urbana)  
**Gayle Saunders**, President (BS, Illinois State University; MS, Eastern Illinois University; EdD, Northern Illinois University)  
**Scott Scheibly**, Tutoring and Accommodations Specialist, Academic Success Center/Tutoring and Accommodations, Teaching and Learning Support Services (AA, Richland Community College)  
**David Schneider**, Instructor, Construction Occupations, Logan Correctional Center (AA, Lincoln College; BS, Illinois State University)  
**Kelly Schoonover**, Secretary, Enrollment Services (AAS, Richland Community College; BS Greenville College)  
**Jan Schumacher**, Administrative Assistant, Clinton Extension Center, Enrollment Services  
**Clifford A. Scott**, Secretary Lincoln Correctional Center (AA, Kendall College; BA, MLS, University of Alabama; MA, University of Illinois)  
**Catherine Sebok**, Director, Admissions and Recruitment, Enrollment Services (AAS, Lake Land College; BS, Eastern Illinois University)  
**Marilyn Settles-Clark**, Accounting Technician, Receiving/Central Stores  
**Kathleen A. Sexton**, Instructor, Career Technologies, Lincoln Correctional Center (BS, Southern Illinois University)  
**Carla Shehorn**, Admissions and Records Representative, Enrollment Services (AA, Richland Community College)  
**Sharon Sims**, Administrative Assistant, Human Resources (AAS, Richland Community College)  
**Lily Siu**, Dean, Communications, Education, Humanities, and Fine Arts Division (BA, University of Hawaii; MA, PhD, University of Illinois at Urbana-Champaign)  
**George Sloat**, Instructor, Commercial Custodial, Lincoln Correctional Center (BS, Eastern Illinois University)  
**Jason Smith**, Associate Professor, Physics (BS, BA, Eastern Illinois University; MS, Indiana University)  
**Melissa Sphar**, Teacher's Assistant, Academy of Early Childhood Education, Teaching and Learning Support Services (AAS, Richland Community College)  
**Michelle Stephens**, Theatre, Communication, and Journalism Coordinator/Assistant Professor, Communication and Theatre (BA, University of Northern Iowa; MA, University of Illinois at Urbana-Champaign; ABD for Ph. D, University of Illinois)  
**Jill Stern**, Reference Assistant, Kitty Lindsay Learning Resources Center (BA, Kansas State University)  
**Robin Stimmel**, Director of Budgeting (AS, Parkland College; BS, Illinois State University)  
**Renee Stivers**, Director, Partners in Education (AA, Richland Community College; BS, Millikin University)  
**Carol Stokes**, Associate Professor, Biology (AS, Richland Community College; BS, Eastern Illinois University; MS, University of Illinois-Springfield)  
**Leo Suhre**, Assistant Professor, Welding  
**Nancy Sullivan**, Network Administrator II, Operations and Technical Services (BA, Illinois College)  
**Scott Sullivan**, Administrative Information Systems Specialist (AAS, Richland Community College)  
**Kristine Sulzberger**, Assistant Professor, English (AA, Richland Community College; BA, MA, University of Illinois-Springfield)  
**Margaret Swaim**, Secretary, Academic Success Center/Accommodations, Teaching and Learning Support Services (AAS, Richland Community College)

## T

**Tiffany Talbott**, Executive Administrative Assistant, Office of the President (AAS, Parkland College)  
**Jennifer Theis**, Theatre Scene Shop Facilitator  
**Sean Thornton**, Creative Marketing Specialist (BS, Illinois State University)  
**Tod Treat**, Vice President, Student and Academic Services (BS, University of Illinois; MS, University of Colorado; PhD, University of Illinois)  
**Richard Tomlinson**, English Coordinator/ Professor, English (AA, Delmar College; BA, University of San Diego; MA, Georgetown University; MA, Ph.D, University of Oxford)  
**Megan Towner**, Literacy Specialist, Project READ (BS, University of Illinois Urbana-Champaign; MS Illinois State University)  
**Brian Tucker**, Director, Culinary Arts (BPS, Culinary Institute of America)  
**James Turnbull**, Training Coordinator, CDL, Continuing and Professional Education

## U

**Teri Urbanowicz**, Operations Support Specialist, Operations and Technical Services

## V

**Steve Vandiver**, Director, Marketing (AA, Blackhawk College; BS, Illinois State University)  
**Karen Vercellino**, Assistant Professor, Nursing (BS, University of Tennessee; BSN, Millikin University; MS)  
**Tony Vespa**, Fire Science Coordinator/Instructor (AAS, Lincoln Land Community College)  
**Michael Vest**, Maintenance (AAS, Richland Community College)  
**Robert Vest**, Maintenance (AAS, Richland Community College)

## W

**Mary Beth Wade**, Professor, Psychology (BA, Johns Hopkins University; MA, PhD, University of Massachusetts)  
**Elizabeth Wanless**, Accounting Technician, Accounts Payable, Business Services  
**Diana Watts**, Enrollment Advocate, Enrollment Services  
**Patricia Weakly**, Executive Administrative Assistant, Student and Academic Services  
**Susan Webster**, Secretary, Campus Life (AAS, Richland Community College)  
**George Wenthe**, Instructor, Construction Occupations, Lincoln Correctional Center (MA, Saint Mary of the Woods)  
**Suzanne White**, Secretary, Continuing and Professional Education Division  
**Alex Wiertelak**, Assistant Professor, Communication/Media (AA, Waubesa Community College; BA, Southern Illinois University; MA Northern Illinois University)  
**Brett Willits**, Instructor, Drafting and Design (BS, University of Wisconsin)  
**Colleen Windhorst**, Literacy Specialist, Project READ (BS, Illinois State University)

## Y

**Deborah Yaden**, Professor, English (BA, MA, Illinois State University)

## Z

**Stephanie Zimmerman**, Director, Advising and Registration Services, Registrar (BS, Western Illinois University; MS, Illinois State University)  
**Teena Zindel-McWilliams**, Assistant to the Vice President of Student and Academic Services (BA, Eureka College)





## Professor Emeritus

The status of Professor Emeritus is granted to faculty who have demonstrated exemplary service over the course of their careers. This appointment recognizes the value that the College places on the experience, knowledge, and ability of its retiring/retired faculty. The following faculty met the criteria established by the College and were recommended by a committee of their peers.

### **2006 Professor Emeritus**

Fred Ellis, Economics  
Glen Freimuth, Earth Sciences  
Dr. William Grieve, History  
Dr. Madelyn Mihm, English and French  
Dr. Jeanelle Norman, English  
Lonn Pressnall, Speech and Drama

### **2007 Professor Emeritus**

Karen Baird, Biology  
Steven Dyer, Drafting, CAD, and Welding  
Frank Weisenmeyer, Electronics  
Jolene Wiegard, Office Technology

### **2009 Professor Emeritus**

Ali D. Moshgi, Mathematics

### **2010 Professor Emeritus**

Dr. John Cordulack, History

### **2011 Professor Emeritus**

Carol Wood, Nursing

## Staff Emeritus

The status of Staff Emeritus is granted to staff who have demonstrated exemplary service over the course of their careers. This appointment recognizes the value that the college places on the experience, knowledge, and ability of its retiring/retired staff. The following staff met the criteria established by the College and were recommended by a committee of their peers.

### **2010 Staff Emeritus**

Jane Johnson, Vice President, Student and Academic Services

### **2011 Staff Emeritus**

Kathy Sorenson, Director of Career Services



## A

Academic Advisement .....	22
Academic Integrity Policy .....	31
Academic Honors .....	37
Academic Load, Full-Time .....	36
Academic Information & Regulations .....	36
Academic Standards .....	36
Academic Success Center .....	22
Accommodations .....	22
Accounting Concentration .....	60
Accounting Courses .....	172
Accounting Program .....	64
Accreditation .....	7
Adele P. Glenn Academy for Early Childhood Education .....	22
Administrative Assistant Programs .....	144
Administrative Drop .....	38
Administration, Faculty, & Staff .....	246
Administrative Officers .....	4
Admission of High School & "Gifted" Students .....	12
Admission to a Program or Course .....	11
Admission to the College .....	11
Admission to a Program of Study .....	11
Admission to Health Professions Programs .....	11
Admissions .....	11
Advanced Placement Program .....	13
Advisement, Academic .....	22
Adult Education .....	34
Adult Basic Education Courses .....	242
Adult Literacy (Project READ) .....	34
African-American Studies Concentration .....	60
African-American Studies Courses .....	172
Agribusiness & Agriculture Program .....	66
Agriculture Concentration .....	60
Agriculture Courses .....	173
Alumni and Friends Association .....	34
Alternative Delivery of Instruction .....	37
Anthropology Concentration .....	60
Anthropology Courses .....	174
Appealing Financial Aid Suspension .....	20
Appealing a Grade .....	37
Applicability of Course to Programs .....	171
Arabic Courses .....	174
Areas of Concentration Suggestions .....	60
Art Concentration .....	60
Art Courses .....	174
Articulated 2+2 Degree Programs .....	61
Associate Degree Nursing Program .....	140
Associate in Arts Program .....	44
AA Degree Transfer Guide .....	45
Associate in Engineering Science Program .....	52
AES Degree Transfer Guide .....	53
Associate in Fine Arts Program .....	50
AFA Degree Transfer Guide .....	51
Associate in Liberal Studies Program .....	48
ALS Degree Transfer Guide .....	49
Associate in Science Program .....	46
AS Degree Transfer Guide .....	47
Associate of Arts in Teaching Program .....	54
AAT Degree Transfer Guide .....	55
Astronomy Courses .....	178
Attendance Requirements .....	38
Auditing a Course .....	38
Automotive Technology Courses .....	178
Automotive Technology Program .....	68

## B

Baccalaureate/Transfer Programs .....	60
Banking Program (Business) .....	70
Basic Certificate, Career and Technical Education Programs .....	62
Basic Certificate Programs .....	169
BioFuels Technician Program .....	92
BioProcess Operator Program .....	94
Biology Concentration .....	60
Biology Courses .....	179
Board of Trustees .....	4
Bookstore .....	10
Building Construction Course .....	180
Business Concentration .....	60
Business Courses .....	180
Business Programs .....	70

## C

Calendar, College .....	6
Campus Facilities .....	10
Campus Life .....	27

Campus Map .....	253
Campus Safety .....	22
Capstone Options, Career and Technical Education Programs .....	62
Career and Technical Education Programs Degree Requirements .....	63
Career Planning and Development Courses .....	183
Career Services .....	22
CDL (Truck Driver Training) Courses .....	239
CDL (Truck Driver Training, Transportation) Program .....	166
Certified Programs .....	43
CNC Technology Program (Engineering Technology) .....	96
Changing Program of Study .....	38
Changes in Program of Study, Effect on Graduation .....	39
Charge-Back Authorization .....	17
Charges, Tuition, Fees .....	16
Cheating (Academic Integrity) .....	31
Chemistry Concentration .....	60
Chemistry Courses .....	183
Child Development Center .....	22
Chinese Courses .....	184
Chronic Communicable Disease Policy .....	31
Circuit Training .....	35
Class Attendance .....	38
CLEP and DSST Prometrics Exams .....	13, 22
Clinton Extension Center .....	10, 24
Clubs, Student .....	27
College Core Values .....	9
College Mission .....	8
College Vision .....	7
Communication Courses .....	184
Communication Concentration .....	60
Communicator (College Newspaper) .....	27
Community Outreach .....	34
Computer Information Systems Courses .....	185
Computer Science Concentration .....	60
Computer Science Courses .....	185
Conduct Policy, Students .....	30
Confidentiality, Student Records .....	28
Continuing and Professional Education .....	34
Cooperative Agreements .....	17, 43
Cooperative Educational Programs .....	43
Core Values and Tenets for Employees .....	9
Correctional Education Program .....	242
Counseling Services .....	22
Course Descriptions .....	172
Course Placement & Testing .....	14
Course Prerequisites, CTE Programs .....	62
Course Responsibilities by Division .....	171
Course Sequences .....	63
Course Titles, Hours, and Credit .....	171
Creative Center for Learning .....	34
Credit Equivalency for Licensure or Certification .....	12
Credit Equivalency for Professional Training .....	14
Credit Equivalency for Professional Experience .....	14
Credit Evaluation Programs .....	13
Credit for Experience Outside the Classroom .....	14
Credit Transfer to Other Institutions .....	40
Credit Transfer to Richland .....	12
Criminal Justice Courses .....	186
Criminal Justice Program .....	78
Criminal Justice - Corrections Program .....	80
Culinary Arts Courses .....	187
Culinary Arts Program .....	82

## D

Dance Courses .....	188
DSST Prometrics Exam .....	13
Deans .....	4
Decatur Public Library .....	10, 34
Degree Audit .....	38
Degree Requirements, Career and Technical Education Programs .....	63
Dentistry Concentration .....	60
Desktop Support Technician Program .....	130
Disbursement of Financial Aid .....	20
Disease Policy .....	31
Dishonesty, Academic Policy .....	31
Drafting Courses .....	188
Drafting & Design Engineering Program .....	84
Dropping a Course .....	38
Drug-Substance Abuse Policies .....	32
Dual Credit .....	12



## E

E-Mail Address (Richland)	1
Early Childhood Education Concentration	61
Early Childhood Education Courses	190
Early Childhood Education Program	86
Earth Science Concentration	60
Earth Science Courses	191
Economics Concentration	60
Economics Courses	191
Education Concentration	60
Education Courses	192
Effects of Changes in Program on Graduation	39
Electrical Systems Specialty (Engineering Technology Program)	98
Electrician Program	90
Electronics Courses	193
Elementary Education Concentration	61
Emergency Medical Services Program	90
Emergency Medical Technology Courses	194
Employment, Student	25
Energy Distribution Courses	195
Energy Distribution Program	92
Engineering Courses	198
Engineering Technology Courses	198
Engineering Technology Program	92
English Concentration	60
English Courses	203
English/Reading Placement	15
English as a Second Language (ESL) Program	34
English as a Second Language (ESL) Courses	242
Entrepreneur (Business) Program	70
Ethics and Leadership	8
Evaluation of Clinical Courses	11
Evaluation of Specialized Courses	11
Expulsion from Class or College	31

## F

Facilities	10
Facilities Maintenance Specialty (Engineering Technology)	100
Faculty, Staff, and Administration	246
Fairview Park Plaza Center	10, 24
Federal Work-Study	19
Fees, Tuition, Charges	16
Financial Aid	17
Financial Information	16
Fire Science Courses	205
Fire Science Program	118
Fitness Center	35
Fluid Power Systems Specialty (Engineering Technology)	102
Foreign Language Concentration	60
Foreign Language Placement	15
Foundation, Richland Scholarships	18, 34
French Courses	207
Full-Time Academic Load	36

## G

GED Placement Program	11
General Educational Development (GED)	11, 34
General Science Concentration	60
German Courses	207
Gifted High School Students Admissions	12
Governance	7
Government, Student	28
Grade Point Average Calculation	37
Grading Policy	37
Graduation	39
Graduation Requirements, Health Programs	41
Graduation Requirements, Career and Technical Education Programs	62
Grants (Financial Aid)	18
Graphic Arts Program	120
Grievances, Student	30
Group/General Education Requirements, CTE Programs	62
Guarantee for Technical Competency	168
Guarantee of Transfer of Credit	41
Guaranteed Transfer Agreement	62

## H

Handicapped Services (Learning Accommodations)	22
Harassment Policy	33
Health Courses	202
Health Professions Fees	16
Health Professions GPA Requirements	36
Health Professions Graduation Requirements	41
Health Information Technology Courses	208
Health Information Technology Program	122
Heating, Ventilation, Air Conditioning & Refrigeration Courses	209

Heating, Ventilation, Air Conditioning & Refrigeration Program	124
High School Student Admissions	12
History Concentration	60
History Courses	211
Honors, Semester Academic	37
Honors, Graduation	40
Honors Opportunities Program	22
Horticulture Courses	212
Horticulture Program	126
Hospitality Management Courses	213
Hospitality Management Program	128
Human Resources Specialty (Business)	72
Humanities Courses	213
Hybrid Classes	38

## I

IDs, Student	25
Illinois Articulation Initiative (IAI)	40
Illinois Incentive for Access Grant	18
In-District Students Attending Another College (Charge-Back Authorization)	17
Incomplete Grade	38
Independent Study	38
Information Technology Policy	32
Information Technology Courses	214
Information Technology Program	130
Installment Payment Plan, Tuition	16
Instructional Programs	42
Instructional Programs – General	169
Instrumentation Systems Specialty (Engineering Technology)	104
International Studies	23
Internet Address	1
Internships	23
Intoxicant Use Policy	31
Introduction to Richland	7

## J-K

Journalism Concentration	60
Journalism Courses	217
Key to Course Descriptions	171
Kitty Lindsay Learning Resources Center	24

## L

Leadership Courses	217
Leadership Development Courses	217
Library	24
Liberal Studies Program	48
Literacy (Project READ)	34
Load, Academic	36
Loans	19
LPN to ADN Bridge Program	142

## M

Machine Repair Specialty (Engineering Technology)	106
Main Campus, Facilities	10
Majors (Areas of Concentration)	60
Management (Business) Program	74
Manufacturing Engineering Technology Specialty (Engineering Technology)	108
Map, Campus	252
Map, Facilities and Districts	252
MAP Grant (Financial Aid)	18
Marketing (Business) Program	76
Mathematics Placement	15
Mathematics Concentration	60
Mathematics Courses	218
Mathematics Enrichment Center	24
Mechanical Systems Specialty (Engineering Technology)	110
Medical Office Specialist Programs	150
Medicine Concentration	60
Minimum Subject Admission of High School Requirements	12
Mission of College	8
Music Courses	220
myRichland	24

## N

Network Technology Program	132
New Student Orientation	24
Newspaper, College (Communicatur)	28
Non-Credit Classes (See Continuing & Professional Education)	34
Nondiscrimination Policy	1
Nurse Assistant Program	136
Nursing Courses	222
Nursing Program (ADN)	140
Nursing Program Admission Requirements	11

## O

Off-campus Facilities	10, 24
Off-campus Programming	35



Office Technology Courses.....	223
Office Technology Program .....	144
Online Classes .....	38
Online Learning Orientation.....	24
Online Learning Support.....	24
Organizations, Student.....	27
Orientation.....	24
Other Instructional Options.....	38
Out-of-District Students Attending Richland (Charge-Back Authorization).....	17

## P-Q

Paraprofessional Education Program.....	88
Paraprofessional Educator Concentration.....	61
Parking .....	25
Payment Information .....	16
PELL Grant.....	18
Perkins Program .....	25
Personal Development Courses.....	225
Personnel Relations Courses .....	226
Pharmacy Technology Courses.....	226
Pharmacy Technology Program .....	156
Philosophy Concentration.....	60
Philosophy Courses.....	227
Physical Education Courses.....	227
Physical Science Courses.....	228
Physics Concentration.....	60
Physics Courses.....	228
Placement Testing .....	15
Placement GED .....	11
Political Science Concentration .....	60
Political Science Courses .....	229
Possession of Weapons Policy .....	32
Power Generation – Nuclear Program .....	158
Power Generation Nuclear Courses.....	229
Practical Nursing Courses .....	230
Practical Nursing Program.....	138
Pre-Dentistry Concentration .....	60
Pre-Forestry Concentration .....	60
Pre-Medicine Concentration.....	60
Pre-Veterinary Concentration .....	60
Prerequisites, Career and Technical Education .....	62
Probation, Academic.....	36
Probation, Financial Aid.....	20
Professor Emeritus .....	249
Proficiency by Advanced Course.....	14
Proficiency Examination .....	13, 16
Program Board.....	28
Programmer/Analyst Program.....	134
Programs of Study.....	42
Project READ .....	34
Psychology Concentration.....	60
Psychology Courses.....	231
Quarter System, Effects on Graduation.....	40

## R

Radiography Courses.....	232
Radiography Program .....	160
Reading Placement Testing.....	15
Recognition, College .....	7
Records, Student.....	28
Refund (Tuition and Fees) Policy .....	17
Refunds, Financial Aid Recipients .....	17
Registration .....	13
Removal from College, Class.....	31
Renewal Energy (Engineering Technology) .....	212
Repeating a Course.....	38
Residency.....	17
Responsible Use of Information Technology Policy.....	32
Richland Discover.....	35
Richland Foundation.....	34
Richland Foundation Scholarships.....	18
Rights and Responsibilities, Student.....	29

## S

Safety, Campus .....	22
Scholarships .....	18
Secondary Education Concentration.....	61
Secondary Math Education Concentration.....	61
Selective Admission to Health Professions Programs.....	11
Self-Registration .....	25
Senior Citizens Tuition Discount.....	16
SEOG Grant.....	18
Sequence of Courses.....	63
Sequestration Courses.....	234
Sequestration Program (Engineering Technology).....	114
Service Learning Courses .....	229

Sexual Harassment Policy.....	33
Shilling Center .....	10
Sign Language Courses .....	234
Smoking/Tobacco Policy.....	33
Social Science Courses.....	234
Sociology Concentration.....	60
Sociology Courses.....	235
Spanish Courses .....	236
Special Education Concentration .....	61
Staff Emeritus .....	249
Staff, Faculty, & Administration .....	246
Standards of Academic Progress, Financial Aid .....	19
State Minimum Subject Requirements, Transfer Programs .....	12
Statement of Purpose .....	7
Student Activities (See Campus Life).....	27
Student Mentor Ambassador Program .....	28
Student & Academic Support Services.....	22
Student Classification .....	36
Student Clubs .....	27
Student Conduct Policy .....	30
Student Employment .....	19, 25
Student Grievance Policy .....	30
Student IDs .....	25
Student Loans .....	19
Student Organizations .....	27
Student Records, Confidential Information.....	28
Student Rights & Responsibilities.....	29
Student Senate.....	28
Student Status (Classification) .....	36
Student Success.....	25
Student Support Services/TRIO .....	26
Student Trustee .....	28
Study Time Required .....	36
Substance Abuse Policy .....	32
Success.net.....	26
Surgical Technology Courses .....	237
Surgical Technology Program.....	162
Suspension, Academic.....	36
Suspension, Financial Aid .....	20

## T

2+2 Degree Programs (Articulated).....	61
Table of Contents.....	2
Teacher Assistant Program.....	88
Teacher Education Concentration .....	61
Technology, Responsible Use Policy.....	32
Tenets for Richland Employees .....	9
Tenets of Trusteeship .....	8
Testing (ASC) .....	26
Testing, Placement .....	15, 22
Theatre (Drama) Concentration.....	61
Theatre (Drama) Courses.....	239
Tobacco Policy.....	33
Transcripts (Fee) .....	16
Transfer Center.....	26
Transfer Credit by Licensure .....	12
Transfer of College Credit, Guaranteed.....	62
Transfer of College Credit to Richland .....	12
Transfer of Credits to Other Colleges.....	40
Transfer Programs.....	44
Transfer Programs, Minimum Subject Requirements .....	12
Transportation Courses (CDL, Truck Driver Training) .....	239
Transportation Program.....	166
TRIO Program .....	26
Truck Driver Training Program.....	166
Tuition, Fees, and Charges .....	16
Tuition Discount for Senior Citizens.....	16
Tuition Payment Plan.....	16
Tutorial Assistance, Veterans .....	21
Tutoring.....	22

## U-V

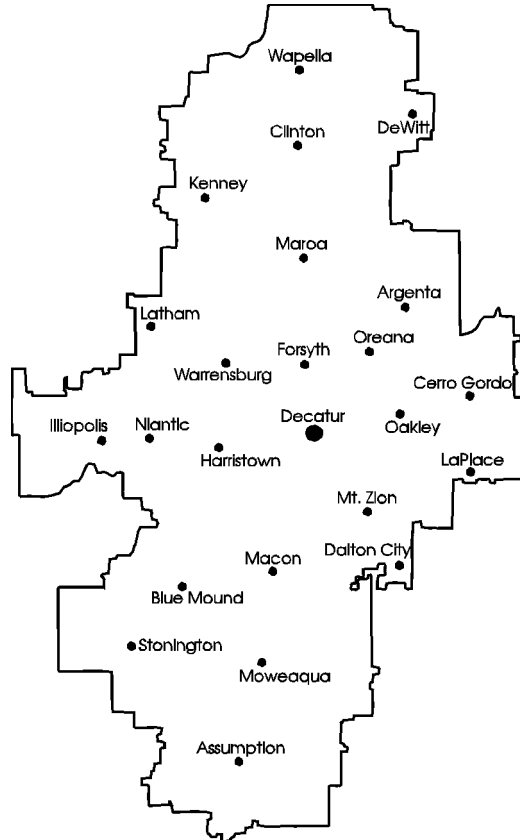
Verification, Financial Aid.....	20
Veterans' Affairs.....	21
Virtual Courses .....	38

## W-Z

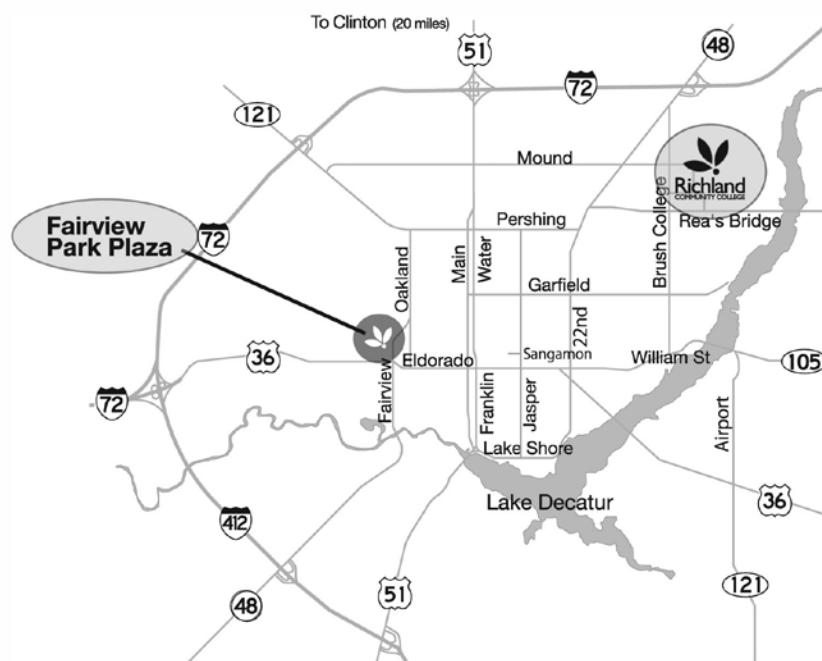
Weapons Possession Policy .....	32
Web-Enhanced Classes .....	38
Web Page Address.....	1
Welcome to Richland.....	5
Welding Technology Courses .....	240
Welding Technology Program.....	166
Wind Energy Systems Specialty (Engineering Technology).....	116
Withdrawing from Course or College.....	38
Withholding Student Information .....	28



## District Served by Richland Community College



## Richland Facilities in Decatur





August 2010

NORTH