

Graduation and Transferring



Perhaps your time at Prairie State College has numbered a few months while you earn a certificate to boost your earnings potential. Or, you might be among the many who have worked for years toward an associate's degree while juggling other responsibilities.

Whatever you have accomplished, we're pleased and proud to have been part of your educational journey. We wish you well with your next step, whether it is on your career path or on the path toward a bachelor's degree or graduate school.

Graduation

As outlined in the opening Overview section, PSC grants certificates and the following six associate's degrees:

- Associate in Arts (A.A.)
- Associate in Science (A.S.)
- Associate in Fine Arts (A.F.A.)
- Associate of Arts in Teaching (A.A.T.)
- Associate in Applied Science (A.A.S.; career and technical degree)
- Associate in General Studies (A.G.S.; not intended for career program or a bachelor's degree)

Specific curriculum requirements for a particular degree or certificate program are found in Degrees, Certificates, Courses. Consult that section of the catalog and the index for detailed information. The next section gives an overview of graduation requirements.

Graduation Requirements

To earn a degree or certificate, you must complete the academic requirements shown in the catalog for the year in which you entered Prairie State College. If the degree or certificate requirements are changed during your attendance, you may elect to satisfy either the new requirement or the ones in force when you enrolled. If you withdraw from Prairie State College for either a fall or spring semester, you must satisfy requirements in force at the time you re-enroll. A student must also satisfy the applicable residency requirements prior to the degree or certificate being conferred.

When submitting a graduation petition, you will be asked to identify the year of the catalog from which you are graduating. Any petition for alteration of graduation requirements must be submitted in writing on a Course Substitution Form—available from the dean over the academic program—at least one semester prior to graduation. Graduation petitions must be submitted to the Enrollment Services Office no later than the following dates:

Fall graduation: October 1

Spring graduation: March 1

Summer graduation: July 1

Graduation petitions submitted after these deadlines will be subject to an additional charge.

December, May, and August candidates may choose to participate in the annual May Commencement ceremony (see following section, "Commencement Ceremony").

Students planning to receive a degree and/or certificate at PSC must request an official evaluation of their credits in the Office of Enrollment Services, by completing the "Transcript Evaluation Request Form" at least one or two semesters prior to degree and/or certificate completion in order to ensure correct course selections. The form is also available on the College Web site and may be printed and mailed to the Office of Enrollment Services at the main campus address or completed online.

Commencement Ceremony

A commencement (graduation) ceremony is held once a year, at the end of the spring semester in May. Graduates from the previous fall, current spring, and forthcoming summer terms are invited to participate.

Note: This is the only ceremony held all year, though you may be certified as a graduate at the end of any semester of the academic year. The deadline to apply for the ceremony is March 1, no matter which semester you actually fulfill the requirements for graduation.

For each degree application, a fee of \$20 will be charged upon petitioning for graduation (this includes the cost of a degree diploma); there is no additional fee to participate in the ceremony. Students who earn a certificate will have that information posted to their college transcript free of charge; however, if a certificate recipient wishes to participate in the graduation ceremonies and therefore receive a diploma, a fee of \$20 will be charged for each diploma.

For more information on academic honors, see “Grading and Other Academic Policies” within the section policies and guidelines. For information on the ceremony, please call the Office of the Vice President of Student Affairs at (708) 709-3507.

Transferring to Other Colleges

If you wish to transfer from Prairie State College to another college, you must follow the admissions procedure for the institution you wish to attend. No matter what transfer hopes and plans you might have, recognize that each college or university has its own unique policies, selection process, and admissions requirements.

It is the responsibility of students to be familiar with transfer policies at other institutions. Visit the Web site or obtain a catalog and application packet from the schools you are interested in attending. The PSC Counseling and Academic Advising Center can assist you in the transfer process. Contact the Transfer Coordinator at (708) 709-3508, or talk with any of PSC’s advisors and counselors for more information.

A transfer student agreement (commonly called the Compact Agreement) is established with a number of public universities in Illinois. This compact states that a transfer student who has completed an associate’s degree based on a baccalaureate-oriented sequence is considered to have attained junior standing and to have met lower-division general educational requirements.

Illinois Articulation Initiative (IAI)

PSC is part of the Illinois Articulation Initiative, a statewide agreement allowing transfer of the completed Illinois Transferable General Education Core Curriculum (IAI GECC) between participating institutions. Completion of the transferable IAI GECC at any participating college or university in Illinois ensures transferring students that lower-division general education requirements for an associate’s or bachelor’s degree have been satisfied.

Here is good advice on transferring—one of many resources and tips found on the IAI Web site (www.itransfer.org):

1. Even though the Illinois Articulation Initiative (IAI) agreements and Web site are meant to make transfer smoother, you still need to see an academic advisor or admissions counselor.
2. To transfer as a junior, you need a minimum of 60 (and usually not more than 64) semester credits. Plan to earn an associate’s degree before transferring: at PSC, we offer Associate in Arts, Associate in Science, Associate in Fine Arts, and Associate of Arts in Teaching.
3. If you already know where you will transfer, see that school’s catalog and a counselor for specific advice.
4. Every participating school does not offer all majors or all specialties in a major.
5. No two majors are alike; courses in one major are unlikely to meet requirements for a different major. Changing your major will likely increase the time needed to complete your degree.
6. Be sure to check to see if any specific Illinois Transferable General Education Core Curriculum (IAI GECC) courses are recommended by your major. A few majors, like music and engineering, suggest you not finish the IAI GECC before transferring.
7. Most majors require at least a “C” for a course to count towards major requirements, and most schools won’t accept pass/fail.
8. Since admission is often competitive, completing the IAI Majors’ recommended courses will not by itself guarantee admission.
9. Some majors require assessment for admission: a basic skills test (reading, grammar, writing, and math) is required for certification in all teacher education majors. Most music schools require an audition and most art schools require a portfolio.
10. When selecting courses for your major, always seek advice from an academic advisor at your current school and a counselor at the transfer school. More information on IAI and transferring is found in Degrees, Certificates, Courses. Consult that section and the Index.

Transcripts

The Office of Enrollment Services issues official transcripts; a nominal fee is charged for each transcript. Students and former students must make a request in writing to order a transcript. The “Transcript Request Form” is available in the Enrollment Services Office Room 1160 or on the College Web site.

A transcript will not be issued to a student or former student if a record encumbrance has been placed on his or her academic record (indicating a past-due monetary obligation to the College such as unpaid tuition, fees, fines, or financial aid repayment). Students may also need to provide additional documentation to verify identity prior to a transcript being released from the College.

For more information on transcripts, please call (708) 709-3514.

Degrees and Certificates



Academic Degrees and Certificates

Prairie State College offers associate's degrees that prepare students for transfer to four-year institutions, associate's degrees and certificates that prepare students for specific careers, and an associate's degree that recognizes completion of a broad range of college-level courses.

Transfer Degrees

The Associate in Arts degree (A.A.) includes the first two years of study for students who plan to pursue a bachelor's degree in liberal arts.

The Associate in Science degree (A.S.) covers the first two years of study for students pursuing a bachelor's degree in engineering, mathematics, or science.

The Associate in Fine Arts: Art degree (A.F.A.) is designed to prepare students to transfer as juniors into a bachelor's degree program (B.F.A.) in Studio Art. Students are encouraged to complete their core courses in art before enrolling in media specific studio courses. A portfolio review is usually required for transfer to a four-year institution.

The Associate of Arts in Teaching degree (A.A.T.) is a two-year program designed for students preparing for careers in secondary education. It provides a foundation in teacher education, field-based experiences, and discipline-specific content. Current A.A.T. degrees are designed to facilitate transfer for students who intend to teach in high-need disciplines.

General Studies Degree

The Associate in General Studies degree (A.G.S.), while not intended for transfer or directed at a specific occupation, allows students to design their own two-year program. See the section about A.G.S. degrees.

Career Program Degrees and Certificates

The Associate in Applied Science (A.A.S.) represents completion of a minimum of 60 credit hours in a technical or career program.

Certificates are awarded after completion of up to 50 credits that focus on specific occupational or technical areas of study. For detailed information about career degree and certificate programs, see the Career Programs section later in the catalog.

Illinois Articulation Initiative (IAI)

www.itransfer.org

Prairie State College participates in the Illinois Articulation Initiative (IAI), a statewide transfer agreement among more than 100 participating colleges, universities, or community colleges in Illinois. IAI works best for students who know they are going to transfer but undecided on the college or university that will grant their baccalaureate degree. All colleges and universities participating in the IAI agree to accept a "package" of IAI general education courses in lieu of their own comparable lower-division general education requirements. It is important to keep in mind that the IAI General Education Core Curriculum transfers as a package. Course-to-course transfer is not guaranteed. IAI also includes major recommendations for the first two years of college in several popular majors. Faculty panels, which have expertise in the major field of study, created these recommendations. IAI major recommendations work best for students who have chosen their majors, are going to eventually transfer, but are undecided on the college or university that will grant their baccalaureate degree.

Understanding IAI

1. The IAI Agreement and the iTransfer Web site are designed to simplify transferring to any participating school. Always seek the advice of academic advisors at Prairie State College and the school you plan to attend when making transfer plans.
2. Articulation is the process of transferring courses from one school to another and identifying the way the classes will be used at the receiving school.
3. The Illinois General Education Core Curriculum is for transfer students only.
4. To guarantee that you receive full credit, you should complete the Illinois General Education Core Curriculum package before transferring. When it is not completed before transfer, each college or university decides how to apply each individual course.
5. The Illinois General Education Core Curriculum requires a total of 12 to 13 courses (37 to 41 semester credits).
6. The General Education requirements at Prairie State College are aligned with the five major areas (fields or categories) within the Illinois General Education Core Curriculum: Area A-Communication, Area B-Humanities and Fine Arts, Area C-Mathematics, Area D-Physical and Life Sciences, and Area E-Social and Behavioral Sciences.
7. The Illinois General Education Core Curriculum became effective statewide in the summer of 1998.
8. Application of credit earned prior to summer 1998 is the decision of the receiving institution. For information about IAI and graduation requirements, see page 48.
9. There are two types of undergraduate degrees: the associate's degree and the bachelor's degree.
10. The IAI identifies courses which will apply to specific majors. Prairie State College students are encouraged to complete an Associate in Arts, Associate in Science, Associate in Fine Arts, or Associate of Arts in Teaching degree prior to transfer.

IAI Participating Schools

There are 95 schools in Illinois that are currently recognized by IAI as full-participating schools, and 18 schools currently recognized as a receiving-only schools. In addition to two-year public colleges (48 schools), there are two-year independent institutions, and four-year public and independent institutions. The following list of four-year institutions is provided to assist in transfer planning. Institutions identified as [R] are receiving institutions only.

Four-Year Public Institutions

- Chicago State University
- Eastern Illinois University
- Governors State University [R]
- Illinois State University
- Northeastern Illinois University
- Northern Illinois University
- Southern Illinois University at Carbondale
- Southern Illinois University at Edwardsville
- University of Illinois at Chicago
- University of Illinois at Springfield
- University of Illinois at Urbana
- Western Illinois University

Four-Year Independent Institutions

- American InterContinental University [R]
- Argosy University [R]
- Aurora University
- Benedictine University
- Blackburn College
- Bradley University
- Concordia University
- DePaul University
- DeVry University, Chicago and DuPage
- Dominican University
- East-West University [R]
- Ellis College of New York Institute of Technology [R]
- Elmhurst College
- Eureka College [R]
- Illinois Institute of Art - Chicago [R]
- Illinois Institute of Technology
- ITT Technical Institute [R]
- Judson College
- Kendall College
- Knox College [R]
- Lake Forest College [R]
- Lakeview College of Nursing [R]
- Lewis University
- Lexington College
- Lincoln Christian University
- Lincoln College
- MacMurray College
- McKendree College [R]
- Midstate College
- Milliken University
- NAES College [R]
- National-Louis University
- North Central College
- North Park University

- Olivet Nazarene University
- Quincy University
- Robert Morris College
- Rockford College
- Roosevelt University
- Saint Anthony College of Nursing [R]
- Saint Augustine College
- Saint Francis Medical Center, Nursing [R]
- Saint Xavier University
- St. Augustine College
- Trinity Christian College
- University of St. Francis
- West Suburban College of Nursing [R]

Additional information about the IAI is available from the Prairie State College Transfer Coordinator or by visiting the IAI Web site at www.itransfer.org.

IAI Course Codes

IAI has its own course numbering sequence for the Illinois Transferable General Education Core Curriculum. Here is an example of an IAI GECC course –
S7 903D: Racial and Ethnic Relations

This code would be noted for a PSC course listed in this catalog as follows:

SOCIO 220 Race Relations: A Multicultural Perspective
(IAI: S7 903D)

The first letter in the IAI GECC code indicates the discipline field for the course. The letter S, for example, indicates Social/Behavioral Sciences. IAI letter codes and their corresponding disciplines are as follows:

General Education Core Curriculum Course Codes:

IAI: C Communications

IAI: F Fine Arts

IAI: H Humanities

IAI: HF Interdisciplinary Humanities/Fine Arts

IAI: HS Interdisciplinary Humanities/Fine Arts and Social/Behavioral Sciences

IAI: L Life Sciences

IAI: LP Interdisciplinary Physical and Life Science

IAI: M Mathematics

IAI: P Physical Sciences

IAI: S Social/Behavioral Sciences

The first number after the letter indicates the sub-area of the discipline. The S7 in this example represents the Sociology subarea of Social/Behavioral Sciences. The next numbers represent the unique content category within this subdiscipline. Letters at the end of course numbers identify specific perspectives related to the course. The D in S7 903D, for example, represents courses that examine aspects of human diversity within the United States. Other end-of-course letters include:

N for courses designed to examine aspects of human diversity from a non-U.S./non-European perspective.

L for laboratory courses

R for research paper courses

Transfer Degree Guidelines

The A.A., A.S., A.F.A., and A.A.T. degrees meet the guidelines of the Illinois Articulation Initiative “Transferable General Education Core Curriculum” and the Illinois Community College Board “Guidelines for Associate Degrees Designed for Transfer”.

Transfer Degree Admissions Requirements

Students applying for admission to a baccalaureate transfer program must have 15 high school credits distributed as follows:

- 4 credits in English (*written and oral communication, literature*)
 - 3 credits in Mathematics (*introductory through advanced algebra plus geometry*)
 - 3 credits in Social Studies (*emphasizing history and government*)
 - 3 credits in Science (*laboratory science*)
 - 2 credits in electives (*foreign language, art, music, vocational education*)
- (Illinois Public Act 86-0954)

Students who have academic deficiencies in these minimum requirements can satisfy these deficiencies upon successful completion of 24 transferable credit hours (with a minimum GPA of 2.0) which must include ENG 101 Composition I (3), COMM 101 Principles of Communication (3), one social science course, one four-credit laboratory science course, and one college-level mathematics course.

Transfer Degree Graduation Requirements

Prairie State College offers four transfer degrees:

- Associate in Arts (A.A.),
- Associate in Science (A.S.),
- Associate in Fine Arts: Art (A.F.A.), and
- Associate of Arts in Teaching: Secondary Mathematics (A.A.T.).

Candidates for these degrees must fulfill the following requirements:

1. Enrolled at Prairie State College for the two semesters immediately preceding graduation, successfully completing at least 15 credit hours at Prairie State College (excluding proficiency credits).
2. Candidates for the A.F.A. Degree must complete 61-62 credit hours including the Transferable General Education Core Curriculum of 31-32 credits. Candidates for the A.A. or A.S. Degree must complete 62 semester hours of college credit as specified, including Transferable General Education Core Curriculum of 37-41 credits.
3. Attained a minimum cumulative grade point average of 2.0 on a 4.0 scale in all Prairie State College courses for A.A., A.S. and A.F.A. degrees, and a minimum cumulative grade point average of 2.5 for A.A.T. degrees.
4. Filed appropriate evidence of high school graduation or GED certification with the Enrollment Services Office.

Transfer Degree Components

There are three components of degree programs: The Transferable General Education Core Curriculum, the area of concentration or major field, and electives.

I. Transferable General Education Core Curriculum Requirements

A.A./A.S. Degrees: 37-41 credit hours

A.F.A. Degree: 31-32 credit hours

A.A.T. Degree: 39-40 credit hours

The General Education Core

The goal of general education is to help students understand the world they live in. The core curriculum consists of liberal arts courses in five key areas: communication, humanities and the fine arts, social sciences, mathematics, and science. Education in these disciplines develops habits of mind like curiosity, critical thinking and introspection that help one adapt to the changing world. Courses in English and Communication foster the ability to read critically and speak and write effectively. Those in the humanities and social science broaden understanding of different cultures and lead to an appreciation of the diversity of human experience. Mathematics and science courses develop the ability to analyze problems and find solutions, while courses in literature, music, and the fine and performing arts enrich understanding of human nature, enhance aesthetic appreciation, and broaden understanding of human nature and society. Taken together, study in these traditional academic disciplines leads to a better understanding of the key issues that face our society and helps students become more responsible citizens.

Prairie State College's General Education Core is designed to ensure that all our students develop competencies in the following areas:

Communication

Students will read with comprehension, listen critically, and speak and write effectively.

Critical Thinking

Students will analyze problems, develop solutions, and evaluate results, forming a self-conscious habit of inquiry as a foundation for a lifetime of continuous learning and personal transformation.

Knowledge

Students will be able to organize and apply discipline-specific ways of knowing.

Social and Cultural Awareness

Students will understand and recognize the values and ethics of Western and non-Western cultural traditions, and appreciate the diversity of human experience both within the United States and throughout the world.

Literacy

Students will function with competence in writing, working with numbers, speaking in large and small groups, using basic technology for learning, and evaluating information from a range of sources.

Area A: Communication

• A.A., A.S., A.F.A., A.A.T.: 9 semester hours

To facilitate development of these essential abilities, students take courses in the following areas:

The purpose of courses in writing and speaking is to foster the ability to communicate effectively with others, whether in speech or writing. The complexities of the modern world require the ability to think independently and express ideas clearly. Because these courses provide such important foundation skills, students should complete them early in the degree program so what they learn can improve their performance in other courses. Satisfactory completion of the required writing course sequence, ENG 101 Composition I and ENG102 Composition II, will mean a grade of “C” or better in both courses.

The following 3 courses (9 credit hours), including a two-course sequence in writing and one course in oral communication, are required:

Writing Course Sequence [IAI Code]

ENG 101 [C1 900] Composition I - with a grade of C or better (3)

Note: All students must write a passing English 101 Portfolio in order to pass ENG101

ENG 102 [C1 901R] Composition II - with a grade of C or better (3)

Oral Communication [IAI Code]

COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts

• A.A., A.S., A.A.T.: 9 credit hours

• A.F.A.: 6 credit hours from Humanities only

Study in the Humanities, Fine Arts, and Philosophy helps develop an understanding of what it means to be human. These courses expose students to great works of literature, art, music, and theater, enhancing their appreciation and understanding of the arts. They also examine the religious traditions and cultural expressions of people in a variety of cultures who have struggled to understand the basic questions that confront human beings – questions about good and evil, identity, courage, love, truth, justice, and morality.

Select 2 or 3 courses (6 or 9 credit hours), with at least one course selected from fine arts and at least one course from the humanities:

Fine Arts Courses

Art [IAI Code]

ART 121 [F2 901] History of Western Art I (3)

ART 122 [F2 902] History of Western Art II (3)

ART 126 [F2 904] History of Photography (3)

ART 129 [F2 900] Art Appreciation (3)

[not accepted for A.F.A. Degree]

ART 131 [F2 903N] Survey of Non-Western Art (3)

Music [IAI Code]

MUSIC 130 [F1 900] Music Appreciation (3)

MUSIC 132 [F1 904] American Music (3)

Theatre [IAI Code]

THTRE 101 [F1 907] Understanding Theatre (3)

Foreign Languages [IAI Code]

SPAN 202 [H1 900] Spanish IV (4)*

*Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Humanities [IAI Code]

HUMAN 101 [H5 904N] Comparative Religions (3)

HUMAN 102 [H5 901] Foundational Religious Texts (3)

HUMAN 201 [H9 900] Humanities Themes: Myth, Reason, & God (3)

Literature [IAI Code]

ENG 211 [H3 914] American Literature I (3)

ENG 212 [H3 915] American Literature II (3)

ENG 215 [H3 910D] African-American Literature (3)

ENG 221 [H3 903] Introduction to Poetry (3)

ENG 231 [H3 912] British Literature I (3)

ENG 232 [H3 913] British Literature II (3)

ENG 240 [H3 901] Introduction to Fiction (3)

ENG 243 [H3 908N] Non-Western Literature in English (3)

ENG 252 [H3 902] Introduction to Drama (3)

ENG 261 [H3 906] Western/World Literature I (3)

ENG 262 [H3 907] Western/World Literature II (3)

ENG 271 [H3 905] Introduction to Shakespeare (3)

Philosophy [IAI Code]

PHILO 201 [H4 900] Introduction to Philosophy (3)

PHILO 202 [H4 904] Ethics (3)

PHILO 203 [H4 906] Introduction to Logic (3)

PHILO 204 [H4 905] Philosophy of Religion (3)

PHILO 205 [H4 903N] Eastern Philosophy (3)

Interdisciplinary Humanities and Fine Arts [IAI Code] may be used for either humanities or fine arts credit.

ENG 256 [HF 908] Film & Literature (3)

HUMAN 202 [HF 900] Form and Structure in the Arts (3)

Area C: Mathematics (3-6 credit hours)

Mathematics focuses on quantitative reasoning as a basis for understanding the relationships found in both work and everyday life.

Mathematics provides the tools and skills necessary to organize thinking, apply problem-solving strategies and recognize patterns and processes across many different fields.

Mathematics is also used to determine reasonableness, identify alternatives and select optimal results.

Select 1 to 2 courses (3 to 6 credit hours) from:

Mathematics [IAI Code]

MATH 112 [M1 904] General Education Math (3)

MATH 115 [M1 902] General Education Statistics (3)

MATH 112 and 115 are recommended for A.A. and A.F.A. students who do not intend to take higher levels of mathematics.

BUS 240 [M1 902] Elementary Statistics (4)

MATH 153 [M1 902] Probability and Statistics (4)

MATH 153 is intended for students with advanced math skills; it may be taken in place of MATH 115. Students can receive credit for only one of BUS 240, MATH 115 and 153.

MATH 155 [M1 906] Finite Mathematics (4)

MATH 157 [M1 900-B] Calculus for Business and Social Science (4)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

MATH 172 [M1 900-2] Calculus with Analytic Geometry II (5)

MATH 173 [M1 900-3] Calculus with Analytic Geometry III (5)

MATH 206 [M1 903] Mathematics for Elementary Teaching II (4)**

MATH 210 [M1 905] Discrete Mathematics (3)

**Prerequisite: MATH 200 Mathematics for Elementary Teaching I (4)

**MATH 206 fulfills general education requirements only for students seeking state certification as elementary teachers. Students must complete both MATH 200 and 206 prior to transfer.

Area D: Physical and Life Sciences

- A.A., A.S., A.F.A., A.A.T.: 7-8 semester hours

The study of science helps students learn how the scientific method is used to discover new truths and re-assess old ones. In science courses, students learn how scientists formulate and test hypotheses to investigate and understand phenomena in the natural world. By participating in laboratory sessions where they use the scientific method themselves, students get first hand experience in how scientists think. Students also become familiar with the physical and biological concepts developed through scientific study. Familiarity with these scientific principles promotes understanding of the natural world and enhances the ability to make informed decisions about environmental, health, and technological problems.

Select two courses (7-8 credit hours), with one course selected from the life sciences and one course from the physical sciences and including at least one laboratory course from:

(The "L" in the IAI code indicates a "lab science" course.)

Life Science Courses [IAI Code]

BIOL 100	[LI 900L]	General Education Biology (4)
BIOL 103	[LI 901]	Plants and Society (3)
BIOL 105	[LI 905]	Environmental Biology (3)
BIOL 106	[LI 906L]	Heredity and Society (4)
BIOL 112	[LI 900L]	Organismal Biology (4)*

*This course is intended for science majors only and should not be selected by non-science majors to meet general education science requirements. Students cannot receive credit for both BIOL 100 and 112. Students who demonstrate successful completion of BIOL 111 may use this course to fulfill their general education life science requirement.

Physical Science Courses [IAI Code]

ASTRO 101	[PI 906]	Guide to the Universe (3)
ASTRO 104	[PI 906L]	The Solar System and Beyond (4)
CHEM 105	[PI 902L]	Survey of General Chemistry (4)
CHEM 110	[PI 902L]	General Chemistry I (5)*

*This course is intended for science majors only and should not be selected by non-science majors to meet general education science requirements. Student cannot receive credit for both CHEM 105 and 110.

GEOG 105	[PI 909]	Introduction to Physical Geography (3)
GEOLO 101	[PI 907L]	Physical Geology (4)
METEO 150	[PI 905]	Introduction to Meteorology (3)
PHYS 111	[P9 900L]	Physical Science (4)
PHYS 112	[P9 905L]	Earth Science (4)

Students cannot receive credit for both METEO 150 and PHYS 112.

PHYS 101	[PI 901L]	Conceptual Physics (4)
PHYS 120	[PI 900L]	College Physics I (4)*
PHYS 210	[P2 900L]	University Physics I (4)

*This course is intended for science majors only and should not be selected by non-science majors to meet general education science requirements. Student cannot receive credit for both PHYS 120 and 210.

Area E: Social and Behavioral Sciences

- A.A., A.S., A.A.T.: 9 credit hours

- A.F.A.: 6 credit hours

The Social Sciences focus on an appreciation of human continuity and change on both the personal and societal level. Through analysis of historical, political, cultural and economic institutions, students become better able to understand themselves and their own society. They also develop insights into contemporary life including a broader understanding of how society works and what good citizenship means. They also become more self-aware and more attuned to issues relating to the environment, diversity, and social justice. In these courses, students are encouraged to become more reflective and use their new insights to think about how to address contemporary problems. Select two or three courses (6 or 9 credit hours), with courses selected from at least two disciplines, from:

Anthropology [IAI Code]

ANTHR 215	[S1 900N]	Introduction to Anthropology (3)
ANTHR 222	[S1 901N]	Introduction to Cultural and Social Anthropology (3)

Economics [IAI Code]

ECON 201	[S3 901]	Macroeconomic Principles (3)
ECON 202	[S3 902]	Microeconomic Principles (3)

Geography [IAI Code]

GEOG 101	[S4 900N]	Cultural Geography (3)
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History [IAI Code]

HIST 111	[S2 912N]	World History: Origins to 1714 (3)
HIST 112	[S2 913N]	World History: 1714 to Present (3)
HIST 115	[S2 906N]	African Civilizations I (3)
HIST 116	[S2 907N]	African Civilizations II (3)
HIST 140	[S2 910N]	History of Latin America (3)
HIST 151	[S2 902]	History of Western Civilization I (3)
HIST 152	[S2 903]	History of Western Civilization II (3)
HIST 201	[S2 900]	U.S. History 1492-1877 (3)
HIST 202	[S2 901]	U.S. History 1877 to Present (3)

Political Science [IAI Code]

POLSC 101	[S5 903]	Principles of Political Science (3)
POLSC 140	[S5 900]	Introduction to U.S. Government and Politics (3)
POLSC 152	[S5 902]	U.S., State and Local Government (3)
POLSC 230	[S5 905]	Introduction to Comparative Government (3)
POLSC 240	[S5 904]	Introduction to International Relations (3)

Psychology [IAI Code]

PSYCH 101	[S6 900]	Introduction to Psychology (3)
PSYCH 102	[S6 902]	Human Growth and Development: Life-Span (3)
PSYCH 215	[S8 900]	Social Psychology (3)

Sociology [IAI Code]

SOCIO 101	[S7 900]	Introduction to Sociology (3)
SOCIO 111	[S7 901]	Contemporary Social Issues (3)
SOCIO 210	[S7 902]	Marriage and the Family (3)
SOCIO 215	[S7 904D]	Sex, Gender and Power (3)
SOCIO 220	[S7 903D]	Race Relations: A Multicultural Perspective (3)

II. Area of Concentration/Major Field

A.A./A.S.: 12 credit hours

A.F.A.: 21 credit hours

A.A.T.: 25-26 credit hours

The Associate in Fine Arts Degree requires 21 credits of 100-level or above transfer courses from any of the following areas of concentration. The Associate of Arts and Associate in Science degrees require 12 credits from the same group of courses (of 100- level or above transfer courses from any of the following areas of concentration). To review the suggested curriculum for specific areas of concentration, see Transfer Degree Areas of Concentration earlier in this section. Depending upon the chosen course of study, additional credit hours may be recommended in the area of concentration, reducing the elective courses.

III. Electives (9-13 credit hours)

The A.F.A. Degree requires 9 semester hours of media specific courses to meet a total of 61 credits. The A.A. and A.S. Degrees require an additional 9-13 credit hours to meet a degree total of 62 credits. The elective courses must be selected from transfer courses of 100 level or above. Developmental, community service, and vocational/technical courses cannot be used to satisfy degree requirements in the A.F.A. or A.A./A.S. degree. No more than four credits of physical education courses can be applied to a degree.

Required Transfer Degree Credit Hours:

A.A./A.S.: 62, A.F.A.: 61, A.A.T.: 64

Dual Degree Graduation Requirement

Students who wish to receive both the Associate in Arts and the Associate in Science degrees must complete an additional 12 credit hours in the second concentration area that is selected.

Transfer Credit Guarantee

Courses taken by students who earn an Associate in Fine Arts: Art (A.F.A.) Degree or an Associate in Arts (A.A.), or Associate in Science (A.S.) Degree will transfer to Illinois state colleges or universities (including Purdue University Calumet at Hammond) as identified and defined in the Course Equivalency Tables (CET) on file at PSC's Transfer Center. If a course is taken and successfully completed in compliance with the CET and not accepted in transfer, Prairie State College will refund the tuition for the course. Call (708) 709-3508 for details.

Transfer Degree Areas of Concentration

A suggested curriculum of study is proposed for each transfer degree area based on PSC degree requirements, IAI majors panels and/or articulation agreements with specific four-year institutions.

degree

Art (A.F.A.)
 Art/Art History (A.A.)
 Art Education (A.A.)
 Astronomy (A.S.)
 Biological Sciences (A.S.)
 Business (A.A.)
 Chemistry (A.S.)
 pre-Clinical Laboratory Science (A.S.)
 Communication Disorders (A.A.)
 Computer Science: Information Systems Emphasis (A.S.)
 Computer Science: Technical Emphasis (A.S.)
 Criminal Justice (A.A.)
 pre-Dentistry (A.S.)
 Education: Early Childhood Education (A.A.)
 Education: Associate of Arts in Teaching:
 Secondary Mathematics (A.A.T.)
 Education: Teacher Education (A.A.)
 Engineering (A.S.)
 English/Literature (A.A.)
 General Math/Science (A.S.)
 Geology (A.S.)
 Health Administration (A.A.)
 History (A.A.)
 Industrial Technology (A.A.)
 pre-Law (A.A.)
 Liberal Arts (A.A.)
 Mass Communication: Advertising/Public Relations (A.A.)
 Mass Communication: Multimedia (A.A.)
 Mass Communication: Radio/TV/Film (A.A.)
 Mathematics (A.S.)
 pre-Medicine (A.S.)
 Music Education (A.A.)
 Music Performance (A.A.)
 pre-Nursing (A.S.)
 pre-Occupational Therapy (A.S.)
 pre-Pharmacy (A.S.)
 Photography (A.A.)
 Physical Education (A.A.)
 Physical Science (A.S.)
 pre-Physical Therapy (A.S.)
 Physics (A.S.)
 Political Science (A.A.)
 Psychology (A.A.)
 Social Work (A.A.)
 Sociology (A.A.)
 Speech Communication (A.A.)
 Theatre Arts (A.A.)

For information about the Associate in General Studies degree, turn to page 80.

For information about Career Programs, both A.A.S. degrees and certificates, turn to pages 81.

Please refer to the General Education Core on pages 48 to 51 for course selection information.

Art

Associate in Fine Arts: Art

A.F.A. Degree • Suggested Curriculum

The Associate in Fine Arts degree (A.F.A.) is designed to prepare students to transfer as juniors into a bachelor's degree program (B.F.A.) in Studio Art. Students are encouraged to complete their core courses in Art before enrolling in media specific studio courses. A portfolio is usually required for transfer to a four-year institution. Students are strongly encouraged to consult with their instructors and with the PSC Counseling and Academic Advising Center (or with the university where they expect to transfer) for information regarding the most appropriate courses to take while at Prairie State College.

I. General Education Core (31-32)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities & Fine Arts (6 credits)

Select two IAI humanities courses from the list for Area B

Area C: Mathematics (3 credits)

MATH 112 [M1 904] General Education Mathematics (3)

or

MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical & Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social & Behavioral Sciences (6 credits)

Select two courses from different disciplines from the list for Area E.

II. Area of Concentration/Major Field (21)

ART 101 Two Dimensional Design (3)
 ART 102 Three Dimensional Design (3)
 ART 104 Drawing I (3)
 ART 106 Drawing II (3)
 ART 121 History of Western Art I (3)
 ART 122 History of Western Art II (3)
 ART 162 Life Drawing (3)

III. Electives/Studio Courses (9)

Select 9 credits of media specific studio courses from at least two media. Choose from the following areas of concentration in consultation with an art department advisor:

Art:

ART 109 Ceramics (3)
 ART 201 Painting I (3)
 ART 202 Painting II (3)
 ART 205 Printmaking (3)

Graphic Design:

ART 115 Introduction to Computer Art (3)
 GC 151 Principles of Graphic Design (3)

Photography:

PHOTO 171 Introduction to Black & White Photography (3)

Required A.F.A. Degree Program Total: 61 credits

Art/Art History

A.A. Degree • Suggested Curriculum

PSC offers the foundation courses in art appreciation, art history, and studio art required in the first two years of the Art major. Through painting, drawing, graphic design, and photography, students may pursue a variety of interests. Students planning to pursue a baccalaureate degree should be aware that transfer admission to art-related programs is competitive, and a portfolio is generally required for admission to the major as well as for registration in advanced art courses and for scholarship consideration. Each senior institution has its own transfer policies; we cannot guarantee the accuracy of this information in regard to every individual school. Consult the school of your choice and/or a PSC advisor to discuss the transferability of courses.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses other than Art History from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (24-25)

ART 101 Two Dimensional Design (3)
 ART 102 Three Dimensional Design (3)
 ART 104 Drawing I (3)
 ART 106 Drawing II (3)
 ART 121 History of Western Art I (3)
 ART 122 History of Western Art II (3)

Completion of the Art Core courses is recommended before enrolling in Media-Specific studio courses. Select studio art courses from at least two media. Students should complete the core courses listed above before enrolling in studio courses. (6-7 credits)

Art:

ART 109 Ceramics (3)
 ART 162 Life Drawing (3)
 ART 201 Painting I (3)
 ART 202 Painting II (3)
 ART 205 Printmaking (3)

Graphic Design:

ART 115 Introduction to Computer Art (3)
 GC 151 Principles of Graphic Design (3)

Photography:

PHOTO 171 Introduction to Black & White Photography (3)

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Art Education

A.A. Degree • Suggested Curriculum

To teach art in Illinois public schools, teachers must be certified by the State of Illinois. To transfer into an approved baccalaureate program in art education as a junior, students must complete a minimum of 60 semester credits. Since admission is competitive, completion of the courses recommended below does not guarantee admission. Community and junior college students are strongly encouraged to complete an Associate in Arts degree prior to transfer. Students should be aware that a minimum grade point average of 2.5 on a 4.0 scale is required for program admission, and passage of a basic skills (reading, writing, grammar, and math) test also is required.

I. General Education Core (38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course selected from humanities and one course from fine arts.

ART 121 [F2 901] History of Western Art I (3)
 ART 122 [F2 902] History of Western Art II (3)
 ENG (200 Level) Select any Literature Course (3) **or**
 HUMAN 101 [H5 904N] Comparative Religions (3)

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

HIST 201 [S2 900] U.S. History: 1492 to 1877 (3) **or**
 HIST 202 [S2 901] U.S. History: 1877 to Present (3)
 POLSC 140 [S5 900] Introduction to U.S. Government & Politics (3)
 PSYCH 101 [S6 900] Introduction to Psychology (3)

II. Area of Concentration/Major Field (15-21)

Art Core Courses (12 credits)

ART 101 Two Dimensional Design (3)
 ART 102 Three Dimensional Design (3)
 ART 104 Drawing I (3)
 ART 106 Drawing II (3)

Media-Specific Studio Art Course (3-9 credits)

Select at least one studio art course from the following:

ART 109 Ceramics (3)
 ART 162 Life Drawing (3)
 ART 201 Painting I (3)
 ART 205 Printmaking (3)
 GC 151 Principles of Graphic Design (3)
 PHOTO 171 Introduction to Black & White Photography (3)

III. Electives (3-9)

Select from the following teacher education electives:

ED 100, 101, 160, 212 (3)

Additional non-Western course from: ART 131, GEOG 101, HUMAN 101, or HIST 115, 116, 140 (3)

Required A.A. Degree Program Total: 62 credits

Astronomy

A.S. Degree • Suggested Curriculum

The astronomer is concerned with the Earth and its position in the solar system and the universe. Employment opportunities include the National Aeronautics and Space Administration (NASA), air traffic control, and weather forecasting and monitoring. In the typical four-year curriculum, the first two years are spent studying the basic sciences, including mathematics and physics. The last two years emphasize advanced mathematics and science courses. Prairie State College offers courses comparable to the first two years of the curriculum required for a major in astronomy and will grant the Associate in Science degree to successful students.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

ASTRO 104 [PI 906L] The Solar System and Beyond (4)
 Life Science Elective (3-4)

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (17)

MATH 172 Calculus with Analytic Geometry II (5)
 PHYSI 210 University Physics I (4)
 PHYSI 220 University Physics II (4)
 PHYSI 230 University Physics III (4)

III. Electives (5-6)

Select additional science, calculus, and foreign language courses or other general education core courses.

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Biological Sciences

A.S. Degree • Suggested Curriculum

Biology, the study of living organisms, is an extremely large and diverse field. Career opportunities exist in many areas such as research, government agencies (conservation department, environmental protection, etc.), industry, sales, and teaching at all educational levels. In addition, the biology curriculum provides the pre-professional foundation for many of the health career areas. Baccalaureate biological science programs are diverse. Some programs emphasize cell and molecular biology, whereas others emphasize organismal, ecological, and evolutionary biology. Research universities offer specific programs of study, optional tracks, or specializations within biology. Students should decide the direction or specialization within biology as early as possible, preferably by the beginning of sophomore year. Students are strongly encouraged to complete the Associate in Science degree prior to transfer.

I. General Education Core (41)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (9 credits)

BIOL 112 [BIO 910] Organismal Biology (4)
 CHEM 110 [CHM 911] General Chemistry I (5)

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (19)

Select a minimum of 19 credits from the foundation courses listed below.

BIOL 111 [BIO 910] Cellular and Molecular Biology (4) *required*
 CHEM 130 [CHM 912] General Chemistry II (5) *required*
 CHEM 203 [CHM 913] Organic Chemistry I (5)
 CHEM 204 [CHM 914] Organic Chemistry II (5)

III. Electives (2-6)

Select one course from CHEM 203, 204, or PHYSI 210, 220 if not already selected from Area II above, or any additional BIOL course. Courses such as microbiology and human anatomy and physiology sometimes will transfer for credit in allied health majors, but most often do not transfer as biology major credit.

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Business

A.A. Degree • Suggested Curriculum

Business programs at community colleges and bachelor's degree institutions include courses and majors in general business, accounting, finance, marketing, and management. The following recommendations apply to programs in all of these fields. These are suggested courses which are designed to satisfy requirements in the Associate in Arts Degree at Prairie State College and to provide the basis for transferring to a four-year institution.

I. General Education Core (38-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

PHILO 202 [H4 904] Ethics (3) *recommended*

Area C: Mathematics (4-5 credits)

Select one math course from:

MATH 157 [M1 900-B] Calculus for Business & Social Science (4)
 MATH 171 [M1 900-I] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

ECON 201 [S3 901] Macroeconomic Principles (3)
 ECON 202 [S3 902] Microeconomic Principles (3)

II. Area of Concentration/Major Field (14)

BUS 131 [BUS 903] Financial Accounting (4)
 BUS 132 [BUS 904] Managerial Accounting (3)
 BUS 240 [BUS 901] Elementary Statistics (4)
 ITAPP 101 [BUS 902] Introduction to Computers (3)

III. Electives (8-10)

BUS 101 Introduction to Modern Business (3)
 BUS 201 Business Law (3)

or

BUS 210 Business Law and Its Environment (3)

Select any other business course (2-4)

Special note: Courses such as Principles of Management, Principles of Marketing, Principles of Finance, Intermediate Accounting, and Cost Accounting, etc., are considered junior-level or upper-division courses at most universities. Some universities, though, will accept these courses as elective credit (but it often will not count toward the hours you need for a major in business). Some have provisions for validating this credit. In this case, a student may be requested to take a proficiency examination, take the next course in sequence, or take a specific CLEP subject examination. Students are strongly advised to consult the information for the school of their choice before registering for these courses.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Chemistry

A.S. Degree • Suggested Curriculum

The chemist is concerned with the application of scientific principles to practical problems. Employment opportunities for chemists include, among others, theoretical research activities, and problem-solving in management, marketing, and production. Bachelor's programs in chemistry are built on an in-depth foundation of sequential courses in science and math, while upper division courses provide the preparation necessary for graduate studies and/or work in industry.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-I] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

PHYSI 210 [P2 900L] University Physics I (4) *recommended*

Select one life science from the list for Area D. (3-4)

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E .

II. Area of Concentration/Major Field (22-23)

Select a minimum of 22-23 credits from the foundation courses listed below. Be aware that because of differences among schools in the number of credits for which various courses are offered, and the possible need for prerequisite courses, it may be difficult to complete an Associate in Science degree without taking more credits than will be accepted in transfer.

CHEM 110 [CHM 911] General Chemistry I (5)
 CHEM 130 [CHM 912] General Chemistry II (5)
 CHEM 203 [CHM 913] Organic Chemistry I (5)
 CHEM 204 [CHM 914] Organic Chemistry II (5)

Other recommended courses:

MATH 172 [MTH 902] Calculus with Analytic Geometry II (5)
 MATH 173 [MTH 903] Calculus with Analytic Geometry III (5)
 PHYSI 220 University Physics II (4)

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

pre-Clinical Laboratory Science

A.S. Degree • Suggested Curriculum

Clinical laboratory scientists play an important role in the detection, diagnosis and treatment of many diseases. Baccalaureate programs in the field are called clinical laboratory science or medical laboratory science and prepare students to perform complex analyses and manage all areas of the laboratory as a Level III practitioner.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (3-4 credits)

Select one math course from:

MATH 115 [M1 902] General Education Statistics (3)
 MATH 153 [M1 902] Probability and Statistics (4)

Area D: Physical and Life Sciences (9 credits)

BIOL 112 [LI 900L] Organismal Biology (4)
 CHEM 110 [PI 902L] General Chemistry I (5)

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (22-23)

BIOL 211 Microbiology (4) *required*
 CHEM 130 General Chemistry II (5) *required*
 CHEM 203 Organic Chemistry I (5)
 CHEM 204 Organic Chemistry II (5)

Select two biology courses from the following:

BIOL 111 Cellular and Molecular Biology (4)
 BIOL 221 Human Anatomy & Physiology I (4)
 BIOL 222 Human Anatomy & Physiology II (4)

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Communication Disorders

A.A. Degree • Suggested Curriculum

This program is for students who plan to transfer to Governors State University (GSU) for a Bachelor of Health Science Degree in Communication Disorders. The undergraduate major in Communication Disorders at GSU offers pre-professional education in speech-language pathology, audiology, and related areas. The Associate of Arts Degree at PSC and Bachelor of Health Science Degree at GSU do not qualify students for state teaching and national certification, but rather provide the foundation necessary for the graduate curriculum which leads to certification. Students will begin taking the general education and professional education requirements for Illinois teaching certificates (Type 10 or Type 03/09) endorsed as Speech and Language Impaired, or the School Service Personnel certificate (Type 73), endorsed as Speech-Language Pathologist. *Please note: Each senior institution has its own transfer policies. Consult the school of your choice and/or a PSC advisor.*

I. General Education Core (38)

Area A: Communication (9 Credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select from three courses from the list for Area B with at least one course selected from humanities and one from fine arts.

Area C: Mathematics (3 credits)

MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (8 credits)

Select one life science and physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

POLSC 140 Introduction to U.S. Government and Politics (3)
 PSYCH 101 [S6 900] Introduction to Psychology (3)
 HIST 201 [S2 900] U.S. History: 1492-1877 (3)
or
 HIST 202 [S2 901] U.S. History 1877-Present (3)

II. Area of Concentration/Major Field (9)

ED 100 Foundations of American Public Education (3)
 ED 101 Child Growth and Development (3)
 ED 212 Exceptional Child (3)

III. Electives (15)

ECED 103 Health, Safety and Nutrition (3)

or

HLTH 101 Health and Human Development (2)
 ECED 201 Sign Language I (3) *suggested*
 ECED 202 Sign Language II (3) *suggested*
 One Non-Western Culture Course (3)
 One English literature course (3)

Any additional general education course from the list at the front of this section.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Computer Science- Information Systems Emphasis

A.S. Degree • Suggested Curriculum

The study of computer science and business focuses on the development of problem-solving skills and tools, and the ability to analyze situations and effectively use these tools. Career opportunities exist for business and financial analysts and information systems specialists. Students are strongly encouraged to complete the Associate in Science degree prior to transfer.

I. General Education Core (38-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (4-5 credits)

Select one math course from:

MATH 155 [M1 906] Finite Mathematics (4)
MATH 157 [M1 900-B] Calculus for Business and Social Sciences (4)
MATH 171* [M1 900-I] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

PHYSI 210 [P2 900L] University Physics I (4) *recommended*
Life Science Course (3-4)

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E including:

ECON 201 [S3 901] Macroeconomic Principles (3)
ECON 202 [S3 902] Microeconomic Principles (3)

Select one course other than ECON (3)

II. Area of Concentration/Major Field (12)

ITAPP 101 Introduction to Computers (3)

MATH 210 [CS 915] Discrete Mathematics (3)

Select one programming language sequence from the following:

ITPRG 142 Introduction to Visual Basic Programming (3)

and ITPRG 24 Advanced Visual Basic Programming (3)

or

ITPRG 144 Introduction to C++ Programming (3)

and ITPRG 244 Advanced C++ Programming (3)

or

ITPRG 147 Introduction to JAVA Programming (3)

and ITPRG 247 Advanced JAVA Programming (3)

III. Electives (10-12)

BUS 131 [BUS 903] Financial Accounting (4)

BUS 132 [BUS 904] Managerial Accounting (3)

BUS 240 [BUS 901] Elementary Statistics (4)

Select additional general education courses from the list at the front of this section, or contact the planned transfer institution for additional course recommendations.

Required A.S. Degree Program Total: 62 credits

* Students should complete the entire sequence of MATH 171, 172, and 173 in the same school prior to transfer, since topics are covered in different order by different schools.

Computer Science- Technical Emphasis

A.S. Degree • Suggested Curriculum

The Computer Science-Technical Emphasis curriculum focuses on algorithms, theoretical foundations of computer science, and development of software. A strong foundation in mathematics and science is needed for this emphasis. Graduates of this emphasis will be prepared to work for a variety of companies including those that have a software, engineering, scientific or mathematical focus. Baccalaureate schools may have multiple computer degree programs, often located in different departments, which build on the recommendations for the Computer Science-Technical Emphasis. This major is typically found in a department named Computer Science or Mathematics and Computer Science or within a College of Engineering. Some schools may not require all of the courses listed below. Consult the baccalaureate schools you are considering and an advisor to select the appropriate courses for you.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course selected from humanities and one from fine arts.

Area C: Mathematics (3 credits)

MATH 210 [M1 905] Discrete Mathematics (3)

Area D: Physical and Life Sciences (7-8 credits)

PHYSI 210 [P2 900L] University Physics I * (4)
Life Science course (3-4)

Area E: Social and Behavioral Sciences (9 credits)

ECON 201 [S3 901] Macroeconomic Principles (3)

ECON 202 [S3 902] Microeconomic Principles (3)

Social & Behavioral Science course, other than ECON (3)

II. Area of Concentration/Major Field (9)

MATH 171 [M1 900-I] Calculus with Analytic Geometry I* (5)

MATH 172 [MTH 902] Calculus with Analytic Geometry II* (5)

MATH 173 [MTH 903] Calculus with Analytic Geometry III* (5)

PHYSI 220 [EGR 912] University Physics II* (4)

PHYSI 230 [EGR 914] University Physics III* (4)

III. Electives (13-14)

Students should select electives from the general education course list at the front of this section.

Required A.S. Degree Program Total: 62 credits

* Students should complete the entire calculus and physics sequences at the same school prior to transfer, since topics are covered in different order by different schools. Second and third courses in each sequence can be used as electives.

Criminal Justice

A.A. Degree • *Suggested Curriculum*

This curriculum is designed for students pursuing baccalaureate degrees in the fields of corrections, criminal justice, law enforcement and security management. Students are strongly encouraged to complete the Associate in Arts degree prior to transfer.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - *with a grade of C or better* (3)
 ENG 102 [C1 901R] Composition II - *with a grade of C or better* (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines.

PSYCH 101 [S6 900] Introduction to Psychology (3) *recommended*
 SOCIO 101 [S7 900] Introduction to Sociology (3) *recommended*

II. Area of Concentration/Major Field (12)

CJ 101 [CRJ 901] Introduction to Criminal Justice (3)
 CJ 102 [CRJ 912] Introduction to Criminology (3)
 CJ 106 [CRJ 911] Introduction to Corrections (3)
 CJ 204 [CRJ 914] Juvenile Justice (3)

III. Electives (12-13)

Select additional general education electives or refer to the program requirements for the university you plan to attend.

CJ 201 Introduction to Criminal Law (3) *recommended*
 ITAPP 101 Introduction to Computers (3) *recommended*

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

pre-Dentistry

A.S. Degree • *Suggested Curriculum*

This program provides the foundation coursework in biology, chemistry and math for students who plan to apply to dental school. Admission to dental school is very competitive. These courses also help prepare students to take the Dental Admission Test (DAT), which is required as part of the admissions screening program.

I. General Education Core (41)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - *with a grade of C or better* (3)
 ENG 102 [C1 901R] Composition II - *with a grade of C or better* (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (9 credits)

BIOL 112 [L1 900L] Organismal Biology (4)
 CHEM 110 [PI 902L] General Chemistry I (5)

Area E: Social and Behavioral Sciences (9 credits)

PSYCH 101 [S6 900] Introduction to Psychology (3)

Select two additional courses from the list for Area E.

At least one course must be from a discipline other than PSYCH.

II. Area of Concentration/Major Field (14)

BIOL 111 Cellular and Molecular Biology (4)
 CHEM 130 General Chemistry II (5)
 MATH 172 Calculus with Analytic Geometry II (5)
 PHYSI 120 College Physics I (4)
 PHYSI 130 College Physics II (4)

III. Electives (7) Select at least 7 credits from:

BIOL 221 Human Anatomy and Physiology I (4)
 BIOL 222 Human Anatomy and Physiology II (4)
 CHEM 203 Organic Chemistry I (5)
 CHEM 204 Organic Chemistry II (5)

Required A.S. Degree Program Total: 62 credits

Education - Early Childhood Education

A.A. Degree • Suggested Curriculum

This curriculum has been designed to help students select courses which are likely to apply to a major in Early Childhood Education. Students should obtain a copy of the Associate in Arts Degree Worksheet and should visit the IAI Web site at www.itransfer.org to get specific transfer course equivalencies for participating Illinois colleges and universities.

State Certification Requirements in Early Childhood Education

To teach young children (birth to age 8) in Illinois public schools, teachers must be certified by the State of Illinois upon completion of their baccalaureate degree program. To transfer into an approved baccalaureate program in Early Childhood Education as a junior, students must complete a minimum of 60 semester credits. Since admission is competitive, completion of the courses recommended below does not guarantee admission. Community college students are strongly encouraged to complete an Associate in Arts degree prior to transfer. A minimum grade point average of 2.5 on a 4.0 scale is usually required for program admission, and passage of a basic skills test (reading, writing, grammar, and math) also is required.

I. General Education Core (42-43)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course selected from humanities and one course from fine arts, including one English course numbered 200 or above.

Area C: Mathematics (8 credits)

MATH 200 Mathematics for Elementary Teaching I (4)
MATH 206 [M1 903] Mathematics for Elementary Teaching II (4)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

HIST 201 [S2 900] U.S. History: 1492 to 1877 (3)
or
HIST 202 [S2 901] U.S. History: 1877 to Present (3)
POLSC 140 [S5 900] Introduction to U.S. Government and Politics (3)
PSYCH 101 [S6 900] Introduction to Psychology (3)

II. Area of Concentration/Major Field (9)

Professional Early Childhood Education Courses
ED 100 Foundations of American Public Education (3)
ED 101 Child Growth and Development (3)
ECED 104 Introduction to Early Childhood Education (3)*
Select one course from:
ED 160 Technology for Teachers (3)
ED 212 Exceptional Child (3)
PSYCH 202 Educational Psychology (3)

III. Electives (7-8)

ECED 103 Health, Safety and Nutrition (3)* *recommended*
or

HLTH 101 Health and Wellness (2)
EDU 120 Child, Family and Community (3) *recommended*
Additional Humanities course (3)
Additional Science course (4)

Select one non-Western or Third World Cultures course: ART 131, GEOG 101, HUMAN 101, HIST 111, 112, 115, 116, or 140 (3)
Additional general education course from the lists at the front of this section.

**Note: Before enrolling in any additional courses with an ECED or EDU prefix at Prairie State College, consult the Transfer Guides in the Counseling & Academic Advising Center to determine the transferability of these courses.*

Required A.A. Degree Program Total: 62 credits

Please note: Each senior institution has its own transfer policies. We strongly urge you to consult the school of your choice early in your program and/or the Prairie State College Counseling and Academic Advising Center to discuss the transferability of courses.

Education - Associate of Arts in Teaching: Secondary Mathematics

A.A.T. Degree • Required Curriculum

The A.A.T. in Secondary Mathematics is a two-year transfer degree program designed for students preparing for careers as secondary education mathematics teachers. The program incorporates foundation coursework in teacher education, field based experiences and content coursework in mathematics. Students who successfully complete the program should be able to begin their upper-division coursework upon transfer.

A minimum cumulative GPA of 2.5 is required for graduation.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)

ENG 102 [C1 901R] Composition II - with a grade of C or better (3)

COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits) **

Select three courses from the list for Area B with at least one from humanities and one fine arts.

Area C: Mathematics (5 credits)

MATH 171* Calculus with Analytic Geometry I (5)

*Note: The Calculus sequence (MATH 171, 172, 173) must be completed prior to transfer.

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits) **

Select three courses in at least two disciplines from the list for Area E.

** Note: Select at least one course designated by IAI as non-Western (N) or Diversity (D) from either Social and Behavioral Sciences or Humanities and Fine Arts. Any of these courses will fulfill this requirement: ANTHR 215, 222; ART 131; ENG 215, 243; GEOG 101; HIST 111, 112, 115, 116, 140; HUMAN 101; SOCIO 215, 220

II. Program Requirements (25-26)

ED 100 Foundations of American Public Education (3)

MATH 172 Calculus with Analytic Geometry II* (5)

MATH 173 Calculus with Analytic Geometry III* (5)

MATH 220 Linear Algebra (3)

Choose one professional education course from the following courses (3)

ED 101 Child Growth and Development

or

PSYCH 102 Human Growth and Development: Life Span (3)

ED 160 Technology for Teachers (3)

ED 212 Exceptional Child (3)

PSYCH 202 Educational Psychology (3)

Select one mathematics course from the following (3-4)

MATH 153 Probability and Statistics (4)

MATH 216 Differential Equations (3)

Select one additional course (3-4):

Select **either** one mathematics course from

MATH 153 Probability and Statistics (4)

MATH 216 Differential Equations (3)

or

one professional education course from

ED 101 Child Growth and Development (3)

or

one course from

PSYCH 102 Human Growth and Development: Life Span (3)

ED 212 Exceptional Child (3)

PSYCH 202 Educational Psychology (3)

**Required A.A.T. Degree Program Total:
64 credit hours**

Education - Teacher Education

A.A. Degree • Suggested Curriculum

This curriculum suggests courses likely to apply to a major in Elementary, Secondary, or Special Education meeting the guidelines of the Illinois Articulation Initiative General Education Core. Students should obtain a copy of the Associate in Arts Degree Worksheet and visit the IAI Web site at www.itransfer.org to get transfer course equivalencies for participating Illinois colleges and universities.

State Certification Requirements

To teach in Illinois public schools, teachers must be certified by the State of Illinois. To transfer into a baccalaureate program in education as a junior, students must have 60-64 semester credits. Admission to teacher preparation programs is competitive; completion of recommended courses does not guarantee acceptance. Students must pass the Illinois Basic Skills test, which includes reading, writing, grammar, and math, as a requirement for program admission. Students should consult their advisor and an advisor at the university early and often.

I. General Education Core (42-43)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits) **

ART 131 [F2 903N] Survey of Non-Western Art (3) *recommended*
 Select any English literature course (ENG 200 level courses) (3)
 Select any additional course from the list for Area B. (3)

Area C: Mathematics (8 credits)

MATH 200 Mathematics for Elementary Teaching I (4)
 MATH 206 [M1 903] Mathematics for Elementary Teaching II (4)
 Note: Students should consult advisors to determine the appropriate math course for their area of interest.

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits) **

HIST 201 [S2 900] U.S. History: 1492 to 1877 (3) **or**
 HIST 202 [S2 901] U.S. History: 1877 to Present (3)
 POLSC 140 [S5 900] Introduction to U.S. Government and Politics (3)
 PSYCH 101 [S6 900] Introduction to Psychology (3)

II. Area of Concentration/Major Field (19-20)

Select 19 credits from:

ED 100 Foundations of American Public Education (3)
 ED 101 Child Growth and Development (3)

Note: Secondary Education majors should select PSYCH 102 in place of ED 101.

ED 160 Technology for Teachers (3)
 ED 212 Exceptional Child (3)
 PSYCH 202 Educational Psychology (3)
 HLTH 101 Health and Human Development (2)

Additional Humanities course (3)

Additional Science course (4)

Select 3-6 credits in one academic discipline at the 200 level in consultation with an academic advisor.

Note: Select at least one course designated by IAI as non-Western (N) or Diversity (D) from either Social and Behavioral Sciences or Humanities and Fine Arts: Any of these courses will fulfill this requirement: ANTHR 215, 222; ART 131; ENG 215, 243; GEOG 101; HIST 111, 112, 115, 116, 140; HUMAN 101; PHILO 205; SOCIO 215, 220

Required A.A. Degree Program Total: 62 credits

Engineering

A.S. Degree • Suggested Curriculum

The engineer is concerned with the application of scientific principles to practical problems. Employment opportunities for engineers include the complete spectrum of the workforce and theoretical research activities. In the typical four-year curriculum, the first two years concentrate on the basic sciences including mathematics, chemistry and physics. The last two years emphasize advanced mathematics and science courses. Prairie State College offers courses applicable to the first two years of the curriculum and will grant an Associate in Science degree to successful students.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-I] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

PHYSI 210 [P2 900L] University Physics I (4)
 Select one life science course (3-4)

Area E: Social and Behavioral Sciences (9 credits)

Select 3 courses in at least two different disciplines from list for Area E.
 ECON 201 [S3 901] Macroeconomic Principles (3) *recommended*
 ECON 202 [S3 902] Microeconomic Principles (3) *recommended*
 Select one Social & Behavioral Science Course, other than ECON (3)

II. Area of Concentration/Major Field (22-23)

Essential Engineering prerequisite courses:

CHEM 110 General Chemistry I (5)
 MATH 172 Calculus with Analytic Geometry II (5)
 MATH 173 Calculus with Analytic Geometry III (5)
 MATH 216 Differential Equations (3)
 PHYSI 220 University Physics II (4)

Suggested IAI Engineering Specialty Courses for Chemical Engineering:

CHEM 130 General Chemistry II (5)
 CHEM 203 Organic Chemistry I (5)
 CHEM 204 Organic Chemistry II (5)

For Civil, Industrial, and Mechanical Engineering:
 CADMD 245 Computer Aided Design (3)

Required A.S. Degree Program Total: 62 credits

English/Literature

A.A. Degree • Suggested Curriculum

Four-year degree programs in English emphasize study of literature and literary criticism. Specializations in creative and/or technical writing prepare a student for certification as a high school English teacher as well as for writing jobs. Students seeking a bachelor's degree in English are encouraged to complete an A.A. or A.S. degree prior to transfer. All literature courses require substantial formal writing, it is recommended students complete the two-course writing sequence before enrolling in literature courses.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (12)

Select up to three courses from the following survey courses:

ENG 211 [H3 914] American Literature I (3)
 ENG 212 [H3 915] American Literature II (3)
 ENG 231 [H3 912] British Literature I (3)
 ENG 232 [H3 913] British Literature II (3)

In addition to the survey courses, select one course from the following genre courses:

ENG 221 Introduction to Poetry (3)
 ENG 240 Introduction to Fiction (3)
 ENG 252 Introduction to Drama (3)
 ENG 256 Film and Literature (3)

III. Electives (12-13)

Some universities require multicultural dimensions within the major. The following courses will fulfill that requirement:

ENG 215 [H3 910D] African-American Literature (3)
 ENG 243 Non-Western Literature in Translation (3)

Universities offering a creative writing specialization will accept the following course in the creative writing specialization only:

ENG 110 Creative Writing: Poetry (3)
 ENG 111 Creative Writing: Nonfiction Prose (3)
 Foreign Language* (4-16)

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

General Math/Science

A.S. Degree • Suggested Curriculum

This curriculum has been designed for students who plan to transfer into a bachelor of science degree program but are undecided about their specific major. It provides the basic foundation in math, the sciences, and general education required by universities for entry into math/science-related programs.

I. General Education Core (41)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (9 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

BIOL 112 [L1 900L] Organismal Biology (4) *recommended*
 CHEM 110 [P1 902L] General Chemistry I (5) *recommended*

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (21)

Select 21 credits from college-level transfer-oriented courses such as: Science and math foundation courses

Suggested science/math foundation courses include:

BIOL 111 Cellular and Molecular Biology (4)
 CHEM 130 General Chemistry II (5)
 MATH 172 Calculus with Analytic Geometry II (5)
 MATH 173 Calculus with Analytic Geometry III (5)
 PHYSI 210 University Physics I (4)
 PHYSI 220 University Physics II (4)

III. Electives

Additional general education core courses from Areas B through E. Entry level courses in baccalaureate majors you wish to explore Foreign language courses*

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Geology

A.S. Degree • Suggested Curriculum

Geologists study the Earth, the processes that shape it, the resources we get from it, and the impact of human action on it. Geologists work in petroleum and mineral exploration, researching and predicting natural disasters, and teaching. An increasing number of geologists focus on environmental work, ensuring adequate water supplies and reducing pollution. In the typical four-year curriculum, the first two years are spent studying basic sciences, including mathematics, chemistry, and physics. The last two years emphasize advanced science courses. Students are strongly encouraged to complete the Associate in Science degree prior to transfer.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course selected from the humanities area and at least one course from the fine arts area.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

GEOLO 101 [PI 907L] Physical Geology (4)

Select one life science course (3-4)

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area B.

II. Area of Concentration/Major Field (22-23)

Select a minimum of 22 hours from the following courses. Check with the school you plan to transfer to before selecting courses in this area.

CHEM 110 General Chemistry I (5)
 CHEM 130 General Chemistry II (5)
 MATH 172 Calculus with Analytic Geometry II (5)
 MATH 173 Calculus with Analytic Geometry III (5)
 PHYSI 120 College Physics I (4)*
 PHYSI 130 College Physics II (4)*
 PHYSI 210 University Physics I (4)*
 PHYSI 220 University Physics II (4)*
 Foreign Language Courses (4-16)

Required A.S. Degree Program Total: 62 credits

*Some universities require algebra-based physics (PHYSI 120, 130). Others require calculus-based physics (PHYSI 210,220)

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Health Administration

A.A. Degree • Suggested Curriculum

This curriculum is designed for students who plan to transfer into a Bachelor of Health Science program in Health Administration. Health administrators develop and manage health services organizations and programs. Graduates of bachelor's degree programs become unit or department heads in large and complex health care institutions such as hospitals, clinics, nursing homes, insurance companies, ambulatory care facilities, and medical group management teams.

Please note: Each senior institution has its own transfer policies. We strongly urge you to consult the school of your choice and/or the Prairie State College Counseling and Academic Advising Center to discuss the transferability of courses in relation to the school and major selected

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (3 credits)

MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science and one physical science course from the list for Area D. One course must have a lab component.

Select one life science course (3-4)

Area E: Social and Behavioral Sciences (9 credits)

ECON 201 [S3 901] Macroeconomic Principles (3)

ECON 202 [S3 902] Microeconomic Principles (3)

Select one additional course from an area other than ECON from the list for Area E.

II. Area of Concentration/Major Field (24-25)

BUS 101 Introduction to Modern Business (3)
 BUS 131 Financial Accounting (4)
 BUS 132 Managerial Accounting (3)
 ITAPP 101 Introduction to Computers (3)

Any additional courses in Business

Any general education course from the lists at the beginning of this section. Other elective courses recommended by the senior institution to which this degree will transfer.

Required A.S. Degree Program Total: 62 credits

This program represents an Articulation Agreement between Prairie State College and Governors State University. Students transferring to other universities should consult their institution of choice for course recommendations in each area.

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

History

A.A. Degree • Suggested Curriculum

This transfer program is designed for students pursuing a baccalaureate degree in various areas of history. The history curriculum at Prairie State College provides students with the background in history and general education courses necessary for advanced work at a four-year institution. Students are strongly encouraged to complete the Associate in Arts degree prior to transfer.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and at least one from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E. Students seeking certification as high school history teachers should select the following social and behavioral science courses:

GEOG 101 [S4 900N] Cultural Geography (3)
 POLSC 140 [S5 900] Introduction to U.S. Government and Politics (3)
 PSYCH 101 [S6 900] Introduction to Psychology (3)

II. Area of Concentration/Major Field (12)

HIST 201 [S2 900] U.S. History: 1492 to 1877 (3)
 HIST 202 [S2 901] U.S. History: 1877 to Present (3)

Select one of the following sequences depending on recommendations at the intended transfer school:

HIST 111 [S2 912N] World History: Origins to 1714 (3)
 and HIST 112 [S2 913N] World History: 1714 to Present (3)

or

HIST 151 [S2 902] History of Western Civilization I (3)
 and HIST 152 [S2 903] History of Western Civilization II (3)

III. Electives (12-13)

Additional history courses may transfer either for history major credit or as general education credits, depending upon the transfer school.

Minor Field: Students who have decided on a minor field may complete one or more courses in their minor.

High School Teacher Certification: Students planning to seek high school teacher certification may complete one or more of the following professional education courses:

ED 100 Foundations of American Public Education (3)
 PSYCH 102 Human Growth & Development: Life-Span (3)
 PSYCH 202 Educational Psychology (3)
 HLTH 101 Health and Human Development (2)

Foreign Language: Competency through the fourth semester of a single foreign language is required for the B.A. degree in History in some schools, and for all majors in the College of Arts and Sciences at many schools.

Required A.A. Degree Program Total: 62 credits

Industrial Technology

A.S. Degree • Suggested Curriculum

Industrial Technology is a combination of a technical (math/science) education with hands-on skills. It is a field of study that specializes in the application of manufacturing concepts, principles and processes to plan, design, and manage machines and people. Employment in manufacturing industries in Illinois accounts for nearly 17 percent of Illinois' non-farm employment. Three subcategories of durable goods manufacturers—primary metals, fabricated metals, and industrial machinery—together employ more than 300,000 Illinoisans. Programs of study as described in this recommendation include machining standards that comply with those outlined by the National Institute for Manufacturing Skills and the Illinois Occupational Skills Standards Machining Skills Cluster.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

CHEM 105 Survey of General Chemistry (4)

or

PHYSI 101 Conceptual Physics (4)

Select one life science course from the list for Area D.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses from at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (24-25)

CADMD 243 [IND 911] Introduction to AutoCAD (3)

Consult an advisor when selecting from the following courses:

CADMD 203 Statics and Strengths of Materials (4)
 CADMD 244 Intermediate AutoCAD (3)
 CET 101 Fundamentals of Electricity (2)
 CET 114 Digital Fundamentals (4)
 DRAFT 115 Blueprint Reading for Mechanical Trades (2)
 HYDR 101 Fundamentals of Hydraulics (2)
 HYDR 106 Pneumatics (2)
 MT 120 Industrial Safety (2)
 MT 210 CNC Programming I (3)
 MT 211 CNC Programming II (3)
 MT 214 CAD/CAM Systems (3)
 MT 215 Manufacturing Systems (4)
 WELD 101 Principles of Flat Welding (2)

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

pre-Law

A.A. Degree • Suggested Curriculum

This transfer program is designed to provide students with the background necessary for advanced work at a four-year institution. A baccalaureate degree from an accredited college and a satisfactory score on the Law School Admission Test (LSAT) are required for admission to most law schools. Most law schools have no specific requirements with regard to the courses chosen in pre-legal study. Common majors among pre-law students include business, history, political science, psychology, sociology, and English. These subject areas help develop skills in close reading, critical thinking, and logical argument. Proficiency in these skills is considered essential for a career in law. Students are strongly encouraged to complete an Associate in Arts degree prior to transfer.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (12)

Select four courses from the baccalaureate major you plan to pursue.

III. Electives (12)

Select any additional courses from the general education core courses listed at the front of this section.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Liberal Arts

A.A. Degree • Suggested Curriculum

This curriculum is designed for students who plan to transfer into a bachelor of arts degree program but are undecided about their specific major. It provides the basic foundation in the humanities, fine arts, social and behavioral sciences, mathematics, communication, and physical and life sciences that is required by universities for entry into arts-and sciences-related programs.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (12-16)

Select four courses from college-level transfer-oriented courses such as additional general education core courses from Areas B through E at the front this section, or beginning-level courses in baccalaureate majors you wish to explore, or foreign language courses. Liberal Arts Elective or Entry-Level Major Course or Foreign Language (12-16)

III. Electives (8-13)

Select any additional courses from general education core courses listed in Areas B through E.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Mass Communication: Advertising/ Public Relations

A.A. Degree • Suggested Curriculum

It is recommended that students complete the entire mass communication core at one institution. Mass Communication students who wish to concentrate in Advertising/Public Relations should complete a minimum of nine credit hours in the major in addition to the General Education Core Curriculum. Remaining credits needed to complete an associate's degree should be chosen with the assistance of an academic advisor. Some schools have specific requirements for admission to the major (e.g., minimum GPA, portfolio review, or other forms of assessment). Check with an advisor.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts

Area C: Mathematics (3 credits) recommended

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (9)

COMM 111 [MC 911] Introduction to Mass Communication (3)
BUS 261 [MC912] Advertising (3)
JRNLM 101 [MC 919] Introduction to Journalism (3)

III. Electives (15-16)

The following courses are recommended for students in the advertising/public relations concentration:

COMM 102 Persuasive Public Speaking (3)
COMM 103 Group Discussion (3)
COMM 115 [MC 914] Introduction to Broadcasting (3)

Students should select additional electives from the list at the front of this section.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Mass Communication: Multimedia

A.A. Degree • Suggested Curriculum

It is recommended that students complete the entire sequence at one institution. Mass Communication students who wish to concentrate in Multimedia should complete a minimum of nine credit hours in the major in addition to the General Education Core Curriculum. Remaining credits needed to complete an associate's degree should be chosen with the assistance of an academic advisor. Some schools have specific requirements for admission to the major (e.g., minimum GPA, portfolio review, or other forms of assessment). Check with an advisor.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts

Area C: Mathematics (3 credits) recommended

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (9)

COMM 111 [MC 911] Introduction to Mass Communication (3)

Select two of the following courses:

GC 162 Introduction to Web Site Development (3)
same as ITWEB 103
GC 175 Animation (3)
ITWEB 105 Multimedia Writing (3)

III. Electives (15-16)

The following courses are recommended for students in the multimedia concentration:

GC 115 Introduction to Computer Art (3) *same as ART 115*
ITWEB 203 Flash/Interface Design (3) *same as GC 262*

Students should select additional electives from the list at the front of this section.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Mass Communication: Radio/TV/ Film

A.A. Degree • Suggested Curriculum

It is recommended that students complete the entire mass communication core at one institution. Mass Communication students who wish to concentrate in Radio/TV/Film should complete a minimum of nine credit hours in the major in addition to the General Education Core Curriculum. Remaining credits needed to complete an associate's degree should be chosen with the assistance of an academic advisor. Some schools have specific requirements for admission to the major (e.g., minimum GPA, portfolio review, or other forms of assessment). Check with an advisor.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts

Area C: Mathematics (3 credits) recommended

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (9)

COMM 111 [MC 911] Introduction to Mass Communication (3)
COMM 115 [MC 914] Introduction to Broadcasting (3)
ENG 256 Film and Literature (3)

III. Electives (15-16)

The following courses are recommended for students in the radio/TV/film concentration:

COMM 102 Persuasive Public Speaking (3)
COMM 103 Group Discussion (3)
GC 115 Introduction to Computer Art (3) same as ART 115
GC 182 Digital Video (2)

Students should select additional electives from the list at the front of this section.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Mathematics

A.S. Degree • Suggested Curriculum

It is recommended that students complete the entire sequence at one institution. Bachelor's degree programs in mathematics prepare students with diverse career goals by developing rigorous, logical thinking; an appreciation and familiarity with complex structures and algorithms; and the ability to learn technical material and abstract concepts. Students are strongly encouraged to complete an Associate in Arts or Associate in Science degree prior to transfer into a baccalaureate Mathematics program. Since admission is competitive, completing the courses recommended below does not by itself guarantee admission.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

PHYSI 210 [P2 900L] University Physics I (4)

Select one life science course from the list for Area D.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (16)

MATH 172 [MTH 902] Calculus with Analytic Geometry II (5)*
MATH 173 [MTH 903] Calculus with Analytic Geometry III (5)*
MATH 201 Engineering Computer Programming (3)
MATH 216 [MTH 912] Differential Equations (3)
or
MATH 220 Linear Algebra (3)

III. Electives (6-7)

Select additional general education electives from the list at the front of this section or refer to the recommended curriculum for Computer Science or Secondary Education for additional course choices.

Required A.S. Degree Program Total: 62 credits

Note: Students who intend to teach mathematics at the secondary level should pursue the A.A.T. degree in Secondary Mathematics.

* It is recommended that students complete the entire calculus sequence at a single institution.

pre-Medicine

A.S. Degree • Suggested Curriculum

This program provides the foundation course work in biology, chemistry, and mathematics for students who plan to apply to medical school. Admission to medical school is highly competitive, and it is important for students to maintain a high overall grade point average, as well as to excel in laboratory science courses. This course work also helps to prepare the student to take the Medical College Admissions Test (MCAT), which is required as part of the admissions screening program.

I. General Education Core (41)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Speech Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-I] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (9 credits)

BIOL 112 [L1 900L] Organismal Biology (4)
 CHEM 110 [P1 902L] General Chemistry I (5)

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

PSYCH 101 [S6 900] Introduction to Psychology (3) *recommended*

II. Area of Concentration/Major Field (21)

BIOL 111 Cellular and Molecular Biology (4)
 BIOL 221 Human Anatomy & Physiology I (4)
 BIOL 222 Human Anatomy & Physiology II (4)
 CHEM 130 General Chemistry II (5)
 CHEM 203 Organic Chemistry I (5)
 CHEM 204 Organic Chemistry II (5)
 MATH 172 Calculus with Analytic Geometry II (5)

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Music Education

A.A. Degree • Suggested Curriculum

This curriculum has been designed for students who plan to transfer into a Bachelor of Arts degree program with a major in music education. A broad background in music theory, literature, keyboarding skills, aural skills, ensemble performance, and applied music instruction is offered at the community college level to provide a foundation for advanced study in music at a senior institution. Transfer admission in music education is competitive. Students may need to demonstrate their skill level through auditions and/or placement testing at the senior institution. To teach music in the Illinois public schools, teachers must be certified by the State of Illinois. All senior institutions require passage of basic skills tests in reading, writing, grammar, and math.

I. General Education Core (38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts, including one English course numbered 200 or above.

ART 131 [F2 903N] Survey of Non-Western Art (3) *recommended*

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E. The following courses are recommended to fulfill teacher certification requirement:

HIST 201 [S2 900] U.S. History: 1492 to 1877 (3)

or

HIST 202 [S2 901] U.S. History: 1877 to Present (3)

POLSC 140 [S5 900] Introduction to U.S. Government and Politics (3)

PSYCH 101 [S6 900] Introduction to Psychology (3)

Continued

Music Education

A.A. Degree • Suggested Curriculum
Continued from previous page

II. Area of Concentration/Major Field (min. of 24)

Take one musicianship course each term for a total of 16 credits.

MUSIC 101	Musicianship I (4)
MUSIC 102	Musicianship II (4)
MUSIC 201	Musicianship III (4)
MUSIC 202	Musicianship IV (4)

Select from Ensemble Groups I-IV: Take one each term for total of 4 credits.

MUSIC 110	Community Chorus (1)
MUSIC 120	Wind Ensemble (1)
MUSIC 152	Jazz Ensemble I (1)
MUSIC 153	Jazz Ensemble II (1)
MUSIC 162	Vocal Jazz Ensemble I (1)
MUSIC 163	Vocal Jazz Ensemble II (1)

Select from Applied Music Instruction I-IV (Private Music Lessons):

Take one each term for a total of 8 credits.

MUSIC 191	Private Applied Music I (2)
MUSIC 192	Private Applied Music II (2)
MUSIC 291	Private Applied Music III (2)
MUSIC 292	Private Applied Music IV (2)

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Music Performance

A.A. Degree • Suggested Curriculum

This curriculum is designed for students who plan to transfer into a Bachelor of Arts degree program with a major in music performance. A broad background in music theory, literature, keyboarding skills, aural skills, ensemble performance, and applied music instruction is offered at the community college level to provide a foundation for advanced study in music at a senior institution. Transfer admission in music is competitive, and most senior colleges require auditions and placement testing as part of the transfer admissions process.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101	[C1 900] Composition I - with a grade of C or better (3)
ENG 102	[C1 901R] Composition II - with a grade of C or better (3)
COMM 101	[C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts, including one English course numbered 200 or above.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112	[M1 904] General Education Mathematics (3)
MATH 115	[M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area B. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (min. of 24-25)

Take one musicianship course each term for a total of 16 credits.

MUSIC 101	Musicianship I (4)
MUSIC 102	Musicianship II (4)
MUSIC 201	Musicianship III (4)
MUSIC 202	Musicianship IV (4)

Select from Ensemble Groups I-IV: Take one each term for a total of 4 credits.

MUSIC 110	Community Chorus (1)
MUSIC 120	Wind Ensemble (1)
MUSIC 152	Jazz Ensemble I (1)
MUSIC 153	Jazz Ensemble II (1)
MUSIC 162	Vocal Jazz Ensemble I (1)
MUSIC 163	Vocal Jazz Ensemble II (1)

Select from Applied Music Instruction I-IV (Private Music Lessons):

Take one each term for a total of 8 credits.

MUSIC 191	Private Applied Music I (2)
MUSIC 192	Private Applied Music II (2)
MUSIC 291	Private Applied Music III (2)
MUSIC 292	Private Applied Music IV (2)

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

pre-Nursing

A.S. Degree • *Suggested Curriculum*

A registered nurse (RN) supervises, teaches and delegates nursing care to health team members and delivers direct care and treatment. The RN also prepares patients for surgery, administers intravenous therapy, establishes patient care plans, assesses and evaluates patient needs, and supervises nursing care. Students who earn a bachelor's degree in nursing are also licensed RN's by the Illinois Department of Financial and Professional Regulation. For optimum transfer, students should take courses in chemistry, math, and humanities.

I. General Education Core (39)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (3 credits)

MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (9 credits)

BIOL 112 [L1 900L] Organismal Biology (4)
 CHEM 110 [NUR 906] General Chemistry I (5)

Area E: Social and Behavioral Sciences (9 credits)

PSYCH 101 [S6 902] Introduction to Psychology (3)
 PSYCH 102 [S6 900] Human Growth & Development: Life-Span (3)

One course other than PSYCH from the list for Area E.

II. Area of Concentration/Major Field (23)

BIOL 111 Cellular & Molecular Biology (4)
 BIOL 211 Microbiology (4)
 BIOL 221 Human Anatomy & Physiology I (4)
 BIOL 222 Human Anatomy & Physiology II (4)
 CHEM 130 General Chemistry II (4)
 CHEM 203 Organic Chemistry I (5)

Required A.S. Degree Program Total: 62 credits

pre-Occupational Therapy

A.S. Degree • *Suggested Curriculum*

This curriculum is designed to help students select courses which are likely to apply to a major in Occupational Therapy. The courses listed are suggested courses which are designed to satisfy requirements in the Associate in Science degree program at Prairie State College and to provide the basis for transferring to a four-year institution.

Occupational therapists are concerned with people's ability to perform their work, self-care, and play in a competent, self-satisfying manner. When disease, trauma, or stress interferes with performance, the occupational therapist uses various methods of mutual problem-solving, environmental modification, and adaptive devices to support and enhance performance. This program provides the foundation course work necessary for admission to an occupational therapy program. Occupational therapy programs are masters degree level programs which require two years of prerequisite course work followed by four years in an approved occupational therapy program. Admission to occupational therapy programs is very competitive.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (3-4 credits)

Select one math course from:

MATH 115 [M1 902] General Education Statistics (3)
 MATH 153 [M1 902] Probability and Statistics (4)

Area D: Physical and Life Sciences (9 credits)

BIOL 112 [L1 900L] Organismal Biology (4)
 CHEM 110 [PI 902L] General Chemistry I (5)

Area E: Social and Behavioral Sciences (9 credits)

PSYCH 101 [S6 900] Introduction to Psychology (3) *recommended*
 SOCIO 101 [S7 900] Introduction to Sociology (3) *recommended*
 One additional course from the list for Area E.

II. Area of Concentration/Major Field (22-23)

BIOL 221 Human Anatomy & Physiology I (4)
 BIOL 222 Human Anatomy & Physiology II (4)
 ED 101 Child Growth and Development (3)

or

PSYCH 102 Human Growth and Development: Life-Span (3)
 PSYCH 203 Abnormal Psychology (3)

Other courses recommended by the senior institution (8-9)

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Please note: Each senior institution has its own transfer policies. Consult the school of your choice and/or the Prairie State College Counseling & Academic Advising Center to discuss the transferability of courses in relation to the school you have selected.

pre-Pharmacy

A.S. Degree • Suggested Curriculum

This curriculum is designed to help students select courses which are likely to apply to a pre-Pharmacy program. The courses listed are suggested courses which are designed to satisfy requirements in the Associate in Science degree program at Prairie State College and to provide the basis for transferring to a four-year institution.

The practice of clinical pharmacy promotes optimal, safe and appropriate drug use by patients. The clinical pharmacist is trained in all aspects of drug therapy management and patient drug education. The pre-Pharmacy program provides students with the foundation course work necessary to meet the prerequisites for admission to a school of pharmacy. Pharmacy schools require applicants to complete two years of pre-pharmacy course work. The colleges of Pharmacy then offer the final four years of a six-year program leading to the Doctor of Pharmacy degree (PharmD). Admission to these programs is very competitive.

I. General Education Core (41)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry (5)

Area D: Physical and Life Sciences (9 credits)

BIOL 112 [L1 902L] Organismal Biology (4)
 CHEM 110 [P1 902L] General Chemistry I (5)

Area E: Social and Behavioral Sciences (9 credits)

ECON 201 [S3 901] Macroeconomic Principles (3) *recommended*
 ECON 202 [S3 902] Microeconomic Principles (3) *recommended*

Select one course from a discipline other than ECON from the list for Area B.

II. Area of Concentration/Major Field (min. of 21)

Select from:

BIOL 111 Cellular & Molecular Biology (4)
 BIOL 221 Human Anatomy & Physiology I (4)
 BIOL 222 Human Anatomy & Physiology II (4)
 CHEM 130 General Chemistry II (5)
 CHEM 203 Organic Chemistry I (5)
 CHEM 204 Organic Chemistry II (5)
 PHYSI 120 College Physics I (4)
 PHYSI 130 College Physics II (4)

Required A.S. Degree Program Total: 62 credits

Please note: Each senior institution has its own transfer policies. We strongly urge you to consult the school of your choice and/or the Prairie State College Counseling and Academic Advising Center to discuss the transferability of courses in relation to the school you have selected.

Photography

A.A. Degree • Suggested Curriculum

This curriculum is designed for students who plan to pursue a baccalaureate program in fine arts photography, photojournalism or professional photography. The program provides basic courses for building technical competency as well as the general education foundation needed to enhance creativity and appreciation for aesthetics. Students are encouraged to begin development of a substantial portfolio. Students should complete the Associate in Arts degree prior to transfer. Admission to baccalaureate programs is highly competitive.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

ART 126 [F2 904] History of Photography (3)
 ART 121 History of Western Art I (3)

or

ART 122 History of Western Art II (3) *recommended*

Select one humanities course from the list for Area B.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (12)

ART 101 Two Dimensional Design (3)
 ART 102 Three Dimensional Design (3)
 PHOTO 171 Introduction to Black & White Photography (3)
 PHOTO 291 Survey of Contemporary Photography (3)

III. Electives (12-13)

Select any additional electives in photography or general education in consultation with an advisor. Some recommended courses include:

PHOTO 170 Digital Camera Skills (1)
 PHOTO 174 Digital Darkroom Techniques (2)
 PHOTO 175 Basic Lighting Skills (2)
 PHOTO 180 Photoshop I (2)
 PHOTO 275 Photographic Design (3)
 PHOTO 285 Digital Color Production (3)
 PHOTO 286 Independent Photo Project (3)
 PHOTO 297 Professional Portfolio (3)

Any additional general education course from the list at the front of this section.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Physical Education

A.A. Degree • Suggested Curriculum

The course of study identifies courses which are likely to apply to a major in Physical Education (with specializations in P.E. Teacher Education, Athletic Coaching, Athletic Training, Exercise Science, Kinesiology, Personal Trainer, etc.). Students should consult the school to which they plan to transfer to discuss the variety of their program and course offerings and to determine which courses to take at the freshman/sophomore level at Prairie State College. Many of these programs have a competitive admissions process and require a specific minimum GPA for admission. Kinesiology and exercise science programs usually require a strong foundation in mathematics (such as statistics) and sciences (such as anatomy and physiology and physics).

I. General Education Core (37-38)

Area A: Communications (9 credits)

- ENG 101 [C1 900]* Composition - with a grade of C or better (3)
ENG 102 [C1 901R]* Composition II - with a grade of C or better (3)
COMM 101 [C2 900] Principles of Communication
- with a grade of C or better (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from Area B with at least one course from humanities and one from fine arts.

Humanities: ENG course recommended for Illinois teacher certification

Fine Arts: ART 131 recommended for Illinois teacher certification

Area C: Mathematics (3 credits)

MATH 112 [M1 904] General Education Mathematics (3)

or

MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

BIOL 112 [LI 900L] Organismal Biology (4) *recommended*

Physical Science Course (3-4)*

*Four credit lab science courses recommended for Illinois teacher certification

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

PSYCH 101 [S6 900] Introduction to Psychology (3) *recommended*

PSYCH 102 [S6 902] Human Growth and Development: Lifespan (3) *recommended*

Any additional course other than PSYCH from the list for Area E.

POLSC 140 or HIST 201 or 202 recommended for Illinois teacher certification.

II. Area of Concentration/Major Field (24-25)

Select a minimum of 24 credit from the following:

- BIOL 111 Cellular and Molecular Biology (4)
BIOL 221 Human Anatomy & Physiology I (4)
BIOL 222 Human Anatomy & Physiology II (4)
ED 100 Foundations of American Public Education (3)
HLTH 101 Health and Wellness (2)
PES 200 Officiating Sports (3)
PES 201 Introduction to Physical Education (2)

Select up to 4 credits from the following physical education activity courses :

PE 101, 102, 103, 104, 105, 106, 107, 108, 151, 161, 162, 163, 164, 165 (1)

SPAN 101, 102, 201, 202 (3)*

Additional academic or PE courses as recommended by the school to which you plan to transfer.

Any additional general education course from the list at the front of this section.

Required A.A. Degree Program Total: 62 credits

**Foreign Language Requirement: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school, or four semesters in college, will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.*

Physical Science

A.S. Degree • *Suggested Curriculum*

This program provides the foundation work for students planning to transfer to upper-division physical science programs or to teach physical science at the high school level. Students are strongly encouraged to complete the Associate in Science Degree prior to transfer.

I. General Education Core (39-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

PHYS 111 Physical Science (4)

One life science course from the list for Area D. (3-4)

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (12)

Select courses from Astronomy, Geology, Meteorology, or Physical Science:

ASTRO 101 Guide to the Universe (3)
 ASTRO 104 The Solar System and Beyond (4)
 GEOG 105 Introduction to Physical Geography (3)
 GEOL 101 Physical Geology (4)
 METEO 150 Introduction to Meteorology (3)
 PHYS 112 Earth Science (4)

III. Electives (10-11)

Select any additional courses from the general education core courses listed above. Students planning to teach at the high school level should also refer to the recommended curriculum for Secondary Education for additional course choices.

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

pre-Physical Therapy

A.S. Degree • *Suggested Curriculum*

Physical therapy is the promotion of optimum human health and function through the application of scientific principles to prevent, identify, correct or alleviate dysfunctions originating in anatomy. This program provides the student with a sound background in the basic sciences and mathematics necessary for admission to a physical therapy program. Admission to these programs is very competitive! Physical therapy programs look for students with high grade point averages, especially in the science and math courses. In addition, documented clinical experience is a prerequisite for admission to most programs.

I. General Education Core (41)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (9 credits)

BIOL 112 [L1 902L] Organismal Biology (4)
 CHEM 110 [P1 902L] General Chemistry I (5)

Area E: Social and Behavioral Sciences (9 credits)

PSYCH 101 [S6 900] Introduction to Psychology (3)

Select two remaining courses from the list for Area E.

One course must be in a discipline other than PSYCH.

II. Area of Concentration/Major Field (21)

BIOL 111 Cellular & Molecular Biology (4)
 CHEM 130 General Chemistry II (5)
 MATH 153 Probability and Statistics (4)
 PHYS 120 College Physics I (4)
 PHYS 130 College Physics II (4)

III. Electives (0)

Although no elective hours are required for this degree, two semesters of Anatomy and Physiology are highly recommended for students who wish to gain admission to a physical therapy program.

BIOL 221 Human Anatomy & Physiology I (4)
 BIOL 222 Human Anatomy & Physiology II (4)

Required A.S. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Physics

A.S. Degree • Suggested Curriculum

The physicist is concerned with theoretical scientific principles. Employment opportunities for engineers and physicists include theoretical research activities plus many other options. In the typical four-year curriculum, the first two years concentrate on the basic sciences including mathematics, chemistry, and physics. The last two years emphasize advanced mathematics and science courses. Prairie State College offers courses applicable to the first two years of the curriculum, and will grant an Associate in Science degree to successful students.

I. General Education Core (40-41)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (5 credits)

MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (8-9 credits)

CHEM 110 [P1 902L] General Chemistry I (5)
 One life science course from the list for Area D (3-4).

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (21-22)

Physics core courses:

PHYSI 210 [PHY 911] University Physics I (4)
 PHYSI 220 [PHY 912] University Physics II (4)
 PHYSI 230 University Physics III (4)

Support courses:

CHEM 130 General Chemistry II (5)
 MATH 172 Calculus with Analytic Geometry II (5)
 MATH 173 Calculus with Analytic Geometry III (5)
 MATH 201 Engineering Computer Programming (3)
 MATH 216 Differential Equations (3)

Required A.S. Degree Program Total: 62 credits

Political Science

A.A. Degree • Suggested Curriculum

This curriculum is designed for students pursuing a baccalaureate degree in Political Science. The transfer program provides students with a broad background to examine all aspects of public life, and prepares them to be alert and well-informed participants in a wide variety of local, state, national, and international issues. Students are strongly encouraged to complete the Associate in Arts degree prior to transfer.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area B. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (9)

POLSC 140 [S5 900] Introduction to U.S. Government and Politics (3)
 POLSC 230 [S5 905] Introduction to Comparative Government (3)
 POLSC 240 [S5 904] Introduction to International Relations (3)

III. Electives (15-16)

POLSC 152 U.S., State and Local Government (3)
 Select additional courses as recommended by the senior institution you plan to attend. Typical elective courses include, but are not limited to, economics, foreign language, geography, history, etc.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Psychology

A.A. Degree • Suggested Curriculum

The Psychology transfer program provides a broad general education background and prepares students for the specialized coursework undertaken during the last two years of a baccalaureate program. Students who plan to major in psychology are encouraged to complete foundation coursework in sciences and mathematics in addition to completing a core of basic psychology courses. It is recommended that students complete the Associate in Arts degree prior to transfer.

I. General Education Core (37-40)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course selected from the humanities area and one course from the fine arts area.

Area C: Mathematics (3-5 credits)

Select one math course from:

MATH 115 [M1 902] General Education Statistics (3)
 MATH 153 [M1 902] Probability & Statistics (4)
 MATH 155 [M1 906] Finite Mathematics (4)
 MATH 171 [M1 900-1] Calculus with Analytic Geometry I (5)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

PSYCH 101 [S6 900] Introduction to Psychology (3)

Select two additional courses from the list for Area E.

At least one course must be from a discipline other than psychology.

II. Area of Concentration/Major Field (9)

Psychology core course:

PSYCH 102 [S6 902] Human Growth & Development: Life-Span (3)

Select two of the following courses:

PSYCH 203 [PSY 905] Abnormal Psychology (3)
 PSYCH 204 [PSY 906] Industrial/Organizational Psychology (3)
 PSYCH 212 [PSY 907] Theories of Personality (3)
 PSYCH 215 [S8 900] Social Psychology (3)

III. Electives (13-16)

Select any additional courses as recommended by the senior institution you plan to attend. Students who plan to major in psychology are encouraged to complete additional foundation courses in sciences (e.g. biology, chemistry, physics, anatomy, and physiology) and mathematics (e.g. college algebra, calculus, and statistics). The number of psychology courses taken at the freshman/sophomore level should generally not exceed 12 credits and should be limited to the courses recommended above. Other recommended electives include foreign language, social science, and sociology.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Social Work

A.A. Degree • Suggested Curriculum

The profession of social work is devoted to helping people function optimally in their environment by providing direct and indirect services to individuals, families, groups, and communities and by working to improve social conditions. Bachelor's degree programs in social work prepare students for careers in public and private agencies such as child welfare, mental health, corrections, shelters, and many other workplaces. Community college students interested in completing bachelor's degrees in social work are strongly encouraged to complete an Associate in Arts degree prior to transfer. Students should see their advisors about particular social work baccalaureate programs for specific entry requirements since admission to these programs is competitive and completion of courses does not guarantee admission to a program at a senior institution.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

PHILO 201 [H4 900] Introduction to Philosophy (3) *recommended*
 PHILO 202 [H4 904] Ethics (3) *recommended*

Select an additional course in fine arts or interdisciplinary humanities/fine arts from the list for Area B.

Area C: Mathematics (3 credits)

MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select 3 courses in at least two different disciplines from the list for Area E.

The following are recommended:

ANTHR 222 [S1 901N] Introduction to Cultural & Social Anthropology (3)
 PSYCH 101 [S6 900] Introduction to Psychology (3)
 SOCIO 101 [S7 900] Introduction to Sociology (3)

II. Area of Concentration/Major Field (15)

Recommended Social Work Core Courses:

PSYCH 102 Human Growth and Development: Life-Span (3)
 PSYCH 203 Abnormal Psychology (3)
 PSYCH 215 Social Psychology (3)
 SOCIO 111 Contemporary Social Issues (3)
 SOCIO 201 Introduction to Social Work (3)

III. Electives (10-11)

Select additional courses as recommended by the senior institutions you plan to attend. Typical elective courses include:

ECON 201 Macroeconomic Principles (3)
 PHILO 203 Introduction to Logic (3)
 POLSC 140 Introduction to U.S. Governments and Politics (3)
 PSYCH 217 Human Sexuality (3)
 SOCIO 220 Race Relations: A Multicultural Perspective (3)
 Foreign Language (4-16)

Other elective courses recommended by the senior institution of your choice.

Required A.A. Degree Program Total: 62 credits

Sociology

A.A. Degree • Suggested Curriculum

This curriculum is designed for students who plan to pursue a bachelor's degree in such fields as behavioral science, and sociology. The Sociology transfer program provides students with a broad, general education background and prepares them for the specialized coursework undertaken during the last two years of a baccalaureate program and for eventual graduate level study in social work. Students are strongly encouraged to complete the Associate in Arts degree prior to transfer.

I. General Education Core (37-39)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one from fine arts.

Area C: Mathematics (3-4 credits)

Select one math course from:

MATH 115 [M1 902] General Education Statistics (3)
 MATH 153 [M1 902] Probability & Statistics (4)
 MATH 155 [M1 906] Finite Mathematics (4)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

ANTHR 215 [SI 900N] Introduction to Anthropology (3)

or

ANTHR 222 [SI 901N] Introduction to Cultural and Social Anthropology (3)

Select one additional course in a discipline other than ANTHR from the list for Area E.

II. Area of Concentration/Major Field (12)

SOCIO 101 [S7 900] Introduction to Sociology (3)
 SOCIO 111 [S7 901] Contemporary Social Issues (3)
 SOCIO 210 [S7 902] Marriage and the Family (3)
 SOCIO 215 [S7 904D] Sex, Gender, and Power (3)
 SOCIO 220 [S7 903D] Race Relations: A Multicultural Perspective (3)

III. Electives (11-13)

Select any additional courses from the general education core courses, foreign language, or courses which are non-Western or multicultural in content. Students planning to teach at the high school level should refer to the Recommended Curriculum for Secondary Education for additional elective choices.

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Speech Communication

A.A. Degree • Suggested Curriculum

This program provides the foundation for students planning to transfer to speech communication programs and specializing in such areas as interpersonal, organization, or persuasive communication; speech performance; or high school teaching. It is recommended that students complete a well-rounded general education core curriculum. Students are strongly encouraged to complete the Associate in Arts degree prior to transfer.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts.

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (9)

Recommended Speech Communication Courses

COMM 102 Persuasive Public Speaking (3)
 COMM 103 Group Discussion (3)
 COMM 108 Interpersonal Communication (3)

III. Electives (15-16)

Select additional courses as recommended by the senior institution you plan to attend. Typical elective courses include, but are not limited to:

COMM 111 Introduction to Mass Communication (3)
 COMM 196 Applied Forensics I (1)
 COMM 197 Applied Forensics II (1)
 COMM 198 Applied Forensics III (1)
 COMM 199 Applied Forensics IV (1)

Foreign Language courses (4-16)

Other elective courses

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Theatre Arts

A.A. Degree • Suggested Curriculum

Students planning to pursue a baccalaureate degree are encouraged to complete an Associate in Arts degree prior to transfer. Transfer admission to theatre arts-related programs is competitive and some schools require an audition for admission to the program. Because each senior institution has its own transfer policies, we cannot guarantee the accuracy of this information for every school. Consult the school of your choice and/or the Prairie State College Counseling and Academic Advising Center to discuss the transferability of courses.

I. General Education Core (37-38)

Area A: Communication (9 credits)

ENG 101 [C1 900] Composition I - with a grade of C or better (3)
 ENG 102 [C1 901R] Composition II - with a grade of C or better (3)
 COMM 101 [C2 900] Principles of Communication (3)

Area B: Humanities and Fine Arts (9 credits)

Select three courses from the list for Area B with at least one course from humanities and one course from fine arts (other than THTRE).

Area C: Mathematics (3 credits)

Select one math course from:

MATH 112 [M1 904] General Education Mathematics (3)
 MATH 115 [M1 902] General Education Statistics (3)

Area D: Physical and Life Sciences (7-8 credits)

Select one life science course and one physical science course from the list for Area D. One course must have a lab component.

Area E: Social and Behavioral Sciences (9 credits)

Select three courses in at least two different disciplines from the list for Area E.

II. Area of Concentration/Major Field (3)

THTRE 111 [TA 914] Fundamentals of Acting (3)

III. Electives (18-19)

Select additional courses as recommended by the senior institution you plan to attend. Typical elective courses include but are not limited to:

ENG 271 [H3 905] Introduction to Shakespeare (3)
 HUMAN 202 [HF 900] Form and Structure in the Arts (3)
 THTRE 101 [FI 907] Understanding Theatre (3)
 THTRE 112 Theatre Practicum/Acting (3)

Foreign Language courses (4-16)

Other elective courses

Required A.A. Degree Program Total: 62 credits

Foreign Language Requirements: Some universities have a foreign language requirement. Generally, four years of a single foreign language in high school or four semesters of language in college will fulfill this requirement. It is recommended that students complete the entire sequence at one institution.

Associate in General Studies Degree (A.G.S.) Guidelines

The Associate in General Studies (A.G.S.) degree, while not intended for transfer or directed at a specific occupation, allows students to design their own two-year program. It provides an opportunity to complete an associate's degree of one's own making. This degree has minimal general education requirements and thus allows one considerable freedom in designing and pursuing a course of study that meets individualized learning goals. Note, however, this degree is not recommended as a stepping-stone toward a baccalaureate degree, nor is it covered by the College's Educational Guarantee. A student considering the Associate in General Studies degree should meet with an advisor to determine whether this degree is well suited to his/her educational goals and needs.

A.G.S. Degree Requirements

A student will be recommended for an Associate in General Studies degree upon completion of the following requirements:

1. Enrolled at Prairie State College for one semester immediately preceding graduation, with passing grades in at least 15 semester hours of credit at Prairie State College (excluding proficiency credits).
2. Completed 62 semester hours of college credit, 20 of which are specified below.
3. Attained a minimum grade point average of 2.0.
4. Completed at least one course in each of the major General Education components (communication, humanities and fine arts, science and mathematics and the social sciences).
5. Completed the remaining 47 credit hours for the degree based on the student's area of interest, and including any baccalaureate or occupationally oriented courses offered by the College and numbered 100 or higher.

Associate in Applied Science

The Associate in Applied Science (A.A.S.) represents completion of a minimum of 60 credit hours in a technical or career program. Certificates are awarded after completion of up to 50 credits that focus on specific occupational or technical areas of study.

A.A.S. Degree Requirements

An Associate in Applied Science degree is awarded to those students who successfully complete a program of study for a specific occupational area. Candidates for the A.A.S. Degree must fulfill the following requirements:

1. Enrolled at Prairie State College for two semesters immediately preceding graduation and successfully completed at least 15 semester hours of credits at Prairie State College (excluding proficiency credits).
2. Completed program requirements as specified by the occupational/technical degree program (minimum of 60 semester hours). This includes a General Education Core Curriculum, program-mandated occupational/technical courses, and electives as determined by the A.A.S. degree program.
3. Attained a minimum cumulative grade point average of 2.0 on a 4.0 scale in all Prairie State College courses.

4. Filed appropriate evidence of high school graduation or GED certificate with the Enrollment Services Office.

A.A.S. Degree Components

The A.A.S. degree is composed of a general education component, a core concentration of occupational/technical courses, and other program electives.

I. General Education Core Curriculum for the A.A.S. Degree

AREA A: Communication (6 semester hours)

AREA A: Communication (6 semester hrs)

ENG 101 [C1 900] Composition I - with a grade of C or better

COMM 101 [C2 900] Principles of Communication

AREA B: Humanities and Fine Arts (3 semester hours)

One course, specified by program or selected from list for Area B at the front of this section.

AREA C: Mathematics - demonstrate competence by:

a) Placing into MATH 095 or above on the Prairie State College Assessment Test; or

b) Completing MATH 090 - with a grade of C or better; or

c) Completing a math course(s) as specified by the degree program.

AREA D: Physical and Life Sciences (3-4 semester hours)

One course, specified by program or selected from the list for Area D at the front of this section.

AREA E: Social and Behavioral Sciences (3 semester hours)

One course, specified by program or selected from the list for Area E at the front of this section.

II. Area of Concentration/Program Requirements

Program requirements are established by each department to reflect the core competencies expected in the workplace for specific occupations.

III. Electives

Electives are determined by each department based on options for specialization within a program or to provide students with choices related to their career goals.

Certificate Guidelines

Certificates are awarded after completion of up to 50 credits that focus on specific occupational or technical areas of study. Certificates are awarded to those students completing education and training in a particular occupational field of study. A student will be recommended for a certificate if the following requirements are met:

Certificate Requirements

1. Completed the certificate requirements as specified in the certificate program.
2. Attained a minimum grade point average of 2.0 in the courses identified in the certificate program.
3. Completed 15 credit hours or one-half of the required credit hours for programs that exceed 30 credit hours, as a student at Prairie State College and enrolled at Prairie State College during the regular semester immediately preceding the awarding of the certificate.

Career Programs

The following list designates career degree and certificate programs by specific areas of study. Consult each program for the required curriculum. Curriculum for career programs reflects current workforce trends, skills standards, and licensure/accreditation standards where applicable.

Automotive

Automotive Technology (A.A.S.)
Automotive Alignment Specialist (Cert.)
Automotive Brake Specialist (Cert.)
Automotive Drivability Specialist (Cert.)
Automotive Engines Specialist (Cert.)
Automotive Heating/Air Conditioning Specialist (Cert.)
Automotive Parts Specialist (Cert.)
Automotive Service Management Specialist (Cert.)
Automotive Services Technology (Cert.)
Automotive Transmission Specialist (Cert.)

Business

Management (A.A.S.)
Accounting Technician (Cert.)
Bookkeeping (Cert.)
Business Essentials
E-Business (see Information Technology)

Computer Aided Design (CAD)

CAD/Mechanical Design Technology (A.A.S.)
CAD/Mechanical Design Technology (Cert.)
CAD Drafter (Cert.)
CAD Technician (Cert.)

Computer Electronics

Computer Electronics Technology (A.A.S.)
Computer Electronics Technician (Cert.)

Criminal Justice

Criminal Justice Services (A.A.S.)
Criminal Justice Services (Cert.)

Early Childhood

Child and Family Studies (A.A.S.)
Child Care Assistant (Cert.)
Early Childhood Director (Cert.)
Early Childhood Teacher Basic (Cert.)

Education–Paraprofessional

Paraprofessional Educator (A.A.S.)
Paraprofessional Educator (Cert.)

Emergency Services

Paramedicine (A.A.S.)
Emergency Medical Technician (Cert.)
First Responder (Cert.)

Fire Science

Fire Science Technology (A.A.S.)
Fire Science Technology (Cert.)
Firefighter II (Cert.)
Firefighter/EMT (Cert.)

Fitness

Fitness and Exercise (A.A.S.)
Group Fitness Instructor (Cert.)
Personal Trainer (Cert.)

Graphic Communications

Graphic Communications (A.A.S.)
Digital Design (Cert.)
E-Business (see Information Technology)
Web Designer (Cert.)

Health Professions

Dental Hygiene (A.A.S.)
Nursing (A.A.S.)
Advanced Bedside Care Provider (Cert.)
CNA/Nurse Assistant (Cert.)
RN First Surgical Assistant (Cert.)
Surgical Technology (Cert.)

Industrial Technology

CNC Programmer/Operator (Cert.)
Heating, Ventilation, A/C & Refrigeration (Cert.)
Hydraulics (Cert.)
Industrial Electrician (A.A.S.)
Industrial Electrician (Cert.)
Industrial Maintenance Technician (Cert.)
Machinist (Cert.)
Manufacturing Technology (A.A.S.)
Manufacturing Technology (Cert.)
Millwright (Cert.)
Tool & Die Making (A.A.S.)
Tool & Die Making (Cert.)
Welder Technician (Cert.)
Welding Specialist (Cert.)

Information Technology

Information Technology (A.A.S.)
Computer Repair Specialist (Cert.)
Desktop Publishing (Cert.)
Digital Mass Communication (Cert.)
E-Business (Cert.)
Game Design and Development (Cert.)
Network Security Specialist (Cert.)
Networking Specialist (Cert.)
Office Assistant (Cert.)
Programming (Cert.)
Software Specialist (Cert.)
Software Technician (Cert.)
Software User (Cert.)
Web Developer (Cert.)
Web Designer (Cert.)
Webmaster (Cert.)

Music

Music Production (A.A.S.)
Music Technology (Cert.)

Personal Trainer

(see Fitness)

Photography

Photographic Studies (A.A.S.)
Photography (Cert.)
Portrait Photography (Cert.)

Automotive Technology

Automotive Technology (A.A.S.)
 Automotive Alignment Specialist
 Automotive Brake Specialist
 Automotive Drivability Specialist
 Automotive Engines Specialist
 Automotive Heating/Air Conditioning Specialist
 Automotive Parts Specialist
 Automotive Service Management Specialist
 Automotive Services Technology
 Automotive Transmission Specialist

Our Automotive Technology program is certified by the National Automotive Technicians Education Foundation (NATEF) and the National Institute for Automotive Service Excellence (ASE). Certification was awarded in automatic transmission and transaxles, brakes, electrical/electronic systems, engine performance, engine repair, heating and air conditioning, manual drive train and axles, and suspension.

Automotive Technology

A.A.S. Degree

This program provides the balance of theory and practical knowledge necessary for students preparing for careers in the automotive technology industry. Service technicians are trained to maintain and repair cars, vans, small trucks, and other vehicles. Using both hand tools and specialized diagnostic test equipment, they learn to pinpoint problems and make necessary repairs or adjustments. In addition to forming complex and difficult repairs, technicians handle a number of routine maintenance procedures such as oil changes, tire rotation and battery replacement. Technicians also interact with customers to explain repair procedures and discuss maintenance needs.

I. General Education Core (20)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C or better* (3)
 COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B on pages 50-52 (3)

Area C: Mathematics (4 credits)

MATH 151 College Algebra (4) required

Area D: Physical and Life Sciences (4 credits)

PHYSI 120 College Physics I (4) required

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Area of Concentration/Program Requirements (47)

AUTO 101	Basic Automobile Service and Systems (3)
AUTO 102	Automotive Engines (4)
AUTO 107	Automotive Electricity/Electronics I (4)
AUTO 108	Suspension and Steering Systems (4)
AUTO 202	Automotive Brake Systems (4)
AUTO 205	Manual Transmissions and Transaxles (4)
AUTO 206	Automotive Engine Performance (4)
AUTO 207	Automotive Heating/Air-Conditioning (4)
AUTO 208	Automotive Transmissions/Transaxles (4)
AUTO 210	Automotive Electricity/Electronics II (4)
AUTO 211	Automotive Engine Performance II (4)
AUTO 215	Advanced Automotive Service and Systems (4)

Program Total: 67 credits

Automotive Alignment Specialist Certificate

This short-term program trains students to function as front end mechanics. Students learn to align and balance wheels, as well as repair steering mechanisms and suspension systems.

Program Requirements

AUTO 101	Basic Automobile Service and Systems (3)
AUTO 108	Steering and Suspension Systems (4)

Program Total: 7 credits

Automotive Brake Specialist Certificate

Students in this program are trained to work on drum and disk braking systems, parking brakes and their hydraulic systems. Students learn to inspect, adjust, remove, repair and reinstall brake shoes, disk pads, drums, rotors, wheel and master cylinders, and hydraulic fluid lines.

Program Requirements

AMATH 100	Basic Mathematics for the Skilled Trades (2)
AUTO 101	Basic Automobile Service and Systems (3)
AUTO 107	Automotive Electricity/Electronics I (4)
AUTO 202	Automotive Brake Systems (4)

Program Total: 13 credits

Automotive Drivability Specialist

Certificate

This short-term program trains students to diagnose Drivability problems. Students learn the basics of the engine, engine performance, how the electronics work, as well as the computer system functions of the vehicle. Students are taught to adjust the ignition timing and valves, and adjust or replace spark plugs or other parts to ensure efficient engine performance. Electronic test equipment is used to adjust and locate malfunctions in fuel, ignition, and emissions control systems.

Program Requirements

AUTO 101	Basic Automobile Service and Systems (3)
AUTO 102	Automotive Engines (4)
AUTO 107	Automotive Electricity/Electronics I (4)
AUTO 206	Automotive Engine Performance (4)
AUTO 211	Automotive Engine Performance II (4)

Program Total: 19 credits

Automotive Engines Specialist

Certificate

This short-term program trains the student to function as an engine mechanic. Students learn to overhaul engines, as well as service the electrical needs of the engine.

Program Requirements

AMATH 100	Basic Mathematics for the Skilled Trades (2)
AUTO 101	Basic Automobile Service and Systems (3)
AUTO 102	Automotive Engines (4)
AUTO 107	Automotive Electricity/Electronics I (4)

Program Total: 13 credits

Automotive Heating/Air Conditioning Specialist

Certificate

This short-term program prepares technicians to install and repair air-conditioners as well as service components such as compressors and condensers.

Program Requirements

AMATH 100	Basic Mathematics for the Skilled Trades (2)
AUTO 101	Basic Automobile Service and Systems (3)
AUTO 107	Automotive Electricity/Electronics I (4)
AUTO 207	Automotive Heating/Air Conditioning (4)

Program Total: 13 credits

Automotive Parts Specialist

Certificate

This short-term program trains the student for positions in parts management. Students learn the parts management system as well as basic business management techniques and introductory computer skills.

Program Requirements

AMATH 100	Basic Mathematics for the Skilled Trades (2)
AUTO 101	Basic Automobile Service and Systems (3)
AUTO 223	Automotive Parts Management (2)
ITAPP 101	Introduction to Computers (3)
Business Elective: Select one course from BUS 107, 127, 170, or 241 (3)	

Program Total: 13 credits

Automotive Services Technology

Certificate

This program prepares students for employment in automotive servicing and repair, engine testing, automotive field services, and automotive parts and shop management.

Program Requirements

AUTO 101	Basic Automobile Service and Systems (3)
AUTO 102	Automotive Engines (4)
AUTO 107	Automotive Electricity/Electronics I (4)
AUTO 108	Suspension and Steering Systems (4)
AUTO 202	Automotive Brake Systems (4)
AUTO 205	Manual Transmissions and Transaxles (4)
AUTO 206	Automotive Engine Performance (4)
AUTO 207	Automotive Heating/Air Conditioning (4)
AUTO 208	Automatic Transmissions and Transaxles (4)
AUTO 210	Automotive Electricity/Electronics II (4)
AUTO 211	Automotive Engine Performance II (4)
AUTO 215	Advanced Automotive Service and Systems (4)

Program Total: 47 credits

Automotive Service Management Technician

Certificate

Service management specialists are the link between the customers seeking repair or maintenance for their vehicles and the technicians who perform the work. Students are trained to write repair orders, inspect vehicles to determine work that needs to be done, determine costs of the work, and prepare itemized estimates. In addition, students learn basic computer skills and basic business management skills. After gaining experience in entry-level positions, successful students can go on to the management/supervisory levels in auto shops.

Program Requirements

AUTO 101 Basic Automobile Service and Systems (3)
 AUTO 224 Automotive Services Management (2)
 BUS 103 Business Mathematics (3)
 BUS 127 Business Communications (3)
 ITAPP 101 Introduction to Computers (3)
 Business Elective: Select from BUS 105, 107, 109, 170, 241, 242 (3)

Program Total: 17 credits

Automotive Transmission Specialist

Certificate

This short-term program trains mechanics to work on gear trains, couplings, hydraulic pumps, and other parts of automotive transmissions. Because these are complex mechanisms and include electronic parts, their repair requires considerable experience and training, including a knowledge of hydraulics.

Program Requirements

AUTO 101 Basic Automobile Service and Systems (3)
 AUTO 102 Automotive Engines (4)
 AUTO 205 Manual Transmissions and Transaxles (4)
 AUTO 208 Automatic Transmissions/Transaxles (4)

Program Total: 15 credits

Business

Management (A.A.S.)
Accounting Technician
Bookkeeping
E-Business [see Information Technology]

Management

A.A.S. Degree

This program is designed for working adults who wish to develop or enhance skills for positions of greater responsibility. The program draws from business, finance, and economics to give prospective supervisors and managers guidelines for directing the work of others in a business environment and institutional organizations. Students may specialize in the functional areas of financial, marketing, human resources, or supply chain management.

I. General Education Core (18-19)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C or better.* (3)
COMM 101 Principles of Communications (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (3 credits)

MATH 112 General Education Mathematics (3)

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Science (3 credits)

ECON 201 Macroeconomic Principles (3)

II. Area of Concentration/Program

Requirements (39-41)

BUS 101 Introduction to Modern Business (3)
BUS 105 Human Relations (3)
BUS 127 Business Communications (3)
BUS 131 Financial Accounting (4)
BUS 201 Business Law (3)
BUS 241 Principles of Management (3)
BUS 251 Principles of Marketing (3)
BUS 298 Seminar (1)
BUS 299 Internship (1-3)
ECON 202 Microeconomic Principles (3)
ITAPP 101 Introduction to Computers (3)
Select ONE of the Specialization Options listed below (9)

Option A:

Financial Management

BUS 132 Managerial Accounting (3)
BUS 138 Accounting Software I (1.5)
BUS 139 Accounting Software II (1.5)
BUS 165 Personal Asset Management (3)

Option B:

Marketing Management

BUS 120 Sales (3)
BUS 170 Small Business Management (3)
BUS 261 Advertising (3)

Option C:

Human Resources Management

BUS 109 Principles of Supervision (3)
BUS 209 Supervisors as Trainers (3)
BUS 242 Human Resources Management (3)

III. Electives (1-3)

Select any additional college-level course(s). (1-3)

Program Total: 60-64 credits

Accounting Technician

Certificate

This certificate program prepares students for entry-level employment as an accounting assistant, junior accountant, junior auditor, head or full-charge bookkeeper, or junior analyst. This program is not designed for students who plan to become professional accountants and CPAs. Students interested in these careers should follow the Associate in Arts degree program for pre-Business majors.

Program Requirements

BUS 101 Introduction to Modern Business (3)
BUS 103 Business Mathematics (3)
BUS 127 Business Communications (3)
BUS 131 Financial Accounting (4)
BUS 132 Managerial Accounting (3)
BUS 138 Accounting Software I (1.5)
BUS 139 Accounting Software II (1.5)
BUS 201 Business Law (3)
BUS 298 Seminar (1)
BUS 299 Internship (1-3)
ECON 201 Macroeconomic Principles (3)
ITAPP 125 Spreadsheet Applications - Level 1 (2)
ITAPP 126 Spreadsheet Applications - Level 2 (2)

Program Total: 29-31 credits

Bookkeeping

Certificate

This career certificate program is designed for individuals interested in pursuing careers as bookkeepers, accounts receivable or payable clerks, or payroll clerks. This program is not designed for students who plan to become professional accountants and CPAs. Students interested in these careers should follow the Associate in Arts Degree program for Pre-Business Majors.

Program Requirements

BUS 101	Introduction to Modern Business (3)
BUS 103	Business Mathematics (3)
BUS 107	Bookkeeping and Procedural Accounting (3)
BUS 138	Accounting Software I (1.5)
BUS 139	Accounting Software II (1.5)

Program Total: 12 credits

Business Essentials

Certificate

This certificate provides students with basic knowledge of business practices for entry-level employment.

Program Requirements

BUS 101	Introduction to Modern Business (3)
BUS 107	Bookkeeping and Procedural Accounting (3)
BUS 127	Business Communications (3)
BUS 241	Principles of Management (3)

Program Total: 12 credits

Computer Aided Design (CAD)

CAD/Mechanical Design Technology (A.A.S.)

CAD Drafter

CAD/Mechanical Design Technology

CAD Technician

CAD/Mechanical Design Technology

A.A.S. Degree

This program prepares students for careers as drafters, mechanical designers, and CAD technicians. Areas of potential employment include drafter, dealer, layout designer, design technician, CAD operator, and CAD technician. The courses emphasize basic drafting and drawing skills, design and analysis of mechanisms and mechanical parts, and the use of CAD systems to draw, design, and analyze mechanical devices.

I. General Education Core (20)

Area A: Communication (6 credits)

ENG 101 Composition I - with a grade of C or better (3)

COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (4 credits)

TECH 109 Technical Mathematics I (4)

Area D: Physical and Life Sciences (4 credits)

PHYSI 120 College Physics I (4)

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Area of Concentration/Program Requirements (39)

CADMD 141 Technical Drafting I (3)

CADMD 201 Mechanical Layout and Design I (3)

CADMD 203 Statics and Strength of Materials (4)

CADMD 243 Introduction to Auto-CAD (3)

CADMD 244 Intermediate Auto-CAD (3)

CADMD 245 Computer Aided Design (3)

MT 101 Metal Working Processes I (3)

MT 102 Metal Working Processes II (3)

MT 210 CNC Programming I (3)

MT 211 CNC Programming II (3)

MATH 151 College Algebra (4)

PHYSI 130 College Physics II (4)

III. Electives (2)

Select from CADMD 246, 247

Program Total: 61 credits

CAD Drafter

Certificate

This program is designed to prepare students for employment as entry-level CAD Drafters. Students will learn the skills and knowledge necessary to produce drawings, diagrams, charts, etc., using the Auto-CAD software. Hands-on experiences will include CAD system operation, drawing set-up, original drawings, copy, and modification of existing drawings and plotting.

Program Requirements

CADMD 141 Technical Drafting I (3)

CADMD 243 Introduction to Auto-CAD (3)

CADMD 244 Intermediate Auto-CAD (3)

TECH 109 Technical Mathematics I (4)

Program Total: 13 credits

CAD/Mechanical Design Technology

Certificate

This certificate program prepares students for entry-level positions in mechanical drafting and CAD. The skills developed will enable the student to work as a drafter, dealer, technical illustrator, and CAD operator.

Program Requirements

CADMD 141 Technical Drafting I (3)

CADMD 201 Mechanical Layout and Design I (3)

CADMD 203 Statics and Strength of Materials (4)

CADMD 243 Introduction to Auto-CAD (3)

CADMD 244 Intermediate Auto-CAD (3)

CADMD 245 Computer Aided Design (3)

CADMD 246 Architectural Desktop (2)

MT 101 Metal Working Processes I (3)

TECH 109 Technical Mathematics I (4)

Program Total: 28 credits

CAD Technician

Certificate

This program is designed to prepare students for a career as a CAD Technician and Designer. It provides a concentrated exposure in computer-aided drafting and design. This program is especially suitable for those currently employed in the field of mechanical design to update their design skills in the context of CAD systems. Persons seeking positions such as checker, layout designer, specifications writer, mechanical design technician, and CAD technician or designer will benefit from this program.

Program Requirements

CADMD 141 Technical Drafting I (3)

CADMD 201 Mechanical Layout and Design I (3)

CADMD 243 Introduction to Auto-CAD (3)

CADMD 244 Intermediate Auto-CAD (3)

CADMD 245 Computer-Aided Design (3)

TECH 109 Technical Mathematics I (4)

Program Total: 19 credits

Computer Electronics

Computer Electronics Technology (A.A.S.)
Computer Electronics Technician

Computer Electronics Technology

A.A.S. Degree

This program prepares students to work with the electronics components of computers and related equipment.

I. General Education Core (18-20)

Area A: Communication (6 credits)

ENG 101 Composition I - with a grade of C or better (3)
COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (3-4 credits)

Select from the following courses:

ITPRG106, MATH 151, TECH 109, or AMATH 100 and 101 (3-4)

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area B (3-4)

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Area of Concentration/Program Requirements (34)

CADMD 243 Introduction to Auto-CAD (3)
CET 101 Fundamentals of Electricity (2)
CET 103 Alternating Current (2)
CET 114 Digital Fundamentals (4)
CET 203 Instrumentation Fundamentals (4)
CET 211 Communication Electronics (4)
CET 220 Programmable Logic Controllers (4)
ELECT 111 Electronic Principles I (2)
ELECT 112 Electronic Principles II (2)
ITNET 160 Computer Repair (4)
ITPRG 140 Introduction to Operating Systems (3)

III. Electives (10)

Select from the following courses: (10)

ELECT 108, 109, 203, 204, 290
CADMD 244; ITWEB 101, 103, 201

Program Total: 62-64 credits

Computer Electronics Technician

Certificate

This program provides the electronics foundation for servicing computers and related electronics equipment.

Program Requirements

CADMD 243 Introduction to Auto-CAD (3)
CET 101 Fundamentals of Electricity (or ELECT 101) (2)
CET 103 Alternating Current (2)
CET 114 Digital Fundamentals (or ELECT 201 and 202) (4)
ELECT 111 Electronic Principles I (2)
ELECT 112 Electronic Principles II (2)
ITNET 160 Computer Repair (4)
ITPRG 140 Introduction to Operating Systems (3)

Select a minimum of 3 credit hours in mathematics from the following courses: (3-4)

AMATH 100 Basic Mathematics for the Skilled Trades (2)

and

AMATH 101 Algebra for the Skilled Trades (2)
ITPRG 106 Mathematics for Computers (3)
MATH 151 College Algebra (4)
TECH 109 Technical Mathematics I (4)

Select from the following courses: (9)

ELECT 108, 109, 203, 204, 290
CADMD 244; ITWEB 101, 103, 201

Program Total: 34-35 credits

Criminal Justice

Criminal Justice Services (A.A.S.)
Criminal Justice Services

Criminal Justice Services

A.A.S. Degree

This program provides a foundation in criminal justice for individuals planning careers in the fields of law enforcement, corrections, probation, parole, or private security. The core criminal justice classes focus on the major components and operations of our system of justice at the local, county, state, and federal levels. Students study criminal law and procedure, corrections, and the courts. They also review the administration, organization, and processes of the overall criminal justice system. Proficiency credits are available for actively working full-time police officers (and corrections officers) who are certified by the Illinois Law Enforcement Training and Standards Board as a Law Enforcement Officer or Corrections Officer. These officers must have completed the Approved Basic Law Enforcement (or Corrections) Officer Training Academies (400 or 480 hours) and have one year or more of full-time experience as a police (or corrections) officer, and they must have completed their probationary period.

I. General Education Core (18-19)

Area A: Communication (9 credits)

ENG 101 Composition I - with a grade of C or better (3)
ENG 102 Composition II - with a grade of C or better (3)
COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from the list for Area B (3)

Area C: Mathematics (demonstrated competence required)

Placement into MATH 095 or completion of MATH 090 - with a grade of C or better

Area D: Physical And Life Sciences (3-4 credits)

One course from the list for Area D

Area E: Social and Behavioral Sciences (3 credits)

POLSC 140 Introduction to U.S. Government & Politics (3) *required*

II. Area of Concentration/Program Requirements (42)

CJ 101 Introduction to Criminal Justice (3)
CJ 102 Introduction to Criminology (3)
CJ 103 Law Enforcement Organization and Administration (3)
CJ 106 Introduction to Corrections (3)
CJ 110 Community Based Policing (3)
CJ 120 Introduction to Homeland Security (3)
CJ 201 Introduction to Criminal Law (3)
CJ 202 Civil and Criminal Laws/Procedures (3)
CJ 203 Principles of Criminal Investigation (3)
CJ 204 Juvenile Justice (3)
CJ 208 Principles of Criminalities (3)
CJ 270 Computer Forensics (3)
ITAPP 101 Introduction to Computers (3)

Select one course from:

CJ 299 Criminal Justice Internship (3)
PSYCH 101 Introduction to Psychology (3)
SOCIO 101 Introduction to Sociology (3)

Program Total: 60-61 credits

Criminal Justice Services

Certificate

This program is designed for part-time students already employed in the fields of law enforcement, corrections and private security. The curriculum prepares students to advance their careers as public police officers and investigators, correctional officers, 911 telecommunications, or private security officers and investigators.

Program Requirements

CJ 101 Introduction to Criminal Justice (3)
CJ 102 Introduction to Criminology (3)
CJ 103 Law Enforcement Organization and Administration (3)
CJ 120 Introduction to Homeland Security (3)
CJ 201 Introduction to Criminal Law (3)
CJ 204 Juvenile Justice (3)
ENG 101 Composition I (3)
ITAPP 101 Introduction to Computers (3)
Select from CJ 106, 110, 202, 203, 270 (6)

Program Total: 30 credits

Early Childhood

Child and Family Studies (A.A.S.)
 Child Care Assistant
 Early Childhood Director
 Early Childhood Teacher Basic

Child and Family Studies

A.A.S. Degree

The Child and Family Studies Associate in Applied Science degree program is designed for individuals who want to work directly with young children and their families in early care and education programs, human service organizations, or professional development services. The program provides both theoretical knowledge and practical skills.

Please note: Students interested in teaching in the elementary schools in Illinois should enroll in the Associate in Arts Degree in pre-elementary or pre-early childhood education. Consult a counselor or advisor for further information. Students interested in pursuing the Level 1 Illinois Director Credential from the Illinois Network of Child Care Resource and Referral Agencies (INCCRA) have up to two years following graduation to document 1200 hours of early childhood/school age management experience. Either while earning their A.A.S. degree or following its completion, students must demonstrate that they have made contributions to the profession in one of the areas described in the program brochure.

I. General Education Core (19)

Area A: Communication (6 credits)

ENG 101 Composition I - with a grade of C or better. (3)
 COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (3 credits)

MATH 111 Mathematics for Paraprofessionals (3)**

Area D: Physical and Life Sciences (4 credits)

Select one laboratory science course from the courses for Area D (4)

Area E: Social and Behavioral Science (3 credits)

PSYCH 101 Introduction to Psychology (3)

Program Requirements (42)

ED 101 Child Growth and Development (3)
 ED 212 Exceptional Child (3)
 ECED 102 Observation and Guidance of Children (3)
 ECED 103 Health, Safety, and Nutrition (3)
 ECED 104 Introduction to Early Childhood Education (3)
 ECED 120 Child, Family, and Community (3)
 ECED 130 Guidance and Classroom Management (3)
 ECED 205 Language Arts for Children (3)
 ECED 213 Multicultural Education (3)
 ED 220 Children's Literature (3)
 ECED 299 Early Childhood Education Internship (3)
 Select 9 credit hours from the following courses:
 ECED 105 Creative Activities for Children (3)
 ECED 108 Science and Math for the Young Child (3)
 ECED 110 Care and Education: Infants, Toddlers, 2-year olds (3)
 ECED 214 Administration of Early Childhood Education Centers (3)
 Required for students who plan to obtain the Illinois Director Credential

Program Total: 61 credits

** Note: Students who plan to continue studies beyond the A.A.S. degree should substitute MATH 112 or 115 for MATH 111.

Child Care Assistant

Certificate

This program teaches the practical skills necessary to provide direct care to young children in day care and preschool centers, home day care sites, hospital child-life programs, and community-based centers. Students are prepared for employment as child care assistants, assistant teachers, and other entry-level positions in the child care field.

(According to the Department of Children and Family Service regulations, child care workers in Illinois must be at least 19 years of age and have a high school diploma or GED equivalency certificate).

Program Requirements

ECED 102 Observation and Guidance of Children (3)
 ECED 103 Health, Safety, and Nutrition (3)
 ECED 104 Introduction to Early Childhood Education (3)
 ECED 299 Early Childhood Education Internship (3)
 ED 101 Child Growth and Development (3)
 ED 212 Exceptional Child (3)
 ENG 101 Composition I (3)
 MATH 111 Math for Paraprofessionals (3)
 Select one of the following methods courses:
 ECED 105 Creative Activities for Children (3)
 ECED 108 Science and Math for the Young Child (3)
 Select one course from the following:
 ECED 120 Child, Family, and Community (3)
 ECED 213 Multicultural Education (3)
 Select one course from the following:
 ECED 205 Language Arts for Children (3)
 ED 220 Children's Literature (3)

Note: Students seeking a Level 2 credential should substitute MATH 112 or MATH 115 for MATH 111.

Program Total: 33 credits

Early Childhood Director

Certificate

This program prepares students to meet basic requirements to be an Early Childhood Care Director. DCFS requires two years of college credit in any area, with at least 18 hours in Early Childhood Education.

Program Requirements

ED 101	Child Growth and Development (3)
ECED 102	Observation and Guidance of Children (3)
ECED 103	Health, Safety, and Nutrition (3)
ECED 104	Introduction to Early Childhood Education (3)
ECED 214	Administration of Early Childhood Education Centers (3)
ECED 299	Early Childhood Education Internship (3)

Program Total: 18 credits

Early Childhood Teacher Basic

Certificate

This program prepares students to meet basic requirements for day care teacher approval. DCFS requires two years of college credit in any area including at least 6 hours in Early Childhood Education. Students completing this work are eligible for entry-level teaching in early childhood programs.

Program Requirements

ED 101	Child Growth and Development (3)
ECED 104	Introduction to Early Childhood Education (3)

Program Total: 6 credits

Education – Paraprofessional

Paraprofessional Educator (A.A.S.)

Paraprofessional Educator

Paraprofessional Educator

A.A.S. Degree

The Paraprofessional Educator Associate in Applied Science Degree program is designed to prepare students to assist teachers in a variety of classroom settings, and to meet the standards for paraprofessional educators developed in response to the federal No Child Left Behind Act (NCLB). This curriculum is based on professional standards developed by the American Federation of Teachers, as well as the Paraprofessional Task Force convened by the Illinois State Board of Education (ISBE) and the Illinois Community College Board (ICCB).

Please note: This program is not for students planning to become regularly certified professional teachers in Illinois public schools. Consult an advisor for more information.

I. General Education Core (22)

Area A: Communication (9 credits)

ENG 101 Composition I - with a grade of C or better (3)

ENG 102 Composition II - with a grade of C or better (3)

COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B

Strongly recommended courses include ART 131; ENG 215; HUMAN 101

Area C: Mathematics (demonstrated competence required)

Area D: Physical and Life Sciences (4 credits)

Select one IAI approved laboratory science course from the courses for Area D (4)

Area E: Social and Behavioral Science (6 credits)

PSYCH 101 Introduction to Psychology (3) *required*

Select one additional course from Area E (3)

Strongly recommended courses include:

ANTHR 222 Introduction to Cultural and Social Anthropology (3)

HIST 112 World History: 1714 to Present (3)

HIST 115 African Civilizations I (3)

HIST 116 African Civilizations II (3)

HIST 140 History of Latin America (3)

HIST 201 U.S. History: 1492 to 1877 (3)

HIST 202 U.S. History: 1877 to Present (3)

POLSC 140 Introduction to U.S. Government & Politics (3)

SOCIO 220 Race Relations: A Multicultural Perspective (3)

Program Requirements (28)

ED 100 Foundations of American Public Education (3)

ED 101 Child Growth and Development (3)

ED 212 Exceptional Child (3)

ED 160 Technology for Teachers (3)

ED 220 Children's Literature (3)

ECED 103 Health, Safety, and Nutrition (3)

EDU 111 Mathematics for Paraprofessionals (3)

EDU 221 Clinical Experience (3)

Note: Students already working as aides should arrange for proficiency credit for EDU 221

Select one cultural awareness course from the following:

EDU 213 Multicultural Education (3)

or

EDU 120 Child, Family, and Community (3)

Select one teaching strategies course from the following:

ECED 105 Creative Activities for Children (3)

EDU 205 Language Arts for Children (3)

EDU 216 Teaching Mathematics to the Young Child (3)

III. ELECTIVES (12)

Select 12 credit hours from the following courses:

CJ 204 Juvenile Justice (3)

ECED 104 Introduction to Early Childhood Education (3)

EDU 130 Guidance and Classroom Management (3)

EDU 213 Multicultural Education (3)

or

EDU 120 Child, Family, and Community (3)

PSYCH 202 Educational Psychology (3)

PSYCH 203 Abnormal Psychology (3)

SOCIO 210 Marriage & the Family (3)

Any Social/Behavioral Science course (non-Western or diversity emphasis) listed at the front of this section. (3)

Any of the following courses required for elementary teacher certification:

HIST 201 U.S. History: 1492 to 1877 (3)

HIST 202 U.S. History: 1877 to Present (3)

POLSC 140 Introduction to U.S. Government & Politics (3)

Other identified courses related to content specialization. Consult with program coordinator.

Program Total: 62 credits

Paraprofessional Educator Certificate

The Paraprofessional Educator Certificate program provides a foundation of important skills and standards that prepare paraprofessionals to work in non-Title I programs. Professional Education core requirements are combined with general education and special emphasis electives. Paraprofessionals who possess college credits that, when combined with this certificate total 60 credit hours, meet requirements of NCLB and are eligible to work in Title I positions.

Program Requirements

ENG 101 Composition I - with a grade of C or better (3)

ED 100 Foundations of American Public Education (3)

COMM 101 Principles of Communication (3)

Note: ENG 101 should be taken prior to or concurrently with ED 100. These two courses and COMM 101 should be completed prior to enrollment in remaining courses.

ED 212 Exceptional Child (3)

ED 160 Technology for Teachers (3)

ED 101 Child Growth, and Development (3)

ED 220 Children's Literature (3)

ECED 103 Health, Safety, and Nutrition (3)

EDU 111 Mathematics for Paraprofessionals (3)

SOCIO 101 Introduction to Sociology (3)

or

SOCIO 210 Marriage and the Family (3)

Select one of the following courses:

CJ 204; ECED 104; HUMAN 101; PSYCH 202; SOCIO 101, 210 (3)

Program Total: 33 credits

Emergency Services

Paramedicine (A.A.S.)
 Emergency Medical Technician
 Firefighter/EMT
 First Responder

Paramedicine

A.A.S. Degree

This program prepares men and women for careers as advanced pre-hospital care providers, trained to administer care to clients who have experienced acute medical or trauma emergencies. As skilled health care providers, paramedics function independently in the field or under the guidance of standing medical orders. The program provides a combination of general education courses, core courses in paramedicine, and selected clinical and field experiences in hospitals and EMS departments. Upon successful completion, students will be eligible to write the National Registry licensing examination. No student will be permitted to write the licensing exam prior to completion of the Associate in Applied Science degree.

Prior to admission to the Paramedicine program, students must submit a Paramedicine Intent Form. The deadline for the intent form is June 1 of each year. To be eligible to enroll in the core paramedicine courses, students must have successfully completed the EMT-B course, passed the state licensing exam, presented documentation of a minimum of six months of field experience as an EMT-B and be "in good standing" with required continuing education credits. Students must also complete HLTH 105 General Medical Terminology, BIOL 221 Anatomy and Physiology I, and BIOL 222 Anatomy and Physiology II, all with a grade of C or better, before being eligible to enroll in EMS 200- level courses.

General Education Core (20)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C or better* (3)
 COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B.

Area C: Mathematics (4 credits)

Placement into MATH 095 or completion of MATH 090 with a grade of C or better.

Area D: Physical and Life Sciences (8 credits)

BIOL 221 Anatomy and Physiology I - *with a grade of C or better* (4)
 BIOL 222 Anatomy and Physiology II - *with a grade of C or better* (4)

Area E: Social and Behavioral Sciences (3 credits)

PSYCH 101 Introduction to Psychology (3)

II. Area of Concentration/Program Requirements (42)

EMS 101	Emergency Medical Technician (7)
HLTH 105	General Medical Terminology - <i>with a grade of C or better</i> (1)
EMS 200	Paramedicine I (12)
EMS 205	Paramedicine: Field Practicum I (2)
EMS 210	Paramedicine: Hospital Practicum (2)
EMS 215	Paramedicine: Seminar I (1)
EMS 220	Paramedicine II (12)
EMS 225	Paramedicine: Field Practicum II (2)
EMS 230	Paramedicine: Leadership Practicum (2)
EMS 235	Paramedicine: Seminar II (1)

Program Total: 62 credits

Emergency Medical Technician Certificate

The EMT program provides students with the knowledge and skill needed to handle the critically ill and injured in a pre-hospital care environment. Areas covered include cardiac arrests, fractures, injuries, and childbirth. Students are prepared for the certification exam, which requires them to be at least 18 years of age. Students may obtain an information packet about prerequisite physical examination and immunizations from the Nursing Department at Prairie State College prior to the start of the course. Students must score a 78 or better on the reading portion of the COMPASS Placement Test to enroll in the course.

Program Requirements

EMS 101 Emergency Medical Technician (7)

Program Total: 7 credits

Firefighter/EMT

(See *Fire Science Technology*)

First Responder

Certificate

This program trains citizens, fire fighters, police officers, and others to respond to emergency situations in the home, community, or workplace.

Program Requirements

FRESP 101 First Responder (3)

Program Total: 3 credits

Fire Science

Fire Science Technology (A.A.S.)
 Fire Science Technology
 Firefighter II
 Firefighter/EMT

Fire Science Technology

A.A.S. Degree

This curriculum prepares the student for employment as a volunteer, paid-on-call part-time, or full-time municipal firefighter.

I. General Education Core (19)

Area A: Communication (6 credits)

ENG 101 Composition I - with a grade of C or better (3)
 COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B

Area C: Mathematics (3 credits)

MATH 112 General Education Mathematics (3)

or

MATH 115 General Education Statistics (3)

Area D: Physical and Life Sciences (4 credits)

Select one course from:

BIOL 100 General Education Biology (4)
 BIOL 112 Organismal Biology (4)
 CHEM 105 Survey of General Chemistry (4)
 PHYS 111 Physical Science (4)
 PHYS 112 Earth Science (4)
 PHYSI 101 Conceptual Physics (4)

Area E: Social and Behavioral Sciences (3 credits)

PSYCH 101 Introduction to Psychology (3) *required*

Program Requirements

I. General Education Core (37)

BUS 127 Business Communications (3)
 FST 101 Introduction to Fire Science Technology (3)
 FST 102 Fire Prevention Principles I (3)
 FST 104 Fire Tactics and Strategy I (3)
 FST 105 Construction and Fire Systems (3)
 FST 106 Hazardous Materials Operations (3)
 FST 119 Firefighter II (7)
 FST 202 Vehicle and Machinery Operations (3)
 FST 204 Fire Tactics and Strategy II (3)
 FST 210 Fire Apparatus Engineer (3)
 FST 212 Fire Service - Instructor I (3)

III. Electives (6)

Select from EMS 101; FST 121, 201, 205, 207, 208, 209, 213, 218, 219;
 FRESP 101; PHOTO 171 (6)

Program Total: 62 credits

Fire Science Technology

Certificate

This curriculum prepares the student for employment as a volunteer, paid-on-call part-time or full-time firefighter.

Program Requirements

FST 101 Introduction to Fire Technology (3)
 FST 102 Fire Prevention Principles I (3)
 FST 104 Fire Tactics & Strategy I (3)
 FST 105 Construction & Fire Systems (3)
 FST 106 Hazardous Materials Operations (3)
 FST 207 Fire Department Management I (3)
 FST 208 Fire Department Management II (3)
 FST 210 Fire Apparatus Engineer (3)

Program Total: 24 credits

Firefighter II

Certificate

This program is designed for students seeking employment in fire service by preparing them for the State Firefighter II certification exam. Students receive training in areas that include fire behavior, safety, fire control, communication, hazardous materials, and fire prevention. Students demonstrate basic firefighter skills such as the use of ladders, hose, ropes, and breathing apparatus in a supervised setting.

Students must complete FST 101 Introduction to Fire Science Technology with a grade of C or better, or document current affiliation with a fire department prior to admission to this program.

Program Requirements

FST 119 Firefighter II (7)

Program Total: 7 credits

Firefighter/EMT

Certificate

The Firefighter/EMT certificate will provide the beginning student in the emergency response occupations with fundamental skills in basic fire fighting techniques and emergency medical care. Both areas have independent certification exams that must be successfully completed to obtain employment in the field.

Program Requirements

EMS 101 Emergency Medical Technician (7)
 FST 119 Firefighter II (7)

Program Total: 14 credits

Fitness

Fitness and Exercise (A.A.S.)

Group Fitness Instructor

Personal Trainer

Fitness and Exercise

A.A.S. Degree

Fitness and exercise students will be taught the skills to pursue professions in fitness/exercise. Students will acquire an academic foundation in the fundamentals, principles of exercise and nutrition, as well as an understanding of human anatomy and physiology. Skills will focus on the development of expertise in fitness assessment, creative health and fitness programming, biomechanically sound exercise techniques, training methodology, lifestyle change prescription, personalized exercise leadership, and business practices. Courses in English, math, communication, exercise physiology, special populations, and administration of an exercise facility will prepare the student to be a qualified fitness professional.

I. General Education Core (16)

Area A: Communication (6 credits)

ENG 101 Composition I - with a grade of C or better (3)

COMM 101 Principles of Communication (3)

Area B: Humanities (3 credits)

Select one course from Area B on pages. (3)

Area C: Mathematics (demonstrated competence required)

Placement into MATH 095 or completion of MATH 090 - with a grade of C or better

Area D: Physical and Life Sciences (4 credits)

BIOL 111 Cellular and Molecular Biology (4) *required*

Area E: Social and Behavioral Sciences (3 credits)

PSYCH 101 Introduction to Psychology (3) *required*

II. Program Requirements (47)

BIOL 108 Essentials of Anatomy and Physiology (4)*

Note: Completion of BIOL 221 and 222, Anatomy and Physiology I and II with a grade of C or better will be accepted in place of BIOL 108.

BUS 101 Introduction to Modern Business (3)

FRESP 101 First Responder (3)

HLTH 101 Health and Wellness (2)

PES 210 Lifestyle Fitness Coaching (2)

PES 215 Group Fitness Instructor Training (3)

PES 220 Fitness Assessment/Program Design (3)

PES 225 Weight Training: Theory and Application (2)

PES 230 Nutrition for Sports and Exercise (3)

PES 235 Athletic Training Techniques (3)

PES 250 Kinesiology (3)

PES 255 Special Populations (3)

PES 260 Fitness/Exercise Facility Management (3)

PES 265 Physiology of Exercise (3)

PES 298 Internship Seminar (1)

PES 299 Internship (3)

PSYCH 212 Theories of Personality (3)

III. Electives (2)

Select two credits from the following group exercise courses:

PE 105, 106, 107, 108 (1); PES 202 (2)

Program Total: 65 credits

Group Fitness Instructor

Certificate

Group Fitness Instructor prepares students to provide group instruction in fitness. Students acquire basic knowledge of anatomy and physiology and nutrition as it relates to weight management. They are trained in first aid, CPR, and AED, and learn to motivate students using a full range of instructional strategies.

Program Requirements

BIOL 108 Essentials of Anatomy & Physiology (4)

FRESP 101 First Responder (3)

PES 215 Group Fitness Instructor Training (3)

PES 230 Nutrition for Sports & Exercise (3)

Select one course from:

PE 105, 106, 107, or 108 Aerobics I-IV (1)

Program Total: 14 credits

Personal Trainer

Certificate

Personal Trainers will acquire an academic foundation in the fundamental principles of exercise and nutrition, and a basic understanding of human anatomy and physiology. Practical skill training will focus on the development of expertise in fitness assessment, creative health and fitness programming, biomechanically sound exercise techniques, training methodology, lifestyle change prescription, personalized exercise leadership, and business practices.

Program Requirements

BIOL 108 Essentials of Anatomy and Physiology (4)

BUS 101 Introduction to Modern Business (3)

FRESP 101 First Responder (3)

HLTH 101 Health and Wellness (2)

PES 210 Lifestyle Fitness Coaching (2)

PES 215 Group Fitness Instructor Training (3)

PES 220 Fitness Assessment/Program Design (3)

PES 225 Weight Training: Theory and Application (2)

PES 230 Nutrition for Sports and Exercise (3)

PES 235 Athletic Training Techniques (3)

PES 250 Kinesiology (3)

PES 298 Internship Seminar (1)

PES 299 Internship for Personal Trainers (3)

Program Total: 35 credits

Graphic Communications

Graphic Communications (A.A.S.)

Digital Design

E-Business

Web Designer

Graphic Communications

A.A.S. Degree

This visual communication program prepares students for entry-level positions as digital designers and illustrators in the graphics publishing and multimedia industry. Students may choose to emphasize digital design, illustration, or interactive design.

I. General Education Core (15-16)

Area A: Communication (6 credits)

ENG 101 Composition I - with a grade of C or better. (3)

COMM 101 Principles of Communication

Area B: Humanities and Fine Arts (3 credits)

ART 131 Survey of Non-Western Art (3) *recommended*

or select one course from Area B (3)

Area C: Mathematics (demonstrated competence required)

Placement into MATH 095 or completion of MATH 090 - with a grade of C or better

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Science (3 credits)

Select one course from Area E (3)

II. Program Requirements (36)

ART 101 Two Dimensional Design (3)

ART 102 Three Dimensional Design (3)

ART 104 Drawing I (3)

ART 106 Drawing II (3)

ART 115 Introduction to Computer Art (3)

ART 121 History of Western Art I (3)

ART 122 History of Western Art II (3)

GC 151 Principles of Graphic Design (3)

GC 299 Internship/Seminar (3)

or

ART 295 Portfolio Seminar (3)

Select one option for specialization from the list below: (9)

Option A:

Digital Design (9 hrs)

GC 160 Design for Publishing (3)

GC 287 Professional Design (3)

ART 205 Printmaking (3)

Option B:

Illustration (9 hrs)

GC 171 Illustration I (3)

ART 162 Life Drawing (3)

ART 201 Painting I (3)

Option C:

Web Designer Specialization (12 hrs)

GC 162 Introduction to Web Site Development (3)

GC 262 Flash/Interface Design (3)

ITWEB 101 Web Page Authoring (3)

ITWEB 105 Multimedia Writing (3)

III. Electives(9)

Select 9 credits from ART, GC, and/or PHOTO courses.

Recommended electives for the Web Designer option include:

GC 175 Animation Techniques (2)

GC 182 Digital Video (2)

GC 185 Digital Sound (2)

Program Total: 60 credits

Digital Design

Certificate

This program provides a foundation in design and computer art and experience with specialized software and techniques required to work in the field of digital design. Students are prepared for entry-level or freelance work in electronic and print media.

Program Requirements

ART 115 Introduction to Computer Art (3)

ART 205 Printmaking (3)

GC 151 Principles of Graphic Design (3)

GC 160 Design for Publishing (3)

GC 287 Professional Design (3)

Program Total: 15 credits

E-Business

(See Information Technology)

Web Designer

Certificate

This program develops Web design skills with an emphasis on graphic design and digital media, including animation.

Program Requirements

ART 115 Introduction to Computer Art (3)

GC 151 Principles of Graphic Design (3)

GC 162 Introduction to Web Site Development (3)
(same as ITWEB 103)

GC 262 Flash/Interface Design (3) (same as ITWEB 203)

ITWEB 101 Web Page Authoring (3)

ITWEB 105 Multimedia Writing (3)

Program Total: 18 credits

Health Professions

Dental Hygiene (A.A.S.)
 Nursing (A.A.S.)
 Advanced Bedside Care Provider
 CNA/Nurse Assistant
 R.N. First Surgical Assistant
 Surgical Technology

Dental Hygiene

A.A.S. Degree

This program prepares students for careers in dental hygiene. It combines courses in general education, basic science, dental science and clinical science with learning experiences in the Dental Hygiene Clinic. Graduates of this program are eligible to sit for the state and regional licensing examinations. Courses must be completed in sequence. Those who desire part-time college enrollment may enroll only in the general education courses prior to applying for entry into the Dental Hygiene program.

Please note: This program begins during summer sessions only and has special admissions requirements. Contact Enrollment Services to obtain a copy of the Dental Hygiene Information Booklet.

I. General Education Core (19)

Area A: Communication (6 credits)

ENG 101 Composition I - with a grade of C or better (3)
 COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (demonstrated competence required)

Placement into MATH 095 or completion of MATH 090 - with a grade of C or better

Area D: Physical and Life Sciences (4 credits)

CHEM 105 Survey of General Chemistry (4)

Area E: Social and Behavioral Sciences (6 credits)

PSYCH 101 Introduction to Psychology (3)
 SOCIO 101 Introduction to Sociology (3)

II. Area of Concentration/Program Requirements (64)

BIOL 211 Microbiology (4)
 BIOL 221 Human Anatomy and Physiology I (4)
 BIOL 222 Human Anatomy and Physiology II (4)
 DH 101 Histology (2)
 DH 103 Head & Neck Anatomy and Tooth Morphology (5)
 DH 104 Dental Radiology (4)
 DH 105 Nutrition (2)
 DH 106 General and Oral Pathology (2)
 DH 107 Fundamentals of Dental Hygiene (2)
 DH 108 Clinical Dental Hygiene I (4)
 DH 109 Clinical Dental Hygiene II (4)
 DH 116 Periodontology (2)
 DH 120 Care of Special Populations (2)
 DH 201 Clinical Dental Hygiene III (3)
 DH 202 Clinical Dental Hygiene IV (5)
 DH 203 Clinical Dental Hygiene V (5)
 DH 204 Ethics, Law and Administration (2)
 DH 205 Pharmacology (2)
 DH 207 The Science and Application of Dental Material (4)
 DH 220 Community Dental Health (2)

Program Total: 83 credits

Nursing

A.A.S. Degree

This program prepares students for careers in nursing. The program combines courses in general and nursing education with selected learning experiences in hospitals and health agencies. Students will be required to perform at a predetermined satisfactory level on a nationally normed comprehensive exit exam at the conclusion of the program. Graduates of the Associate in Applied Science degree program may apply to take the NCLEX-RN examination for licensure as a registered nurse.

Please note: This program has special admissions requirements! Contact Enrollment Services to obtain a copy of the Nursing Information Booklet. (starts fall only)

Prior to admission to the Nursing program, students must complete NURS 100 Nurse Assistant Training (7) with a grade of C or better or demonstrate current status on the Illinois Certified Nurse Assistant (CNA) Registry. Credit earned for NURS 100 is not included in the 66 credit hours required for the Nursing A.A.S. degree.

Students also must complete BIOL 221 Human Anatomy and Physiology I (4) with a grade of C or better prior to admission to the Nursing program. Credit earned for BIOL 221 is included in the 66 credit hours required. Students are encouraged to complete as many general education courses as possible before enrolling in the Nursing Core Courses listed below in Section II.

LPN Bridge Program

LPNs who are seeking the A.A.S. in Nursing degree should consult with the Nursing Advisor in the Admissions Office for information on bridging options.

I. General Education Core (22)

Area A: Communication (9 credits)

ENG 101 Composition I - with a grade of C or better (3)
 ENG 102 Composition II (3)
 COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B. (3)

Area C: Mathematics (demonstrated competence required)

Placement into MATH 095 or completion of MATH 090 - with a grade of C or better

Area D: Physical and Life Sciences (4 credits)

BIOL 221 Human Anatomy and Physiology I (4)

Area E: Social and Behavioral Sciences (6 credits)

PSYCH 101 Introduction to Psychology (3)
 PSYCH 102 Human Growth & Development: Life-Span (3)

II. Area of Concentration/Program Requirements (46)

BIOL 211 Microbiology (4)
 BIOL 222 Human Anatomy and Physiology II (4)
 NURS 101 Basic Care Needs (6)
 NURS 102 Acute Care Needs (7)
 NURS 111 Nursing as a Profession (1)
 NURS 201 Family Care Needs (11)
 NURS 202 Advanced Care Needs (11)
 NURS 211 Preparation for Professional Nursing (2)

Program Total: 68 credits

Advanced Bedside Care Provider

Certificate

This certificate program will provide students with theoretical background and psychomotor skills needed to provide basic bedside care. CNA competencies are enhanced by instruction in communication strategies and human behavior. This will prepare the bedside care provider to improve his/her ability to interact with clients, families and other members of the health care team.

Note: Students must be actively listed in the State of Illinois CNA Registry in order to complete this certificate. Students currently listed in the State of Illinois CNA Registry may qualify for proficiency credit for NURS 100. Contact the Dean of Health Professions for information.

Program Requirements

COMM 101 Principles of Communication (3)
NURS 100 Nurse Assistant Training (7)
PSYCH 101 Introduction to Psychology (3)

Program Total: 13 credits

CNA/Nurse Assistant

Certificate

The Nursing Assistant Training Program has been designed to provide students with the theory and skills necessary to give basic patient care in a nursing home or hospital. The course includes instruction in basic bedside skills such as bed baths, moving and lifting, enemas, and other techniques. Students will receive practice in a lab setting and in a nursing home. Successful completion of this program qualifies the student for the Illinois Basic Nursing Assistant Certificate and to take the state approved Competency Examination.

Program Requirements

NURS 100 Nurse Assistant Training* (7)

Program Total: 7 credits

**Along with regular lectures, students will have clinicals in some local facilities such as long-term care facilities, where they will perform basic nursing care under the guidance of a registered nurse.*

R.N. First Surgical Assistant

Certificate

This program is designed for employed registered nurses with a minimum of two years current acute care setting operating room experience. It provides further training to enable nurses to competently assist the surgeon during surgical procedures requiring an assistant.

Note: Contact the Dean of Health Professions for additional enrollment requirements.

Program Requirements

RN 100 R.N. First Assistant (3)
RN 101 R.N. First Assistant Internship (3)

Program Total: 6 credits

Surgical Technology

Certificate

Please note: This program has special admissions requirements. Contact Enrollment Services to obtain a copy of the Surgical Technologist Application Procedures Booklet.

This program prepares students to work as surgical technologists in the operating room, labor and delivery, ambulatory surgical care centers, cardiac catheterization laboratories, physician's offices, or central supply units. Surgical technologists work under medical supervision to facilitate safe and effective performance of invasive surgical procedures aimed at optimizing patient safety. This program meets nationally established standards for Surgical Technology. It has been approved by the Commission on Accreditation of Allied Health Programs (CAAHEP). Graduates may sit for the Surgical Technologist national certification exam administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

This program begins only in the fall semester and takes one year to complete. It is essentially a 40-hour per week day-time program which includes both classes and clinical labs. Clinicals will be held in hospital operating rooms with students working with a preceptor. Students must have their own transportation to travel to a hospital site within a 45-mile radius. Upon completion of the program, students will take the certification examination administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA) to become a Certified Surgical Technologist (CST).

Program Requirements

(All courses must be completed with a C grade or better)

BIOL 115 Microbiology for Surgical Technologists (4)
HLTH 102 Workplace Issues for Allied Health (1)
SRT 102 Patient Care I (2)
SRT 103 Patient Care II (1)
SRT 110 Introduction to Surgical Technology (7)
SRT 120 Surgical Procedures I (5)
SRT 122 Applied Surgical Procedures I (1)
SRT 130 Surgical Procedures II (6)
SRT 132 Applied Surgical Procedures II (2)
SRT 140 Surgical Procedures III (6)
SRT 142 Applied Surgical Procedures III (2)
SRT 298 Surgical Technology Seminar (4)
SRT 299 Applied Surgical Procedures IV (2)

Program Total: 43 credits

Industrial Technology

CNC Programmer/Operator
Heating, Ventilation, Air Conditioning and Refrigeration
Hydraulics
Industrial Electrician (A.A.S.)
Industrial Electrician
Industrial Maintenance Technician
Machinist
Manufacturing Technology (A.A.S.)
Manufacturing Technology
Millwright
Tool & Die Making (A.A.S.)
Tool & Die Making
Welder Technician
Welding Specialist

CNC Programmer/Operator

Certificate

This program is designed to prepare people to be CNC Programmers/Operators. The curriculum emphasizes programming and operation of both milling and turning CNC equipment. Additionally, the student will receive instruction in these important related areas: machine tool operation and applications, mathematics, and drafting/CAD.

Program Requirements

CADMD 243 Introduction to AutoCAD (3)
MT 101 Metal Working Processes I (3)
MT 102 Metal Working Processes II (3)
MT 210 CNC Programming I (3)
MT 211 CNC Programming II (3)
MT 214 CAD/CAM Systems (3)
TECH 109 Technical Mathematics I (4)
MATH 151 College Algebra (4)
Electives: Select from CADMD 244, 245; MT 212, 215 (6)

Program Total: 32 credits

Heating, Ventilation, Air-Conditioning and Refrigeration

Certificate

This program prepares heating and cooling technicians to work on systems that control the temperature, humidity, and air quality of enclosed environments. Students learn to assemble, install, maintain and service climate control equipment. Typical entry-level positions include service technicians, new installation technicians, and sales positions.

Program Requirements

AMATH 100 Basic Math for the Skilled Trades (2)
HVACR 101 Fundamentals of Refrigeration (2)
HVACR 102 Advanced Refrigeration (2)
HVACR 103 Air Conditioning (2)
HVACR 104 Advanced Air Conditioning (2)
HVACR 105 Heating System Applications (2)
HVACR 107 Electrical Control Applications (2)
HVACR 108 Advanced Controls (2)
HVACR 109 Installation & Service of HVACR Systems (2)
HVACR 110 Troubleshooting HVACR Systems (2)
HVACR 112 Sheet Metal Layout and Fabrication (2)
Electives: Select from WELD 101; HVACR 114; or courses chosen with coordinator's consent. (4)

Program Total: 26 credits

Hydraulics

Certificate

This program is designed for students who are working on machines in industry that have fluid control devices.

Program Requirements

AMATH 100 Basic Math for the Skilled Trades (2)
AMATH 101 Algebra for the Skilled Trades (2)
AMATH 103 Geometry for the Skilled Trades (2)
AMATH 106 Applied Trigonometry for the Skilled Trades (2)
AMATH 107 Trigonometry & Shop Applications I (2)
APHYS 100 Applied Physics (2)
DRAFT 101 Drafting Essentials (2)
DRAFT 102 Drafting Conventions and Symbols (2)
ELECT 100 Electric Wiring I (2)
ELECT 101 Fundamentals of Electricity I (2)
HYDR 101 Fundamental of Hydraulics (2)
HYDR 102 Hydraulic Pumps (2)
HYDR 103 Hydraulic Controls (2)
HYDR 104 Basic Hydraulic Circuits (2)
HYDR 106 Pneumatics (2)
MILL 101 Industrial Maintenance Techniques I (2)
PLUMB 101 Fundamentals of Plumbing (2)

Program Total: 34 credits

Industrial Electrician

A.A.S. Degree

The industrial electrician degree program prepares students for work as electricians in industry. To meet the demands of changing technology, training encompasses electronics as well as electrician skills. Students pursuing the A.A.S. degree on a full-time schedule will be prepared for entry-level positions as industrial electricians. This training has been approved by the United States Bureau of Apprenticeship Training.

I. General Education Core (17-18)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C or better.* (3)
COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (2)

AMATH 101 Algebra for the Skilled Trades (2)

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Science (3 credits)

Select one course from Area E (3)

II. Program Requirements (37)

ELECT 100 Electric Wiring I (2)
ELECT 101 Fundamentals of Electricity I (2)
ELECT 102 Fundamentals of Electricity II (2)
ELECT 103 Alternating Current (2)
ELECT 105 Power, Transformers, Polyphase Circuits (2)
ELECT 106 DC Motors and Generators (2)
ELECT 107 AC Motors and Generators (2)
ELECT 108 Electrical Control for Machines I (2)
ELECT 109 Electric Control for Machines II (2)
ELECT 111 Electronic Principles I (2)
ELECT 112 Electronic Principles II (2)
ELECT 113 Blueprint Reading for Electricians (2)
ELECT 114 National Electrical Code (2)
ELECT 120 Electrical Safety (2)
ELECT 203 Industrial Electronics I (2)
ELECT 204 Industrial Electronics II (2)
ELECT 208 Programmable Logic Controllers I (2)
ELECT 209 Programmable Logic Controllers II (2)
ELECT 298 Electrical Seminar (1)
ELECT 299 Electrical Internship (2)

III. Electives (10)

Select from ELECT 141, 150, 201, 202, 206, 207, 290; MATH 151; PHYSI 130 (10)

Program Total: 64-65 credits

Industrial Electrician

Certificate

Industrial Electricians are prepared to troubleshoot and maintain electrical devices used in a manufacturing industry; install electrical machines and wiring; and wire electrical panels.

Program Requirements

AMATH 101 Algebra for the Skilled Trades (2)
ELECT 100 Electric Wiring I (2)
ELECT 101 Fundamentals of Electricity I (2)
ELECT 102 Fundamentals of Electricity II (2)
ELECT 103 Alternating Current (2)
ELECT 106 DC Motors and Generators (2)
ELECT 107 AC Motors and Generators (2)
ELECT 108 Electrical Control for Machines I (2)
ELECT 109 Electric Control for Machines II (2)
ELECT 113 Blueprint Reading for Electricians (2)
ELECT 114 National Electrical Code (2)
ELECT 120 Electrical Safety (2)
ELECT 203 Industrial Electronics I (2)
ELECT 204 Industrial Electronics II (2)
ELECT 208 Programmable Logic Controllers I (2)

Select from ELECT 111, 112, 141, 201, 202, 206, 207, 209, 290; MATH 151; (9)

Program Total: 35 credits

Industrial Maintenance Electrician

Certificate

This program trains students for a company's individual workplace needs. Students complete a core program and then focus in one or several technical areas.

Program Requirements

AMATH 100 Basic Mathematics for the Skilled Trades (2)
AMATH 101 Algebra for the Skilled Trades (2)
ELECT 100 Electric Wiring I (2)
MILL 101 Industrial Maintenance Techniques I (2)
PLUMB 101 Fundamentals of Plumbing (2)
WELD 101 Principles of Flat Welding (2)

Select one drafting or blueprint reading course from the following:
DRAFT 101, 102, 115; ELECT 113; CADMD 141 (2-3)

Select one OSHA mandated safety elective from ELECT 120 or MT 120 (2)

Select technical courses from the following areas: (18)

(Applied Math) AMATH 103, 106, 107, 108, 110

(Applied Physics) APHYS 100

(Business) BUS 109, 242

(Drafting) DRAFT 101, 102, 105; CADMD 141

(Heating/Ventilation/Air Conditioning) HVACR 101, 102, 104, 105, 107, 108, 109

(Hydraulics) HYDR 101, 103, 106

(Industrial Electricity) ELECT 101, 102, 103, 105, 106, 107, 109, 110, 111, 112, 113, 114, 120, 150, 201, 202, 203, 204, 206, 207, 208, 209, 298, 299

(Information Technology) ITAPP 101

(Manufacturing Technology) MT 101, 102, 120, 220, 221

(Millwright) MILL 102, 103, 105, 106, 107, 108

(Plumbing/Pipefitting) PLUMB 102, 103, 104

(Welding) WELD 102, 103, 104, 105, 106, 201, 202

Program Total: 34-35 credits

Machinist

Certificate

This program prepares students to enter machinist craft fields. Machinist training teaches students to custom build metal devices in both a job shop or a manufacturing establishment.

Program Requirements

AMATH 100	Basic Math for the Skilled Trades (2)
AMATH 101	Algebra for the Skilled Trades (2)
AMATH 103	Geometry for the Skilled Trades (2)
DRAFT 115	Blueprint Reading for Mechanical Trades (2)
CADMD 141	Technical Drafting I (3)
CADMD 243	Introduction to AutoCAD (3)
MT 101	Metal Working Processes I (3)
MT 102	Metal Working Processes II (3)
MT 105	Metal Working Processes III (3)
MT 210	CNC Programming I (3)
MT 211	CNC Programming II (3)
MT 220	Metallurgy - Ferrous (2)

Program Total: 31 credits

Manufacturing Technology

A.A.S. Degree

This program prepares personnel for a wide range of manufacturing related occupations. These include machine operator, machinist, CNC operator, CNC programmer, and robotics programmer. Coursework includes basic machine shop operations and processes, CNC machine operation and programming, CAD/CAM fundamentals, robotics and automated manufacturing applications. This program prepares technicians to operate, program, design and install manufacturing, assembly and materials handling equipment. Students who wish to pursue a bachelor's degree in this program should consult an enrollment advisor regarding transfer information.

I. General Education Core (20)

Area A: Communication (6 credits)

ENG 101	Composition I - with a grade of C or better (3)
COMM 101	Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from the list for Area B (3)

Area C: Mathematics (4 credits)

TECH 109	Technical Mathematics I (4) <i>required</i>
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Area D: Physical and Life Sciences (4 credits)

PHYSI 120	College Physics I (4) <i>required</i>
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Area E: Social and Behavioral Sciences (3 credits)

Select one course from the list for Area E (3)

II. Area of Concentration/Program Requirements (39)

CADMD 141	Technical Drafting I (3)
CADMD 243	Introduction to Auto-CAD (3)
MT 101	Metal Working Processes I (3)
MT 102	Metal Working Processes II (3)
MT 105	Metal Working Processes III (3)
MT 210	CNC Programming I (3)
MT 211	CNC Programming II (3)
MT 212	Introduction to Robotics (3)
MT 214	CAD/CAM Systems (3)
MT 215	Manufacturing Systems (4)
MATH 151	College Algebra (4)
PHYSI 130	College Physics II (4)

III. Electives (2)

Select from CADMD 244; HYDR 101; WELD 101 (2)

Program Total: 61 credits

Manufacturing Technology

Certificate

This certificate program is designed for individuals who do not seek the associate degree, yet still want the technical skills and knowledge necessary for successful employment in the field of manufacturing. The curriculum provides instruction for such occupations as machine operator, machinist, and CNC operator.

Program Requirements

CADMD 141	Technical Drafting I (3)
MT 101	Metal Working Processes I (3)
MT 102	Metal Working Processes II (3)
MT 210	CNC Programming I (3)
MT 212	Introduction to Robotics (3)
TECH 109	Technical Mathematics (4)

Select from CADMD 243, 244; CET 103; ELECT 103; HYDR 101; MT 211, 214, 215, 220; WELD 101 (12)

Program Total: 31 credits

Millwright

Certificate

This program trains students to move and install various metalworking machines according to a firm's management requests. Millwrights are high-skilled workers trained to dismantle, operate, repair, or lubricate industrial machinery. They are skilled in the use of basic tools and machinery and can read blueprints and schematic designs.

Program Requirements

AMATH 100	Basic Mathematics for the Skilled Trades (2)
AMATH 101	Algebra for the Skilled Trades (2)
DRAFT 101	Drafting Essentials (2)
DRAFT 102	Drafting Conventions & Symbols (2)
DRAFT 115	Blueprint Reading for the Mechanical Trades (2)
HYDR 101	Fundamentals of Hydraulics (2)
HYDR 106	Pneumatics (2)
MILL 101	Industrial Maintenance Techniques I (2)
MILL 102	Industrial Maintenance Techniques II (2)
MILL 103	Lubrication (2)
MILL 105	Rigging (2)
MILL 106	Power Train Elements (2)
MILL 107	Machine Vibration Analysis I (2)
WELD 101	Principles of Flat Welding (2)
WELD 102	Horizontal Welding and Brazing (2)

Select from MILL 108; PLUMB 101 (2)

Program Total: 32 credits

Tool and Die Making

A.A.S. Degree

The Tool and Die Making curriculum meets the standards of the United States Bureau of Apprenticeship which requires a minimum of 144 contact hours of related classroom instruction per year for an apprenticeship. The program is coordinated with area firms.

I. General Education Core (19-20)

Area A: Communication (6 credits)

ENG 101	Composition I - with a grade of C or better (3)
COMM 101	Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (4)

AMATH 100	Basic Math for the Skilled Trades (2)
AMATH 101	Algebra for the Skilled Trades (2)

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Program Requirements (41)

AMATH 103	Geometry for the Skilled Trades (2)
AMATH 106	Applied Trigonometry for the Skilled Trades (2)
AMATH 107	Trigonometry & Shop Applications for the Skilled Trades (2)
AMATH 108	Compound Angles for the Skilled Trades (2)
AMATH 110	Gearing & Cams for the Skilled Trades (2)
CADMD 141	Technical Drafting I (3)
CADMD 243	Introduction to Auto-CAD (3)
DRAFT 105	Design Applications for Mechanical Trades (2)
HYDR 101	Fundamentals of Hydraulics (2)
HYDR 106	Pneumatics (2)
MILL 101	Industrial Maintenance Techniques I (2)
MT 101	Metal Working Processes I (3)
MT 102	Metal Working Processes II (3)
MT 105	Metal Working Processes III (3)
MT 220	Metallurgy - Ferrous (2)
TOOL 101	Tool and Die Processes (2)
TOOL 102	Tool and Die Maintenance (2)
WELD 101	Principles of Flat Welding (2)

Program Total: 60-61 credits

Tool and Die Making

Certificate

This curriculum prepares students to reconstruct and rebuild dies, maintain old dies, replace punches and redress, make adjustments on draw dies, redress and keep equipment to quality performance while in production.

Program Requirements

AMATH 100	Basic Math for the Skilled Trades (2)
AMATH 101	Algebra for the Skilled Trades (2)
AMATH 103	Geometry for the Skilled Trades (2)
AMATH 106	Applied Trigonometry for the Skilled Trades (2)
AMATH 107	Trigonometry and Shop Applications for the Skilled Trades (2)
CADMD 141	Technical Drafting I (3)
CADMD 243	Introduction to Auto-CAD (3)
DRAFT 105	Design Applications for Mechanical Trades (2)
HYDR 101	Fundamentals of Hydraulics (2)
HYDR 106	Pneumatics (2)
TOOL 101	Tool and Die Processes (2)
TOOL 102	Tool and Die Maintenance (2)
MT 101	Metal Working Processes I (3)
MT 102	Metal Working Processes II (3)
MT 105	Metal Working Processes III (3)
MT 220	Metallurgy - Ferrous (2)

Program Total: 37 credits

Welder Technician

Certificate

The curriculum prepares students to perform various welding jobs for maintenance manufacturing machines. The training also prepares students to custom build devices by working from machine drawings and specifications.

Program Requirements

AMATH 100	Basic Mathematics for the Skilled Trades (2)
AMATH 101	Algebra for the Skilled Trades (2)
AMATH 103	Geometry for the Skilled Trades (2)
AMATH 106	Applied Trigonometry for the Skilled Trades (2)
DRAFT 101	Drafting Essentials (2)
DRAFT 102	Drafting Conventions & Symbols (2)
DRAFT 103	Three Dimensional Shapes (2)
MT 220	Metallurgy - Ferrous (2)
WELD 101	Principles of Flat Welding (2)
WELD 102	Horizontal Welding and Brazing (2)
WELD 103	Metal Inert and Vertical Welding (2)
WELD 104	Tungsten Inert and Overhead Welding (2)
WELD 105	A.W.S. Structural Certification (2)

Select 8 credits from the following courses: APHYS 100; HYDR 101; MT 101, 221; PLUMB 103; WELD 106, 201, 202 (8)

Program Total: 34 credits

Welding Specialist

Certificate

This certificate program is designed to concentrate on welding skills utilizing processes that are most widely employed in business and industry. The welding proficiency and knowledge gained in this program supplement most skilled construction trades.

Program Requirements

AMATH 100	Basic Mathematics for the Skilled Trades (2)
DRAFT 101	Drafting Essentials (2)
WELD 101	Principles of Flat Welding (2)
WELD 102	Horizontal Welding and Brazing (2)
WELD 103	Metal Inert and Vertical Welding (2)
WELD 104	Tungsten Inert and Overhead Welding (2)
WELD 105	A.W.S. Structural Certification (2)
WELD 106	Pipe and Pressure Vessel Certification (2)
WELD 201	Advanced Gas Metal Arc Welding (2)
WELD 202	Advanced Gas Tungsten Arc Welding (2)

Program Total: 20 credits

Information Technology

Computer Electronics Technology (A.A.S.)
 Computer Electronics Technician
 Information Technology (A.A.S.)
 Administrative Assistant Option
 Networking Option
 Programming Option
 Software Application Option
 Webmaster Option
 Computer Repair Specialist
 Desktop Publishing
 Digital Mass Communication
 E-Business
 Game Design and Development
 Network Security Specialist
 Networking Specialist
 Office Assistant
 Programming
 Software Specialist
 Software Technician
 Software User
 Web Developer
 Web Designer
 Webmaster

Information Technology

A.A.S. Degree

This program prepares students for the rapidly changing world of computers, computer applications and the office environment. After completing introductory courses, students may choose one of the following options: administrative assistant, networking, programming, software applications, or Webmaster. Career opportunities vary according to the option selected.

Information Technology: Administrative Assistant Option

I. General Education Core (18-19)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C or better* (3)
 COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (3 credits)

BUS 103 Business Mathematics (3) or

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Program Requirements (46)

Core Courses:

BUS 101 Introduction to Modern Business (3)
 ITAPP 101 Introduction to Computers (3)
 BUS 107 Bookkeeping and Procedural Accounting (3)
 ITOFS 299 Internship (2)

Administrative Assistant Concentration Courses:

ITAPP 109 Introduction to the Internet (1)
 ITAPP 121 Word Processing Applications - Level 1 (3)
 ITAPP 122 Word Processing Applications - Level 2(3)
 ITAPP 125 Spreadsheet Applications - Level 1 (2)
 ITAPP 128 Database Applications - Level 1 (2)
 ITAPP 132 Desktop Publishing (3)
 ITAPP 133 Presentation Applications (2)
 ITOFS 111 Business Document Formatting (2)
 ITOFS 112 Intermediate Keyboarding Applications (2)
 ITOFS 117 Keyboarding Skill Development (1)
 ITOFS 119 Office Procedures (3)
 ITOFS 122 Transcription Skills (3)
 ITOFS 219 Office Management (3)
 ITOFS 221 Advanced Keyboarding Applications (2)
 Select from the following: ITAPP 126, 232; ITOFS 100; ITPRG 103, 140, 142, 205 (3)

Program Total: 64 credits

Information Technology: Networking Option

I. General Education Core (18-19)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C or better* (3)
 COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (3 credits)

ITPRG 106 Mathematics for Computers (3)

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Program Requirements (46)

Core Courses:

BUS 101 Introduction to Modern Business (3)
 ITAPP 101 Introduction to Computers (3)
 BUS 107 Bookkeeping and Procedural Accounting (3)
 ITNET 299 Internship (2)

Networking Concentration Courses:

ITNET 160 Computer Repair (4)
 ITNET 165 Introduction to Networking (3)
 ITNET 250 Intro to LAN Administration (3)
 ITPRG 103 Intro to Programming (3)
 ITPRG 140 Intro to Operating Systems (3)
 ITPRG 142 Intro to Visual Basic Programming (3)
 ITPRG 201 Systems Design and Develop.(3)
 ITPRG 240 Intro to Linux Operating System (3)
 ITWEB 101 Web Page Authoring (3)
 Select from the following:
 ITAPP 133; ITNET 260, 270, 280; ITOFS 100; ITPRG 144, 147, 205, 242, 244, 247, 248 (7)

Program Total: 64 credits

Information Technology: Programming Option

I. General Education Core (18-19)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C of better* (3)

COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (3 credits)

ITPRG 106 Mathematics for Computers (3)

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Area of Concentration/Program Requirements (46)

Core Courses:

BUS 101 Introduction to Modern Business (3)

ITAPP 101 Introduction to Computers (3)

BUS 131 Financial Accounting (4)

ITPRG 299 Internship (2)

Programming Concentration Courses:

ITPRG 103 Introduction to Programming (3)

ITPRG 140 Introduction to Operating Systems (3)

ITPRG 142 Introduction to Visual Basic Programming (3)

ITPRG 144 Introduction to C++ Programming (3)

or

ITPRG 147 Introduction to JAVA Programming (3)

ITPRG 201 Systems Design and Development (3)

ITPRG 248 Introduction to COBOL Programming (3)

Select from the following:

ITAPP 133; ITOFS 100; ITPRG 144, 147, 154, 205, 242, 244, 247, 249;

ITWEB 101, 103, 201 (16)

Program Total: 64 credits

Information Technology: Software Applications Option

I. General Education Core (18-19)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C of better* (3)

COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (3 credits)

ITPRG 106 Mathematics for Computers (3)

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Program Requirements (46)

Core Courses:

BUS 101 Introduction to Modern Business (3)

ITAPP 101 Introduction to Computers (3)

BUS 107 Bookkeeping and Procedural Accounting (3)

ITOFS 299 Internship (2)

Software Applications Concentration Courses:

ITAPP 109 Introduction to the Internet (1)

ITAPP 121 Word Processing Applications - Level 1 (3)

ITAPP 122 Word Processing Applications - Level 2 (3)

ITAPP 125 Spreadsheet Applications - Level 1 (2)

ITAPP 126 Spreadsheet Applications - Level 2 (2)

ITAPP 128 Database Applications - Level 1 (2)

ITAPP 129 Database Applications - Level 2 (2)

ITAPP 132 Desktop Publishing (3)

ITAPP 133 Presentation Applications (2)

ITAPP 240 Application Development in Database (2)

ITOFS 100 Keyboarding (1)

ITPRG 103 Introduction to Programming (3)

ITPRG 140 Introduction to Operating Systems (3)

ITPRG 142 Introduction to Visual Basic Programming (3)

Select from the following:

BUS 201; ITAPP 130, 232; ITPRG 144, 205, 242 (3)

Program Total: 64 credits

Information Technology: Webmaster Option

I. General Education Core (18-19)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C of better* (3)

COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (3 credits)

ITPRG 106 Mathematics for Computers (3)

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Sciences (3 credits)

Select one course from Area E (3)

II. Program Requirements (46)

Core Courses:

BUS 101 Introduction to Modern Business (3)

ITAPP 101 Introduction to Computers (3)

BUS 131 Financial Accounting (4)

ITWEB 299 Internship (2)

Webmaster Concentration Courses:

BUS 261 Advertising (3)

COMM 111 Introduction to Mass Communication (3)

GC 115 Introduction to Computer Art (3) (*same as ART 115*)

ITPRG 140 Introduction to Operating Systems (3)

ITPRG 157 Javascript Programming (3)

ITPRG 205 Ethics in Information Technology (2)

ITWEB 101 Web Page Authoring (3)

ITWEB 103 Introduction to Web Site Development (3)

ITWEB 105 Multimedia Writing (3)

ITWEB 201 Technology of E-Commerce (3)

ITWEB 203 Flash/Interface Design (3) (*same as GC 262*)

ITWEB 225 Web Workshop: Advanced Topics (2)

Program Total: 64 credits

Computer Repair Specialist

Certificate

This program is for those individuals who want to work with computer hardware and software. This certificate provides students with skills needed as a first-level troubleshooting technician in a computer facility.

Program Requirements

ELECT 111 Electronic Principles I (2)
 ELECT 112 Electronic Principles II (2)
 ITNET 160 Computer Repair (4)
 ITPRG 140 Introduction to Operating Systems (3)
 Select from CET 114; ITNET 250; ITWEB 101 (5)

Program Total: 16 credits

Desktop Publishing

Certificate

This program prepares students to produce professional looking publications using desktop publishing software.

Program Requirements

ITAPP 101 Introduction to Computers (3)
 ITAPP 121 Word Processing Applications - Level I (3)
 ITAPP 132 Desktop Publishing (3)
 ITAPP 133 Presentation Applications (2)
 ITAPP 232 Advanced Desktop Publishing (3)
 ITOFS 100 Keyboarding (1)

Program Total: 15 credits

Digital Mass Communication

This program prepares students to develop digital media and web sites using computer-based technologies by writing text, designing graphics, creating animations, and incorporating sound for multimedia presentations.

Program Requirements

BUS 261 Advertising (3)
 COMM 111 Introduction to Mass Communication (3)
 GC 115 Introduction to Computer Art (3) (*same as ART 115*)
 ITWEB 103 Introduction to Web Site Development (3)
same as GC 162
 ITWEB 105 Multimedia Writing (3)
 ITWEB 203 Flash/Interface Design (3) (*same as GC 262*)

Program Total: 18 credits

E-Business

Certificate

This certificate program includes the experiences necessary to create and maintain a successful E-business site. Topics include business, marketing, legal issues, programming, online monetary security issues, and graphic design considerations.

Program Requirements

BUS 101 Introduction to Modern Business (3)
 BUS 287 E-Business (3)
 GC 162 Introduction to Web Site Development (3)
 ITPRG 142 Introduction to Visual Basic Programming (3)
 ITWEB 201 Technology of E-Commerce (3)

Program Total: 15 credits

Game Design and Development

Certificate

Games Design and Development is a rapidly growing field that produces a wide variety of jobs. The program offers students the ability to explore different facets of the industry, as well as other digital entertainment and educational areas. This program combines current technology skills with art, design, writing, and programming.

Program Requirements

ENG 101 Composition I (3)
 GC 115 or ART 115 Introduction to Computer Art (3)
 GC 175 Animation (3)
 ITPRG 103 Introduction to Programming (3)
 ITPRG 142 Introduction to Visual Basic Programming (3)
 ITPRG 144 Introduction to C++ Programming (3)
 ITPRG 171 Game Design I (3)
 ITPRG 173 Digital Storytelling (3)
 ITWEB 203 Flash/Interface Design (3)

Select one of the following courses :

ITPRG 140 Introduction to Operating Systems (3)
 ITPRG 147 Introduction to JAVA Programming (3)
 ITPRG 205 Ethics in Information Technology (3)
 ITWEB 205 Web Languages (3)

Program Total: 30 credits

Network Security Specialist

Certificate

This program covers the fundamentals of computer networking with an emphasis on network security, network defense, data integrity, and computer forensics. It prepares students for jobs in network administration, network security, and computer forensics. Students are prepared for a range of industry certifications.

Program Requirements

CJ 101	Introduction to Criminal Justice (3)
ITPRG 140	Introduction to Operating Systems (3)
ITPRG 240	Linux Operating System (3)
ITNET 160	Computer Repair (4)
ITNET 165	Introduction to Networking (3)
ITNET 250	Introduction to LAN Administration (3)
ITNET 260	Network Security Fundamentals (3)
ITNET 270	Computer Forensics (3)
ITNET 280	Ethical Hacking (3)

Program Total: 28 credits

Network Specialist

Certificate

This program provides a foundation in computer networking including network planning, installation, configuration, maintenance, and troubleshooting. It includes coverage of both Microsoft and Linux operating systems. Upon completion, student may seek various industry certification credentials such as CompTIA's A+, Network +, and/or Linux+.

Program Requirements

ITNET 160	Computer Repair (4)
ITNET 165	Introduction to Networking (3)
ITNET 250	Introduction to LAN Administration (3)
ITPRG 140	Introduction to Operating Systems (3)
ITPRG 240	Linux Operating System (3)

Program Total: 16 credits

Office Assistant

Certificate

This program prepares students to perform clerical duties for supervisors, including setting up and maintaining files, answering and placing telephone calls, compiling and maintaining reports and records, and performing office-related duties.

Program Requirements

ITAPP 121	Word Processing Applications - Level I (3)
ITAPP 125	Spreadsheet Applications - Level I (2)
ITAPP 133	Presentation Applications (2)
ITOFS 111	Business Document Formatting (2)
ITOFS 119	Office Procedures (3)
ITOFS 122	Transcription Skills (3)
ITOFS 199	Office Assistant Practicum (1)

Program Total: 16 credits

Programming

Certificate

This program is designed for working adults who need to update their skills and knowledge of programming languages. Object-oriented and event-driven languages, as well as traditional structured languages, are included in this curriculum. Some career opportunities include Visual Basic programmer, C++ programmer, JAVA programmer, object-oriented programmer, and user interface designer.

Program Requirements

ITPRG 103	Introduction to Programming (4)
ITPRG 142	Introduction to Visual Basic Programming (3)

Select from the following programming courses:
ITPRG 144, 147, 201, 242, 244, 247, 248, 249 (12)

Program Total: 19 credits

Software Specialist

Certificate

This program provides students with the information and skills needed to be marketable and productive in a microcomputer environment. Career opportunities include database programmer, BASIC programmer, spreadsheet specialist, technical support coordinator, office manager, and office productivity coordinator.

Program Requirements

BUS 107*	Bookkeeping and Procedural Accounting (3)
BUS 127	Business Communications (3)
ITAPP 101	Introduction to Computers (3)
ITAPP 109	Introduction to the Internet (1)
ITAPP 121	Word Processing Applications - Level I (3)
ITAPP 125	Spreadsheet Applications - Level 1 (2)
ITAPP 126	Spreadsheet Applications - Level 2 (2)
ITAPP 128	Database Applications - Level 1 (2)
ITAPP 129	Data Base Applications - Level 2 (2)
ITAPP 130	Software Integration and Applications (2)
ITAPP 240	Application Development in Database (2)
ITPRG 140	Introduction to Operating Systems (3)
ITPRG 142	Introduction to Visual Basic Programming (3)

* BUS 131 - Financial Accounting will be accepted in place of BUS 107

Program Total: 31 credits

Software Technician

Certificate

This program prepares students to be a software technician for a small or large company. As an employee, this technician could install, upgrade and maintain software programs and files, as well as diagnose and troubleshoot software-related problems. Career opportunities include computer troubleshooter, software maintenance technician and DOS/Windows Specialists.

Program Requirements

ITAPP 101 Introduction to Computers (3)
 ITAPP 109 Introduction to the Internet (1)
 ITPRG 140 Introduction to Operating Systems (3)

Electives:

Select from: ITNET 250; ITPRG 142, 144, 147 (3)

Select one additional IT course (2)

Program Total: 12 credits

Software User

Certificate

This program exposes students to a variety of application programs including spreadsheets, database and word processing software. Students will gain experience in operating systems (DOS and Windows), diagnostic tools and integration techniques. Some possible career opportunities include administrative assistant, secretary, office manager, and office productivity coordinator.

Program Requirements

ITAPP 101 Introduction to Computers (3)
 ITAPP 109 Introduction to the Internet (1)
 ITAPP 121 Word Processing Applications - Level I (3)
 ITAPP 125 Spreadsheet Applications - Level I (2)
 ITAPP 128 Database Applications - Level I (2)
 ITAPP 130 Software Integration and Application (2)
 ITPRG 140 Introduction to Operating Systems (3)

Program Total: 16 credits

Web Designer

Certificate

This program develops Web design skills with an emphasis on graphic design and digital media, including animation.

Program Requirements

ART 115 Introduction to Computer Art (3)
 GC 151 Principles of Graphic Design (3)
 GC 162 Introduction to Web Site Development (3)
(same as ITWEB 103)
 GC 262 Flash/Interface Design (3) *(same as ITWEB 203)*
 ITWEB 101 Web Page Authoring (3)
 ITWEB 105 Multimedia Writing (3)

Program Total: 18 credits

Web Developer

Certificate

This program is designed for students who wish to become Web developers or Web programmers. Students are offered hands-on experience in database, graphic design and Web programming using popular Web development software.

Program Requirements

ITAPP 128 Database Applications - Level I (2)
 ITPRG 140 Introduction to Operating Systems (3)
 ITPRG 157 Javascript Programming (3)
 ITWEB 101 Web Page Authoring (3)
 ITWEB 103 Introduction to Web Site Development (3)
 ITWEB 201 Technology of E-Commerce (3)
 ITWEB 225 Web Workshop: Advanced Topics (2)

Program Total: 19 credits

Webmaster

Certificate

The Webmaster program is designed for students who wish to become Webmasters in small- to medium-sized companies. Students are offered hands-on experience in networking, operating systems, and Web programming.

Program Requirements

ITNET 165 Introduction to Networking (3)
 ITNET 250 Introduction to LAN Administration (3)
 ITPRG 140 Introduction to Operating Systems (3)
 ITPRG 240 Linux Operating System (3)
 ITWEB 101 Web Page Authoring (3)
 ITWEB 103 Introduction to Web Site Development (3)
 ITWEB 201 Technology of E-Commerce (3)

Program Total: 21 credits

Music

Music Production
Music Technology

Music Production

A.A.S. Degree

This program is designed to give students the basic practical and theoretical skills necessary to function in a variety of positions within the music industry.

I. GENERAL EDUCATION CORE (19)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C or better* (3)
COMM 101 Principles of Communication (3)

Area B: Humanities (3 credits)

MUSIC 130 Music Appreciation (3)

or

MUSIC 132 American Music (3)

Area C: Mathematics (3 credits)

BUS 103 Business Mathematics (3)

Area D: Physical and Life Sciences (4 credits)

PHYSI 101 Conceptual Physics (4)

Area E: Social and Behavioral Sciences (3 credits)

One course from the IAI courses listed for Area E

II. Program Requirements (32)

CET 101 Fundamentals of Electricity (2)
ELECT 111 Electronic Principles I (2)
ELECT 112 Electronic Principles II (2)
ITPRG 140 Introduction to Operating Systems (3)
MUSIC 100 Fundamentals of Music Theory (3)
MUSIC 101 Musicianship I (4)
MUSIC 172 Music in Film and Television (3)
MUSIC 174 Computer-Assisted Music Production (4)
MUSIC 176 Sound Recording Techniques (3)
MUSIC 171 Digital Keyboard Techniques (2)

or

MUSIC 181 Private Lessons I (piano) and
MUSIC 182 Private Lessons II (2) (piano)
MUSIC 274 Digital Composition for Video (4)

III. Electives (9)

Select any additional courses. Recommended selections for special areas of emphasis include:

Music: MUSIC 102, 201, 202, 299

Multimedia: GC 115, 162, 185; ITNET 160, 165; ITPRG 171, 173; MUSIC 299

Marketing: BUS 101, 107, 251; GC 162; MUSIC 299

Program Total: 60 credits

Music Technology

Certificate

This program is designed to give students the basic practical and theoretical skills necessary to work as assistants and technicians in the music industry.

Program Requirements

CET 101 Fundamentals of Electricity (2)
ITPRG 140 Introduction to Operating Systems (3)
MUSIC 100 Fundamentals of Music Theory (3)
MUSIC 130 Music Appreciation (3)
or
MUSIC 132 American Music (3)
MUSIC 172 Music in Film and Television (3)
MUSIC 174 Computer-Assisted Music Production (4)
MUSIC 176 Sound Recording Techniques (3)
MUSIC 181 Private Lessons I (1) (piano)
MUSIC 274 Digital Composition for Video (4)
MUSIC 299 Music Production Internship (2)
PHYSI 101 Conceptual Physics (4)

Program Total: 32 credits

Photography

Photographic Studies (A.A.S.)

Photography

Portrait Photography

Photographic Studies

A.A.S. Degree

This program is designed to provide the student with practical experience in creative and vocational applications of photography. Each student is challenged to explore their ideas through commercial, social and aesthetic visual problems. Options are available for specialization in print or studio production.

I. General Education Core (15-16)

Area A: Communication (6 credits)

ENG 101 Composition I - *with a grade of C or better* (3)

COMM 101 Principles of Communication (3)

Area B: Humanities and Fine Arts (3 credits)

Select one course from Area B (3)

Area C: Mathematics (demonstrated competence required)

Placement into MATH 095 or completion of MATH 090 - *with a grade of C or better*

Area D: Physical and Life Sciences (3-4 credits)

Select one course from Area D (3-4)

Area E: Social and Behavioral Science (3 credits)

Select one course from Area E (3)

II. Program Requirements (47)

ART 101 Two Dimensional Design (3)

ART 126 History of Photography (3)

PHOTO 171 Introduction to Black & White Photography (3)

PHOTO 174 Digital Darkroom Techniques (2)

PHOTO 175 Basic Lighting Skills (2)

PHOTO 176 Electronic Flash Techniques (2)

PHOTO 180 Photoshop I (2)

PHOTO 196 Careers in Photography (1)

PHOTO 273 Photographic Methods (3)

PHOTO 275 Photographic Design (3)

PHOTO 285 Digital Color Production (3)

PHOTO 290 Advanced Color Photography (4)

PHOTO 291 Survey of Contemporary Photography (3)

Option: Select one area of specialization from the options listed below (13)

Option A:

Print Production

Select 13 credits from

PHOTO 280 Photoshop II (2)

PHOTO 281 Digital Applications (4)

PHOTO 282 Experimental Techniques (3)

PHOTO 286 Independent Photo Project (3)

PHOTO 292 Photo Workshop: Special Topics (4)

PHOTO 297 Professional Portfolio (3)

PHOTO 298 Seminar (1)

PHOTO 299 Internship (1-3)

Option B:

Studio Production

Select 13 credits from

PHOTO 276 Commercial Techniques (4)

PHOTO 283 Portraiture (3)

PHOTO 287 Independent Photo Studio (3)

PHOTO 292 Photo Workshop: Special Topics (4)

PHOTO 293 Advanced Portraiture (4)

PHOTO 297 Professional Portfolio (3)

PHOTO 298 Seminar (1)

PHOTO 299 Internship (1-3)

Program Total: 62-63 credits

Photography

Certificate

This program builds a technical and visual foundation using photographic techniques while encouraging students to become effective communicators with their cameras.

Program Requirements

ART 101 Two Dimensional Design (3)

PHOTO 171 Introduction to Black & White Photography (3)

PHOTO 174 Digital Darkroom Techniques (2)

PHOTO 175 Basic Lighting Skills (2)

PHOTO 176 Electronic Flash Techniques (2)

PHOTO 180 Photoshop I (2)

PHOTO 196 Careers in Photography (1)

PHOTO 273 Photographic Methods (3)

PHOTO 275 Photographic Design (3)

PHOTO 285 Digital Color Production (3)

PHOTO 290 Advanced Color Photography (4)

PHOTO 291 Survey of Contemporary Photography (3)

Program Total: 31 credits

Portrait Photography

Certificate

This program is designed to prepare students in specific photographic techniques of portrait photography. Participants gain substantial experience creating successful studio and location portraits while working in a professional studio/lab environment.

Program Requirements

PHOTO 171 Introduction to Black & White Photography (3)

PHOTO 174 Digital Darkroom Techniques (2)

PHOTO 175 Basic Lighting Skills (2)

PHOTO 176 Electronic Flash Techniques (2)

PHOTO 180 Photoshop I (2)

PHOTO 283 Portraiture (3)

PHOTO 285 Digital Color Production (3)

PHOTO 293 Advanced Portraiture (4)

PHOTO 297 Professional Portfolio (3)*

Program Total: 24 credits

Note: Students must take the first four courses in sequence, or enroll in two consecutively numbered courses in the same semester. Students must earn a grade of B or better in PHOTO 171 or a score of 80% or better on a proficiency exam with portfolio review.

** PHOTO 298 and 299 (3 credits total) will be accepted in place of PHOTO 297.*

CAREER Cooperative Program

Prairie State College is a partner in CAREER (Comprehensive Agreement Regarding the Expansion of Educational Resources) Cooperative with the community colleges listed below. If PSC does not offer a particular degree or certificate program, residents of PSC District 515 may apply for a Cooperative Agreement. Upon approval, residents can enroll at any of these colleges. If accepted into the desired program they will be charged the in-district tuition rate at these partner colleges.

Applications must be received at PSC 30 days prior to the beginning of the semester at the college the student will be attending. Developmental course work (courses below 100 level) and required prerequisites must be completed at PSC.

A 2.0 grade point average must be maintained at PSC before a cooperative agreement will be approved. Individual courses are not eligible for cooperative agreements nor are programs that are generally considered to be baccalaureate oriented. In addition, repeated courses are not covered under these agreements.

Courses taken which are not part of the approved program will not be honored for the cooperative agreement. That is, the entire out-of-district tuition for such courses must be borne by the student. Students who change to programs of study outside of these existing agreements will be billed at out-of-state tuition for all course work. Community colleges often have comparable programs. Cooperative agreements are granted at the discretion of PSC and will not be granted for comparable programs.

For more information about specific programs, contact the college where the program is offered. For more information about the CAREER application process, call the Counseling and Academic Advising Center at (708) 709-3506.

Community Colleges Part of a CAREER Cooperative Program

- Black Hawk College
- Carl Sandburg College
- Danville Area Community College
- Elgin Community College
- Heartland Community College
- Highland Community College
- Illinois Central College
- Illinois Valley Community College
- John Wood Community College
- Joliet Junior College
- Kankakee Community College
- Kaskaskia College
- Kishwaukee College
- Lake Land College
- Lewis and Clark Community College
- Lincoln Land Community College
- McHenry County College
- Morton College

- Moraine Valley Community College
- Prairie State College
- Richland Community College
- Rock Valley College
- Sauk Valley Community College
- South Suburban College
- Spoon River College
- Waubesa Community College

Tech Prep College Credit for High School Students

Just as Advanced Placement (AP) courses provide a way to earn college credit in subjects such as English, History, and the Sciences, Tech Prep is a national program that grants college credit in career and technical disciplines. Its purpose is to prepare any student to enter and succeed in a career as well as further his or her education beyond high school.

Depending on the courses offered at the particular high school and the articulation (dual-credit) agreements made with PSC, Tech Prep courses include (but are not limited to) the following subjects: Business, Child Development, Industrial Technology (Automotive Technology, Welding, and more), and Information Technology. If you are a high school student, contact your school's guidance office or career administrator for more information. High school career administrators work with the Career Preparation Network, the consortium that coordinates Tech Prep programs in PSC's District 515:

Career Preparation Network
 Tom Hysell, Director
 Prairie State College - ATOC
 202 South Halsted Street
 Chicago Heights, IL 60411
 phone (708) 709-7905
 fax (708) 709-7904
 e-mail: thysell@yahoo.com

Course Descriptions



Course	Abbreviation	Page	Course	Abbreviation	Page
Air Conditioning and Heating (see Heating, Ventilation, Air Conditioning and Refrigeration)			Information Technology – Office Skills	ITOFS	151
Anthropology	ANTHR	116	Information Technology – Programming	ITPRG	152
Applied Mathematics (see Mathematics)	AMATH		Information Technology – Web Development	ITWEB	154
Applied Physics (see Physics)	APHYS		Journalism	JRNLM	155
Art	ART	116	Manufacturing Technology	MT	155
Astronomy	ASTRO	118	Mathematics (Applied)	AMATH	156
Automotive Technology	AUTO	118	Mathematics (Developmental & College-Level)	MATH	157
Biological Science	BIOL	119	Meteorology	METEO	160
Business	BUS	121	Millwright (was APPMW)	MILL	160
CAD/Mechanical Design Technology	CADMD	123	Music	MUSIC	161
Chemistry	CHEM	124	Nursing	NURS	164
College Skills	COL	125	Philosophy	PHILO	165
Communication	COMM	125	Photographic Studies	PHOTO	166
Computer Electronics Technology	CET	126	Physical Education	PE	168
Criminal Justice Services	CJ	127	Physical Education: Exercise Science	PES	
Dental Hygiene	DH	128	Physical Science	PHYSC	169
Drafting	DRAFT	131	Physics (Applied Physics)	APHYS	171
Early Childhood Education	ECED	131	Physics	PHYSI	171
Economics	ECON	133	Plumber/Pipefitter/ Steamfitter (was APPPF)	PLUMB	172
Education	ED	133	Political Science	POLSC	172
Education – Paraprofessional	EDU	133	Psychology	PSYCH	173
Electrician (was APPIE)	ELECT	134	Reading	RDG	174
Emergency Medical Services	EMS	137	Registered Nursing	RN	174
English/Literature	ENG	139	Social Work	SWK	175
Fire Science Technology	FST	141	Sociology	SOCIO	175
First Responder (see Emergency Medical Services)	FRESP		Spanish	SPAN	175
Geography	GEOG	143	Surgical Technology	SRT	176
Geology	GEOLO	143	Technology of Mathematics and Science	TECH	177
Graphic Communications	GC	143	Theatre	THTRE	177
Health	HLTH	145	Tool and Die Making (was APPTD)	TOOL	177
Heating, Ventilation, Air Conditioning & Refrigeration	HVACR	145	Welding (was APPW)	WELD	178
History	HIST	146			
Humanities	HUMAN	147			
Hydraulics (was APPH)	HYDR	148			
Information Technology – Applications	ITAPP	148			
Information Technology – Networking	ITNET	150			

Illinois Articulation Initiative

(IAI) www.itransfer.org

Prairie State College participates in the Illinois Articulation Initiative (IAI), a statewide agreement that allows transfer of the completed Illinois Transferable General Education Core Curriculum between participating institutions. Completion of the Transferable 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 became effective statewide in the Summer of 1998. It applies to students who enrolled in an associate or baccalaureate degree-granting institution as a first-time freshman in summer 1998 or later. More than 100 schools, including all community colleges and all public state universities in Illinois, as well as most independent colleges and universities in the state, participate in the IAI.

IAI Course Codes

IAI has its own course numbering sequence for the Illinois Transferable General Education Core Curriculum (GECC).

Here is an example of an IAI GECC course –
S7 903D: Racial and Ethnic Relations

This code would be noted for a PSC course listed in this catalog as follows:

SOCIO 220 (IAI: S7 903D)

Race Relations: A Multicultural Perspective

The first letter in the IAI GECC code indicates the discipline field for the course. The letter S, for example, indicates Social/Behavioral Sciences. IAI letter codes and their corresponding disciplines are as follows:

General Education Core Curriculum Course Codes:

IAI: C Communication

IAI: F Fine Arts

IAI: H Humanities

IAI: HF Interdisciplinary Humanities and Fine Arts

IAI: HS Interdisciplinary Humanities/Fine Arts and Social/Behavioral Sciences

IAI: L, LP Life Sciences

IAI: M Mathematics

IAI: P, LP Physical Sciences

IAI: S Social/Behavioral Sciences

The first number after the letter indicates the sub-area of the discipline. The S7 in this example represents the Sociology sub-area of Social/Behavioral Sciences. The next numbers represent the unique content category within this subdiscipline. Letters at the end of course numbers identify specific perspectives related to the course. The D in S7 903D, for example, represents courses that examine aspects of human diversity within the United States. Other end-of course letters include:

N for courses designed to examine aspects of human diversity from a non-U.S./non-European perspective

L for laboratory courses

R for research paper courses

Codes which represent the IAI Baccalaureate Majors recommendations have two parts: a letter code that represents the field of study and a unique number that represents the course content.

Baccalaureate Major Course Codes:

IAI: AG Agriculture

IAI: BIO Biological Sciences

IAI: BUS Business

IAI: CHM Chemistry

IAI: CS Computer Science

IAI: CRJ Criminal Justice

IAI: EGL English

IAI: EGR Engineering

IAI: HST History

IAI: IND Industrial Technology

IAI: MC Mass Communication

IAI: MTH Mathematics

IAI: PHY Physics

IAI: PLS Political Science

IAI: PSY Psychology

IAI: SOC Sociology

IAI: TA Theatre Arts

Anthropology

ANTHR 215 (IAI: SI 900N)

Introduction to Anthropology

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

Introduction to the major areas: physical anthropology, cultural anthropology, ethnology, and archeology. Topics include race, language, prehistory, the culture, and social organization of contemporary primitive or preliterate peoples, human origins, and basic research methods in anthropology.

ANTHR 222 (IAI: SI 901N)

Introduction to Cultural and Social Anthropology

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

The cultural and social systems of both simple and complex societies: technology, aesthetics, language, religion, family and kinship, and associational life. Basic theories and methods relevant to those topics are introduced. This course is especially valuable for students in education, the humanities, and the social sciences.

Applied Physics

(See Physics)

Art

(See also Graphic Communications and Photographic Studies)

ART 101

Two Dimensional Design

Prerequisite: Placement into ENG 099 or higher

6 lab hrs per week: 3 hrs credit

This course introduces the theory and practice of the elements and principles of 2-D design. Students experiment with a variety of media as they develop an understanding of the visual elements and principles of 2-D design.

ART 102

Three Dimensional Design

Prerequisite: ART 101

6 lab hrs per week: 3 hrs credit

This course introduces the theory and practice of 3-D design. Students work with a variety of three-dimensional media and techniques as they develop an understanding of form, mass, contour, space, and texture.

ART 104

Drawing I

Prerequisite: Placement into ENG 099 or higher

6 lab hrs per week: 3 hrs credit

This course is an introduction to the materials and techniques of drawing as an art form. Working in black and white and colored media, students explore the formal, conceptual, and expressive dimensions of drawing. Emphasis is placed upon the observation, interpretation, and rendering of visible form.

ART 105

Color Theory

Prerequisite: ART 101

1 lecture, 4 lab hrs per week: 3 hrs credit

This course is a study of color and its use and the perception, psychology and physical characteristics of color as related to aesthetics and creativity.

ART 106

Drawing II

Prerequisite: ART 104

6 lab hrs per week: 3 hrs credit

ART 106 reinforces the formal and technical concepts introduced in Drawing I. Students work with a variety of subjects and materials, exploring a wide range of conceptual approaches culminating in a final series of related drawings.

ART 109

Ceramics

Prerequisite: Placement into ENG 099 or higher

6 lab hrs per week: 3 hrs credit

This studio course introduces ceramic clay-forming techniques with emphasis placed on wheel-throwing and hand-building methods of construction. Procedures on glazing, surface decorations, and clay and glaze theory are examined.

ART 115

Introduction to Computer Art

Prerequisite: Placement into ENG 099 or higher

6 lab hrs per week: 3 hrs credit

This studio course introduces students to the history and use of computer applications in the visual arts. Students learn to generate, combine, and manipulate traditional and contemporary visual ideas using both raster paint/photo retouching programs and professional quality vector drawing programs. (same as GC 115)

ART 121 (IAI: F2 901)

History of Western Art I

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course surveys the chronological development of the visual arts in Western society from prehistory through the Middle Ages. Emphasis is placed upon the analysis of form, style and content as well as the historical context in which works of art are created.

ART 122 (IAI: F2 902)

History of Western Art II

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course surveys the chronological development of the visual arts in Western society from the early Renaissance through the Modern period. Emphasis is placed upon the analysis of form, style, and content, as well as the historical context in which works of art are created.

ART 126 (IAI: F2 904)

History of Photography

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course surveys the history of photography as an art form from 1839 to the present, with an emphasis upon the medium's technological and aesthetic development. Students learn to examine photographs as expressions of ideas and beliefs of individual photographers within their social and cultural context.

ART 129 (IAI: F2 900)

Art Appreciation

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

Art Appreciation serves as an introduction to the visual arts for non-art majors. Students examine selected works in painting, drawing, printmaking, sculpture, and architecture from various cultures and periods. Emphasis is placed upon historical, social, and technological factors that contribute to understanding the aesthetic form, function, and meaning of art. Field trips may be included.

ART 131 (IAI: F2 903N)

Survey of Non-Western Art

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course surveys the visual arts of non-Western societies, including, India, China, Japan, Oceania, Africa, and Native North and South America, and examines the influence of non-Western art on contemporary Western art.

ART 162

Life Drawing

Prerequisite: ART 101 & 104

6 lab hrs per week: 3 hrs credit

This advanced course in drawing focuses upon the direct observation and interpretation of visual form, with an emphasis on the human figure. Students are expected to demonstrate competence with diverse drawing materials and various compositional strategies.

ART 201

Painting I

Prerequisite: Placement into ENG 099 or higher

6 lab hrs per week: 3 hrs credit

This course introduces students to the technical and aesthetic dimensions of painting. Students address both formal and expressive qualities of painting as they observe and interpret a variety of subjects from life. A final portfolio is required.

ART 202

Painting II

Prerequisite: ART 201

6 lab hrs per week: 3 hrs credit

This course is a continuation of ART 201 and introduces a wider range of both technical and conceptual approaches to painting. Students are encouraged to seek a more personal voice through exploring the expressive dimensions of painting and developing a final series of related works on a chosen theme.

ART 205

Printmaking

Prerequisite: ART 101 and 104

6 lab hrs per week: 3 hrs credit

This course is an introduction to traditional and contemporary fine art printmaking practices. Students produce a portfolio that demonstrates a basic understanding of the technical and aesthetic dimensions of this art form.

ART 246

Independent Study

Prerequisite: None

1 lecture, 4 lab hrs per week: 3 hrs credit

May be repeated two times.

The independent study in fine arts provides advanced students with the opportunity to pursue a specialized creative project that goes beyond the normal course offerings. Students contract a problem, present alternative directions to its solution and present a final portfolio of artwork accompanied by a written statement. Frequent critiques are conducted throughout the semester.

ART 295

Portfolio Seminar

Prerequisite: Consent of instructor

2 lectures, 2 lab hrs per week: 3 hrs credit

This course is an interdisciplinary arts seminar that is intended to expose students to a wide range of artistic concerns and practices through lectures, discussions, and critiques. Specific workshops focus on the development of a resume, an art portfolio, and a statement of artistic purpose.

Astronomy

ASTRO 101 (IAI: PI 906)

Guide to the Universe

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a one-semester conceptual astronomy course. It explores the night sky, stars and constellations, light and astronomical tools, and the history and origin of the solar system and the universe. Students cannot receive credit for both ASTRO 101 and ASTRO 104.

ASTRO 104 (IAI: PI 906L)

The Solar System and Beyond

Prerequisite: Placement into ENG 099 or higher

3 lectures, 2 lab hrs per week: 4 hrs credit

This course offers a non-mathematical survey of astronomical phenomena including the cycles of the night sky, the origins of modern astronomy, the solar system, galaxies, planetary motion, and cosmology. Students cannot receive credit for both ASTRO 101 and ASTRO 104.

Automotive Technology

AUTO 101

Basic Automobile Service and Systems

Prerequisite: Placement into RDG 098 or higher

2 lectures, 2 lab hrs per week: 3 hrs credit

This course introduces automotive systems and service. It includes safety systems, drive lines, engines, transmissions, transaxles, heating and cooling systems, fuel systems, steering and brake systems, ignition systems, construction, and operating systems.

AUTO 102

Automotive Engines

Prerequisite: AUTO 101

2 lectures, 4 lab hrs per week: 4 hrs credit

This course focuses on automotive engine repair, disassembly, adjustments, assembly, and operation. Service units include block, cylinder heads, valve assembly, lubrication system, and cooling system.

AUTO 107

Automotive Electricity/Electronics I

Prerequisite: Placement into RDG 098 or higher

2 lectures, 4 lab hrs per week: 4 hrs credit

Specialized training is provided in the basic automotive electrical system, including the electrical circuits, storage batteries, cranking systems, charging systems, ignition systems, electrical system-circuit-component tests, and the testing equipment that pertains to the automotive diagnostic-service field.

AUTO 108

Suspension and Steering Systems

Prerequisite: AUTO 101

2 lectures, 4 lab hrs per week: 4 hrs credit

This course covers component repair operations, adjustments, and performance testing of front and rear suspension systems. Service units include control arm pivot shaft bushings, ball joints, springs, shocks, MacPherson struts, bearings, wheels, tires, steering linkages, and gears.

AUTO 202

Automatic Brake Systems

Prerequisite: AUTO 101

2 lectures, 4 lab hrs per week: 4 hrs credit

This course covers component repair operations, adjustments, and performance testing of drum and disk brake systems. Service units include wheel cylinders, master cylinders, power boosters, parking brakes, control devices, shoe drums, rotors, and fluid transfer lines. Students also are introduced to the computer systems that control the brake system.

AUTO 205

Manual Transmissions and Transaxles

Prerequisite: AUTO 101

2 lectures, 4 lab hrs per week: 4 hrs credit

This course covers operation and maintenance service of clutches, standard transmissions, overdrives, drive lines, differentials, and major manual transaxles.

AUTO 206

Automotive Engine Performance

Prerequisite: AUTO 102, 107

2 lectures, 4 lab hrs per week: 4 hrs credit

This course covers diagnosing and repairing complex engine and computer problems and drivability problems of the modern automobile.

AUTO 207

Automotive Heating/Air Conditioning

Prerequisite: AUTO 101

2 lectures, 4 lab hrs per week: 4 hrs credit

This course focuses on component repair operations and adjustments. Performance testing on heating, defrosting, and air conditioning systems is included. Retro fitting and alternative refrigerants also are studied.

AUTO 208

Automatic Transmissions and Transaxles

Prerequisite: AUTO 101

2 lectures, 4 lab hrs per week: 4 hrs credit

This course covers component repair operations, adjustments, and performance testing on automatic transmissions, transmission controls, auto transaxle transmissions, overdrives, and drive lines.

AUTO 210

Automotive Electricity/Electronics II

Prerequisite: AUTO 101 and 107

2 lectures, 4 lab hrs per week: 4 hrs credit

This course covers electrical circuit identification, isolation, testing repair, and component operation. Service units include batteries, starting system, ignition system, charging system, light circuits, gauges, and electrical accessories, and diagnosis on chassis electronics and all electrical components of the vehicle.

AUTO 211

Automotive Engine Performance II

Prerequisite: AUTO 206, 210

2 lectures, 4 lab hrs per week: 4 hrs credit

Student technicians cover the operational aspects of automotive computer output/input control systems, performance diagnosis procedures, repair, service, and OBD I, OBD II, readiness monitors, and IM-240.

AUTO 215

Advanced Automotive Service and Systems

Prerequisite: AUTO 206, 210

2 lectures, 4 lab hrs per week: 4 hrs credit

This course focuses on advanced automotive engine, engine performance, brake, electric/electronic, computer, and transmission system operation and diagnosis.

AUTO 223

Automotive Parts Management

Prerequisite: Placement into ENG 099 or higher

2 lectures per week: 2 hrs credit

Parts training includes the use of parts, equipment and supply catalogs, descriptive nomenclature, stock familiarization, pricing procedures, and inventory control.

AUTO 224

Automotive Service Management

Prerequisite: Placement into ENG 099 or higher

2 lectures per week: 2 hrs credit

This course covers automotive repair shop operations including the use of flat rate manuals, repair and order writing, familiarization with manufacturer and company policies and procedures, and existing labor agreements.

AUTO 298

Internship Seminar

Prerequisite: 12 hrs in AUTO courses

1 lecture per week: 1 hr credit

This course is structured to enable interns to participate in group discussions on current automotive repair practices and experiences related to their internship studies. A written report of work related activities is required.

AUTO 299

Internship: Automotive

Prerequisite: 12 hrs in AUTO and consent of program coordinator

20 lab hrs per week: 2 hrs credit (variable hrs of credit)

This course provides on-the-job experience combined with supervision. It is designed to present service technicians with a performance view of the automotive service professions.

Biological Science

BIOL 100 (IAI: LI 900L)

General Education Biology

Prerequisite: Placement into ENG 099 or higher

3 lectures, 2 lab hrs per week: 4 hrs credit

This one-semester introductory course for non-science majors is designed to fill the general education requirement for life science with a laboratory. The course covers cell biology, genetics, evolution and diversity, plant and animal structure and functions, animal behavior, and ecology. Students cannot receive credit for both BIOL 100 and 112.

BIOL 103 (IAI: LI 901)

Plants and Society

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course emphasizes scientific inquiry through selected concepts in biology such as organization, function, heredity, evolution, and ecology. Topics include plant structure, growth, genetics, evolution, physiology, reproduction, and the economic importance and inter-relationships between plants and humans. This course is for non-majors.

BIOL 105 (IAI: LI 905)

Environmental Biology

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

A consideration of the timely and urgent problems of mankind of a biological nature: pollution of air and water, adverse effects of radiation and insecticides on the environment, overpopulation, food production, thermal pollution, noise pollution, and other related topics.

BIOL 106 (IAI: LI 906L)

Heredity and Society

Prerequisite: Placement into ENG 099 or higher

3 lectures, 2 lab hrs per week: 4 hrs credit

This course is an introduction to basic genetic principles and contemporary issues in biotechnology. The ethical, political, and social implications of biological advances in genetics are addressed.

BIOL 108**Essentials of Anatomy Physiology**

Prerequisite: Placement into ENG 099 or higher

4 lectures per week: 4 hrs credit

The course involves the basic structure and function of the organs and systems of the human body. This one-semester lecture class is recommended for students in the Surgical Technology and Personal Trainer programs.

BIOL 111 (IAI: BIO 910)**Cellular and Molecular Biology**

Prerequisite: High school biology or equivalent; placement into ENG 099 or higher

3 lectures, 3 lab hrs per week: 4 hrs credit

This is a course designed for science and health majors. It provides an introduction to biochemistry, molecular genetics, cell structure, cell function, cellular process, and cell division. This course also includes an introduction to Mendelian inheritance and gene activity.

BIOL 112 (IAI: LI 900L; BIO 910)**Organismal Biology**

Prerequisite: High school biology or equivalent; placement into ENG 099 or higher

3 lectures, 3 lab hrs per week: 4 hrs credit

This is a course designed for science and health majors. It provides an introduction to the structure and function of microorganisms, fungi, plants, and animals. This course also includes an introduction to evolutionary and ecological principles. Students cannot get credit for both BIOL 100 and 112.

BIOL 115**Microbiology for Surgical Technologists**

Prerequisite: Admission to Surgical Technology program

4 lectures per week: 4 hrs credit

Students learn the impact of microbiology on the practice of aseptic technique and how to apply those principles in controlling infection in the operating room. The immune response, hypersensitivity, vaccines, common pathogens, and the process of infection also are addressed.

BIOL 120**Independent Studies in Ecology**

Prerequisite: Consent of instructor

15 lab hrs per week: 3 hrs credit (variable credit)

This course is designed to allow students to obtain hands-on experience in the various phases of ecosystem restoration and preservation as well as in monitoring the factors involved in ecosystem functioning. Students inventory flora and fauna of ecosystems, monitor water and soil quality, and perform activities needed to maintain viable ecosystems. The course includes field work and writing reports on activities carried out in the field.

BIOL 211**Microbiology**

Prerequisite: BIOL 111 with C or better; or CHEM 105 with a C or better; or high school chemistry within the past 5 years with a C or better.

3 lectures, 3 lab hrs per week: 4 hrs credit

This is an introduction to the study of microscopic organisms, with an emphasis on bacteria. Special attention is given to their structure, physiology, and ecology. This course also includes an introduction to virology, medical parasitology, medical mycology, and immunological concepts. This course is especially beneficial for health profession majors because of the emphasis on the microbial role in the disease process focusing on the epidemiology, clinical manifestation, and treatment of microbial diseases.

BIOL 221**Human Anatomy and Physiology I**

Prerequisite: BIOL 111 with a C or better; or CHEM 105 with a C or better; or high school chemistry within the past 5 years, with a C or better.

3 lectures, 2 lab hrs per week: 4 hrs credit

This is part I of a two-semester sequence of study concerning anatomy and physiology of the human body. Part I includes the study of basic principles of chemistry, cell biology, cellular metabolism, and tissue histology. It also covers the integumentary system, skeletal system, muscle system, and the nervous system.

BIOL 222**Human Anatomy and Physiology II**

Prerequisite: BIOL 221

3 lectures, 2 lab hrs per week: 4 hrs credit

This is part II of a two-semester sequence of study on the anatomy and physiology of the human body. It also covers senses, endocrine system, digestive tract, nutrition, metabolism, respiratory system, cardiovascular system, lymphatic system, urinary system, water and electrolyte balance, reproductive system, human growth and development, and human genetics.

Business

(See also Economics, and Transportation, Warehousing, and Logistics)

BUS 101

Introduction to Modern Business

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is designed to provide an overview of business and the environment in which it operates. The topics studied include organization of business, business environment, management and organization of business, managing employees, marketing, financial management, information for business strategy, and special topics. Students develop a business plan.

BUS 103

Business Mathematics

Prerequisite: Math 085 with a C or better or qualifying score on the Math Placement Test.

3 lectures per week: 3 hrs credit

This course emphasizes development of skill in handling the mathematics of business transactions in business and as consumers. Included are fundamental processes of percentage, discounts, profit and loss, net present value, annuities, simple and compound interest, and payroll taxes as well as depreciation and inventories.

BUS 105

Human Relations

Prerequisite: None

3 lectures per week: 3 hrs credit

This course teaches how to develop and maintain positive and productive relationships in the workplace. Students learn how, as managers, to provide a better quality of work life for employees. They also learn communication skills, how to conduct meetings, how to properly delegate, theories of motivation and leadership, and problem-solving skills.

BUS 107

Bookkeeping and Procedural Accounting

Prerequisite: None

3 lectures per week: 3 hrs credit

This course emphasizes how to keep records rather than how to analyze them. Work is devoted to developing procedures within the framework of acceptable accounting concepts. Students also acquire the vocabulary necessary to understand communications with others in the field.

BUS 109

Principles of Supervision

Prerequisite: None

3 lectures per week: 3 hrs credit

This course examines the principles of planning, organizing, directing and controlling the work of others by first-level managers. Real world applications and productivity are emphasized.

BUS 120

Sales

Prerequisite: None

3 lectures per week: 3 hrs credit

This course is a study of the sales process and the psychology involved in the sales process. Special emphasis is given to application of sales techniques and management of sales campaigns. Emphasis is also placed on student oral presentations and research.

BUS 127

Business Communications

Prerequisite: ENG 101 or consent of instructor

3 lectures per week: 3 hrs credit

This course offers a comprehensive study of the types of communications used in business with special emphasis on written communication. The course teaches how to write a business memo, letter, and report. Everything from layout to content is covered, as are such things as proper listening, semantics, and psychology of business communication, and tips which make writing easier and more professional.

BUS 131 (IAI: BUS 903)

Financial Accounting

Prerequisite: Placement into ENG 099 or higher

4 lectures per week: 4 hrs credit

This is an introduction to financial accounting and the communication of relevant information to external parties. It includes the development of the accounting model, internal control, measurement processes, data classification, and terminology. Interpretation and use of the resultant financial statements are emphasized. Sole proprietorships, corporations, service businesses, and merchandisers are covered. The additional feature of this course is the inclusion of computer applications.

BUS 132 (IAI: BUS 904)

Managerial Accounting

Prerequisite: BUS 131

3 lectures per week: 3 hrs credit

This is an introduction to managerial accounting emphasizing information required for internal decision making. The fundamentals of product costing, cost/volume/profit analysis, absorption costing, variable costing, budgeting, standard costs, variance analysis, cost control, responsibility accounting, short-run decision analyses, capital budgeting, activity-based costing, just-in-time concepts, and quality management are included.

BUS 138**Accounting Software I**

Prerequisite: BUS 107 or BUS 131

1.5 lecture hrs per week: 1.5 hrs credit

This is an introductory course in the use of commercial microcomputer accounting software applications. General ledger, financial statements, customer, vendor, payroll, and inventory applications are included.

BUS 139**Accounting Software II**

Prerequisite: BUS 107 or 131

1.5 lecture hrs per week: 1.5 hrs credit

This course continues the study of commercial microcomputer accounting software applications. General ledger, financial statements, customer, vendor, payroll, and inventory applications are included.

BUS 165**Personal Asset Management**

Prerequisite: None

3 lectures per week: 3 hrs credit

This course is a study of investment vehicles and the securities market. The content includes a study of stocks, bonds, money market instruments, mutual funds, and real estate; what they are used for and how; why and when they should be traded; who should invest in them; how interest rates affect them; investment strategies; and how a portfolio should be managed. The course also informs students of their financial responsibilities, helps them to develop strategies for managing their debt, and explores skills for the wise use of credit.

BUS 170**Small Business Management**

Prerequisite: None

3 lectures per week: 3 hrs credit

This course provides a study of the steps in founding, organizing, financing, developing, operating, and managing a small business firm. The course also includes a study of the planning, budgeting, purchasing, inventory control, hiring, supervision, advertising, promotion, selling, record keeping, taxation, risk management, and other topics as they pertain to the small business firm.

BUS 201**Business Law**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course emphasizes the development of law and effects on transacting business. Specifically, it deals with settlement of disputes, torts, contract sales, product liability, and breach of contracts. Also included are agency and the duties and responsibilities of an agent contract.

BUS 209**Supervisors as Trainers**

Prerequisite: None

3 lectures per week: 3 hrs credit

This course presents principles, practices, and basic methods of instruction as related to business and industry. Emphasis is on the supervisor as a trainer.

BUS 210**Business Law and Its Environment**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course provides a broad and general overview of legal precepts concerning personal property and its liability, forms of business organization and the regulations governing them, and consumer protection as it affects business.

BUS 240 (IAI: M1 902; BUS 901)**Elementary Statistics**

Prerequisite: MATH 151 or qualifying score on Math Placement Test

4 lectures per week: 4 hrs credit

This is an introductory course in probability and statistics. Topics covered in the course include frequency distributions, percentiles, measures of central tendency, measures of dispersion, standard deviation, correlation, probability, line of regression, statistical inferences, the binomial distribution, the t-distribution, and the chi-square distribution. Computer software such as minitab is used. A comprehensive project is assigned. Students who complete this course cannot also receive credit for MATH 115 and 153. (same as MATH 153)

BUS 241**Principles of Management**

Prerequisite: BUS 101

3 lectures per week: 3 hrs credit

This course introduces the concept of the managerial functions in the modern business enterprise including the presentation and development of managerial principles in all activities, most specifically in the business enterprise. Basic management philosophies and theories are presented in relation to planning, organizing, staffing, directing, and controlling. Attention is given to basic management concepts and applications of motivation in the formal and informal organizational structures. Discussions and case studies are directed toward management theory and practice.

BUS 242

Human Resources Management

Prerequisite: None

3 lectures per week: 3 hrs credit

Modern concepts of supervisory principles and practice are studied. Emphasis is on the human relations aspects of supervision, as well as on the functions of staffing, training, compensation, employee services, fringe benefits, health and safety, job evaluation, and industrial relations. Role playing and case studies supplement the course.

BUS 251

Principles of Marketing

Prerequisite: BUS 101

3 lectures per week: 3 hrs credit

This survey course presents the concepts, principles and functions of marketing in the dynamic business and economic environment. Emphasis is on the understanding of channels of distribution, marketing costs, motivations, and pricing. Planning policies and strategies also are studied, and casework is used as a supplement.

BUS 261 (IAI: MC 912)

Advertising

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is a survey of social and economic aspects of advertising, the advertising cycle, kinds of advertising, selection of media, costs, analysis of copy and displays, format, layout, labels, trademarks, slogans, campaigns, and measurement of results. Students prepare magazine and advertising copy.

BUS 287

E-Business

Prerequisite: BUS 101

3 lectures per week: 3 hrs credit

This course is designed to provide an overview of how business can profit from current technology, primarily the Internet. Topics studied include e-business versus e-commerce, foundations of e-business, business to business electronic commerce, e-business legal issues, electronic payment systems, and e-business strategy and implementation.

BUS 298

Seminar

Prerequisite: Consent of Coordinator

1 lecture per week: 1 hr credit

This seminar is taken in conjunction with BUS 299, Internship. The content of the seminar relates to internship work which is correlated with students' fields of study.

BUS 299

Internship

Prerequisite: Consent of Coordinator

15 lab hrs per week: 3 hrs credit (variable credit)

The student internship allows students to earn variable amounts of college credits for managerial responsibilities while working in commerce or industry. A formalized work training program is structured to allow supervision by both the employer and the College's coordinator. The internship work should be directly related to students' fields of study.

CAD/Mechanical Design Technology

CADMD 141

Technical Drafting I

Prerequisite: None

2 lectures, 2 lab hrs per week: 3 hrs credit

A beginning course in drafting for students who have little or no drafting experience. Principal objectives are basic understanding of orthographic, isometric, and assembly working drawings; understanding the principles and applications of descriptive geometry; experience in using handbooks and other resource materials; and use of simplified drafting practices in industry. ASA standards are stressed. Interpretation of industrial sketches and prints is introduced to emphasize accepted drawing practices.

CADMD 201

Mechanical Layout and Design I

Prerequisite: None

2 lectures, 2 lab hrs per week: 3 hrs credit

An advanced course in graphics for all students taking the mechanical design curriculum. The instructional unit provides experience in mechanical layout and design. Design problems require solution by math, graphics, and creative imagination. Experience also is given in industrial filing systems, engineering specifications, blueprint corrections, manufacturing processes, and other products.

CADMD 203

Statics and Strength of Materials

Prerequisite: TECH 109

4 lectures per week: 4 hrs credit

A study of the stress and deformation of mechanical parts and structural members. The properties of materials, the geometry of parts, and the type of loading are considered for the design of shafts, beams, columns, and welded joints based on both strength and stiffness requirements. Methods of analyzing force systems, shear and moment diagrams, and the concepts of deflections and moments of inertia on an area are also covered by the course. This course is calculator based.

CADMD 243 (IAI: IND 911)**Introduction to AutoCAD***Prerequisite:* CADMD 141

2 lectures, 2 lab hrs per week: 3 hrs credit

This is an introductory course in Computer Aided Drafting (CAD). Through lecture and hands-on experience, students learn to use the most popular microcomputer CAD software, AutoCAD. Students learn basic CAD skills that enable them to produce mechanical drawings. Topics include: setting up AutoCAD, utility commands, drawing construction techniques, editing, display controls, layers, drawing aids, dimensioning, and plotting. Although there are no specific prerequisites, prospective students should have a working knowledge of IBM-compatible PCs, an understanding of plane geometry, and be able to deal with both common and decimal fractions.

CADMD 244**Intermediate AutoCAD***Prerequisite:* CADMD 243

2 lecture, 2 lab hrs per week: 3 hrs credit

This course is a continuation of CADMD 243. Students learn to use advanced AutoCAD commands to create complex mechanical drawings. The topics to be covered include: attributes and polylines, AutoCAD 3-D, customizing AutoCAD, and a brief intro to AutoLisp.

CADMD 245 (IAI: EGR 941)**Computer Aided Design***Prerequisite:* CADMD 244

2 lecture, 2 lab hrs per week: 3 hrs credit

This is a course in Computer Aided Design for the advanced CAD user. Students learn to use a typical CAD system to design and analyze mechanical mechanisms. The course content stresses reinforcement of CAD capabilities covered in previous courses, creating AutoLisp programs using AutoCAD commands in AutoLisp, conditional and loop statements, and programming logic. Design concepts such as design automation and product design analysis are covered.

CADMD 246**Architectural Desktop***Prerequisite:* CADMD 243

1 lecture, 2 lab hrs per week: 2 hrs credit

This course teaches advanced CAD students to use Architectural Desktop software to create architectural drawings. It is not a course in architectural design. Students are expected to have previous AutoCAD experience and have a working knowledge of conventional architectural drawing techniques. Topics include creating typical architectural drawings such as floor plans, elevations, sections, and site plans.

CADMD 247**Mechanical Desktop***Prerequisite:* CADMD 244

1 lecture, 2 lab hrs per week: 2 hrs credit

This course teaches students to create mechanical designs using Autodesk's Mechanical Desktop software. Students who are already proficient in 2-D CAD learn to convert rough sketches into working solid model mechanical drawings.

CADMD 248**Introduction to Inventor***Prerequisite:* CADMD 244

1 lecture, 2 lab hrs per week: 2 hrs credit

This course is an introduction to Autodesk Inventor, which is an advanced 3-D parametric solid modeling system with surface modeling capabilities. Students learn to create solid parts, assemblies of solid parts, exploded presentations of assemblies and engineering drawings.

Chemistry**CHEM 105** (IAI: PI 902L)**Survey of General Chemistry***Prerequisite:* MATH 090 with a C or better or qualifying score on Math Placement Test

3 lectures, 3 lab hrs per week: 4 hrs credit

This course includes the basic concepts of general chemistry such as nomenclature, mass relationships, solutions, acids and bases, and bonding. Students cannot receive credit for both CHEM 105 and 110.

CHEM 110 (IAI: PI 902L; CHM 911)**General Chemistry I***Prerequisite:* MATH 095 with a C or better or placement in MATH 151 and high school chemistry

4 lectures, 3 lab hrs per week: 5 hrs credit

This is the first course of a two-semester sequence and is strongly recommended for all science majors and pre-engineering students. It includes the mole concept, bonding theory, formulas and equations, periodic classification of the elements, and physical properties of gases, liquids, solids, and solutions. Students cannot receive credit for both CHEM 105 and 110.

CHEM 130 (IAI: CHM 912)**General Chemistry II***Prerequisite:* CHEM 110 with a C or better

4 lecture, 3 lab hrs per week: 5 hrs credit

This is the second course of the two-semester sequence and is strongly recommended for all science majors and pre-engineering students. This class includes a study of acids and bases, general equilibria, qualitative analysis, electrochemistry, oxidation reduction, general descriptive chemistry, thermodynamics, molecular structure, coordination compounds, and introduction to organic chemistry.

CHEM 203 (IAI: CHM 913)

Organic Chemistry I

Prerequisite: CHEM 130 with a C or better

4 lectures, 3 lab hrs per week: 5 hrs credit

This course covers the properties, preparation, and reactions of aliphatic and aromatic compounds, alkenes, alkynes, alkyl halides and alcohols, mechanism or reactions, stereochemistry, infrared, and nuclear magnetic resonance spectroscopy.

CHEM 204 (IAI: CHM 914)

Organic Chemistry II

Prerequisite: CHEM 203 with a C or better

4 lectures, 3 lab hrs per week: 5 hrs credit

The course focuses on interpretation of NMR, IR, and mass spectra, heterocyclic compounds, polymers.

College Skills

COL 100

Computer Skills for College Writing

Prerequisite: None

1 lecture per week: 1 hr credit

This course is designed to teach the basic computer skills necessary to become successful writers in the college environment. Topics covered include computer skills, beginning word processing functions, the fundamentals of composing on the computer, and computer terminology. In addition, students learn the basics of the Internet, including using the Prairie State College e-mail system and WebAdvisor.

COL 101

College Success Seminar

Prerequisite: None

1 lecture per week: 1 hr credit

The purpose of this course is to provide an opportunity for students to learn and adopt methods that promote success in college. Students learn about the challenges and choices they face as college students as they set education and career goals, explore their values and decision-making skills, learn study strategies, and develop an appreciation for diversity. Students complete a master academic plan.

COL 102

Career Development Seminar

Prerequisite: None

1 lecture per week: 1 hr credit

This course provides the opportunity to explore career interests, skills, abilities, and work-related values. Topics include the nature of various careers, labor market trends, job search strategies, education and training requirements, and diversity in the workplace. Students learn to develop a career and educational plan based upon informed career decisions.

COL 104

Leadership Development

Prerequisite: Instructor Consent

2 lectures per week: 2 hrs credit

This course provides a basic understanding of leadership and group dynamics theory, and assists students in developing a personal philosophy of leadership, an awareness of moral and ethical responsibilities of leadership, and one's own style of leadership.

COL 105

Personal Awareness

Prerequisite: None

1 lecture per week: 1 hr credit

The focus of this course is to help each individual assess his or her personal resources and communication styles and then set realistic goals. Students examine their own values, interpersonal relationships, emotions, decision-making processes, motivations, etc. Various personal growth theories also are explored. Emphasis is placed on the application of these characteristics and theories to help students obtain and maintain positive control over their lives and lifestyles.

COL 106

Personal Wellness

Prerequisite: None

1 lecture per week: 1 hr credit

This course is designed for those who want to improve their choice of lifestyle relative to personal responsibilities, balance, and personal enhancement of physical, mental, and spiritual health. The course also assists individuals in making voluntary behavior changes which reduce health risks and enhance individual productivity.

Communication

COMM 101 (IAI: C2 900)

Principles of Communication

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a course in the theory and practice of interpersonal, group, and public communication. Emphasis is placed on the speaker's confidence, audience adaptation, discovery of ideas, organization, and delivery. Students are given opportunities to improve their speaking and critical listening skills.

COMM 102**Persuasive Public Speaking**

Prerequisite: COMM 101

3 lectures per week: 3 hrs credit

This course develops one's ability to formulate, construct, deliver, receive, and analyze formal and informal persuasive messages. It is primarily a speaking course with an emphasis on the discovery of multiple methods for designing messages that evoke change in society.

COMM 103**Group Discussion**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course examines the nature of small group discussion. Topics include defining problems, preparation, process, leadership, participation, types and forms of discussion, and evaluation. Students practice techniques of effective group discussion.

COMM 108**Interpersonal Communication**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course explores one-to-one, face-to-face communication through experience, theory and skill application. Communication in family, work, and social contexts are examined. Stress is placed on satisfying individual needs, functioning in appropriate roles, resolving conflicts, and communicating effectively.

COMM 111 (IAI: MC 911)**Introduction to Mass Communication**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course provides an overview of the nature, functions and responsibilities of the mass communications industry in a global environment with an emphasis on the media's role in American society.

COMM 115 (IAI: MC 914)**Introduction to Broadcasting**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a beginning course in broadcasting. An understanding of the historical development, theory, writing, broadcasting, and engineering is stressed.

COMM 196**Applied Forensics I**

Prerequisite: Placement into ENG 099 or higher

2 lab hrs per week: 1 hr credit

This course provides instruction and experience on speech competition, including participation in a variety of competitive speech events. Students enrolled in this course are automatically part of the Forensics Team.

COMM 197**Applied Forensics II**

Prerequisite: COMM 196

2 lab hrs per week: 1 hr credit

Continuation of COMM 196.

COMM 198**Applied Forensics III**

Prerequisite: COMM 197

2 lab hrs per week: 1 hr credit

Continuation of COMM 197.

COMM 199**Applied Forensics IV**

Prerequisite: COMM 198

2 lab hrs per week: 1 hr credit

Continuation of COMM 198.

Computer Electronics Technology

CET 101**Fundamentals of Electricity**

Prerequisite: None

2 lectures per week: 2 hrs credit

This is an introductory course in the fundamentals of electricity. The nature of voltage, current, resistance, and power are studied. Students analyze, calculate, measure, and wire parameters of electrical devices and circuits. Included are series, parallel, and combination circuits.

CET 103**Alternating Current**

Prerequisite: CET 101

2 lectures per week: 2 hrs credit

This is a fundamental course in alternating current theory and analysis. Students analyze, calculate, measure, and wire circuits and electrical parameters involving transformers, relays, inductors, capacitors, series and parallel alternating current circuits.

CET 114

Digital Fundamentals

Prerequisite: None

4 lectures per week: 4 hrs credit

This is an introductory course in digital systems. Numbering systems and codes are introduced along with logic representation, and combination digital logic circuits. Logic gates, logic families, and interfacing of components are studied. Related circuitry is wired and analyzed.

CET 203

Instrumentation Fundamentals

Prerequisite: CET 101

4 lectures per week: 4 hrs credit

This course is a study of electronic instrumentation with applications to the control of industrial processes. Topics include measuring instruments, an introduction to process control, transducers, controller principles, and control elements.

CET 211

Communication Electronics

Prerequisite: CET 103

4 lectures per week: 4 hrs credit

This course is a continuation of electronic studies extending into communications applications. Topics include feedback, oscillators, modulation, demodulation, R.F. amplification, wave propagation, wave transmission, and wave radiation. Analysis techniques are extended from the time domain to frequency domain.

CET 220

Programmable Logic Controllers

Prerequisite: None

4 lectures per week: 4 hrs credit

Students program, download and wire input and output devices using Allen-Bradley software for the S.L.C.-500 and Micro-Logic 1000 programmable logic controllers.

Criminal Justice Services

CJ 101 (IAI: CRJ 901)

Introduction to Criminal Justice

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a survey and analysis of the criminal justice system, including an historical and philosophical overview of its development, with special emphasis on the system's primary components, and the relationship of these components in the administration of criminal justice in the United States.

CJ 102 (IAI: CRJ 912)

Introduction to Criminology

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is an introduction to the multidisciplinary study and analysis of the nature, causes and control of crime in America. The measurement of crime and the interactive roles of the system, victim, offender, and society also are covered.

CJ 103

Law Enforcement Organization and Administration

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course focuses on the principles of organization and management as applied to law enforcement agencies. Topics covered include concepts of organization behavior, formulation of policy and procedure, and coordination of operational units.

CJ 106 (IAI: CRJ 911)

Introduction to Corrections

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

An overview and analysis of the American correction system is presented, including the history, evolution, and philosophy of punishment and treatment. The operation and administration of criminal justice in both institutional and non-institutional settings is covered. Current issues in correctional law also are presented.

CJ 110

Community-Based Policing

Prerequisite: CJ 101

3 lectures per week: 3 hrs credit

The philosophical and practical applications of community based policing are presented.

CJ 120

Introduction to Homeland Security

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course examines the programs and activities that have been implemented to improve the safety of our country. Special emphasis is placed on the threat of terrorism and strategies to address that threat. (same as FST 121)

CJ 201**Introduction to Criminal Law**

Prerequisite: CJ 101

3 lectures per week: 3 hrs credit

This course examines and analyzes the structure and functions of substantive criminal law. The principles of criminal law are presented, including the acts, mental state, and attendant circumstances that are necessary elements of the crime.

CJ 202**Civil and Criminal Laws/Procedures**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course examines legal concepts and criminal procedures in the areas of arrest, force, search and seizure, interrogation, and obtainment of physical evidence. Also included are studies on trials, indictments, bail, grand and petit juries, and the rules of evidence in the State of Illinois.

CJ 203**Principles of Criminal Investigation**

Prerequisite: CJ 101

3 lectures per week: 3 hrs credit

This course covers the fundamentals and procedures of investigation including applications of deductive and inductive reasoning, and other investigative techniques; collection, marking and preservation of evidence suitable for court presentation; due process; and techniques and procedures of follow-up investigation.

CJ 204 (IAI: CRJ 914)**Juvenile Justice**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

The history and philosophy of society's reaction to juvenile behavior and problems are covered. The interaction among the police, judiciary and corrections systems are examined within the context of cultural influences. Theoretical perspectives of causation and control are examined.

CJ 208**Principles of Criminalistics**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course covers the application of the natural and physical sciences to crime solutions in law enforcement. All aspects of crime scene processing including evidence recognition, collection, protection and transmission, examination and evaluation of physical evidence, and identification and comparison of crime laboratory procedures are included. The role of the crime laboratory in modern law enforcement also is studied.

CJ 270**Computer Forensics**

Prerequisite: CJ 101 or ITPRG 140

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides an introduction to computer forensics, preparing students to acquire and analyze digital crime evidence. Students learn tools and techniques for conducting digital investigations, preserving evidence, and preparing expert witness testimony. Topics include file structures, data recovery, forensic analysis, e-mail, and network investigations, and ethics. (*same as ITNET 270*)

CJ 299**Criminal Justice Internship**

Prerequisite: Consent of program coordinator.

1 lecture, 10 lab hrs per week: 3 hrs credit

Students are assigned to a criminal justice agency for supervised exposure to the various aspects of a working agency. Students spend a minimum of 10 hours per week on-site and one hour per week in a seminar setting.

Dental Hygiene**DH 101****Histology**

Prerequisite: Consent of program coordinator

2 lecture hrs per week: 2 hrs credit

A basic course in the minute structural and functional units of living tissue. This course provides sufficient knowledge of that part of the body whose healthful condition is the particular responsibility of the dental hygienist.

DH 103**Head and Neck Anatomy and Tooth Morphology**

Prerequisite: Consent of program coordinator

3 lectures, 4 lab hrs per week: 5 hrs credit

This course deals with the study of structure, function, and morphology of the teeth. Also included are surrounding anatomical structures such as salivary glands, muscles of mastication, bones of the skull, and ligaments. Terminology is included so that students may communicate effectively in the profession.

DH 104

Dental Radiology

Prerequisite: DH 103

2 lectures, 4 lab hrs per week: 4 hrs credit

This in-depth introduction to dental radiography concentrates on the history and characteristics of radiation in dentistry, technical aspects of radiation production, computerized digital radiography, and the components and functions of the dental X-ray machine. Hazards, safety precautions, and infection control are covered. Intraoral techniques, landmarks, processing of radiographs, and the mounting and viewing of films are emphasized. Regulations and management of clients with special needs are covered. Students assess clients, complete treatment plans, and perform a required number of examinations and radiographic surveys on manikins and selected clients in a laboratory setting. Students are responsible for client recruitment.

DH 105

Nutrition

Prerequisite: DH 101

2 lectures per week: 2 hrs credit

This seminar provides a comprehensive review of the role of nutrients in the biological development of health and disease. Attention is given to process of assimilating nutritional information and making it applicable to the clinical setting. Special emphasis will be placed on methods of controlling dental disease.

DH 106

General and Oral Pathology

Prerequisite: DH 101

2 lectures per week: 2 hrs credit

This course serves as an introduction to general pathology with consideration of the more common diseases affecting the human body, covering in particular the clinical pathology of the diseases affecting the teeth and supporting structures and the physiological/pathological changes which affect the gingivae and the hard and soft structures of the oral cavity.

DH 107

Fundamentals of Dental Hygiene

Prerequisite: Consent of program coordinator

1 lecture, 2 lab hrs per week: 2 hrs credit

This first of five clinical dental hygiene courses is designed for the entry-level, first-year dental hygiene student. Students perform selected services on clients, student partners, and a laboratory manikin, but do not provide a full range of client services. Didactic and clinical studies include infection control, clinical barriers, patient reception and positioning, instrument grasp, finger rests, tooth brushing, and interdental care. Laboratory evaluations are performed as well as continual evaluation of the essential functions of dental hygiene.

DH 108

Clinical Dental Hygiene I

Prerequisite: DH 107

2 lectures, 8 lab hrs per week: 4 hrs credit

This course provides lecture, pre-clinical, and laboratory instruction in the techniques utilized for the assessment, diagnosis, planning, implementation, and evaluation of client treatment care plans. Clinical activities are coordinated with Fundamentals of Dental Hygiene (DH 107). Students deliver some client care including histories and vitals, oral examinations, occlusion determination, evaluation of teeth, tooth brushing, and interdental care. Patient care plans and health care issues are addressed. Instrument design is discussed with demonstration of the strokes used with hand instruments. Students practice demonstrated techniques on manikins, student partners, and clients. Students are responsible for client recruitment. There is continued evaluation of the essential functions of dental hygiene.

DH 109

Clinical Dental Hygiene II

Prerequisite: DH 108

2 lectures, 8 lab hrs per week: 4 hrs credit

Students continue to apply and refine skills of dental prophylaxis acquired in Clinical Dental Hygiene I. Dental calculus identification, records and charting, mouth rinse, dentifrices, care of dental appliances, topical application of fluoride, clinical technique of irrigation, indice and scoring methods, extrinsic stain removal, use of Gracey curets, care of implants, and history of tobacco use are emphasized. Students provide dental hygiene care by assessing, diagnosing, planning, implementing and evaluating dental hygiene care on clients. Students are responsible for client recruitment.

DH 116

Periodontology

Prerequisite: DH 108

2 lectures per week: 2 hrs credit

This course emphasizes the etiology, classification, symptomatology, treatment and prognosis of periodontal disease. A basic understanding of periodontics is necessary for the dental hygiene student to realize the significance of client education and of the dental prophylaxis. Non-surgical periodontal therapy and current treatment modalities are emphasized.

DH 120**Care of Special Populations***Prerequisite: DH 108*

2 lectures per week: 2 hrs credit

This course emphasizes care of clients with special oral and general systemic conditions. Included are people with physical, mental, social/emotional, and selected medical conditions, as well as the elderly and medically compromised. An interdisciplinary, problem-solving teaching strategy provides a comprehensive, coordinated approach to dental care for individuals with special needs.

DH 201**Clinical Dental Hygiene III***Prerequisite: DH 109*

1 lectures, 4 lab hrs per week: 3 hrs credit

This course continues to integrate the scientific and clinical principles of the process of providing dental hygiene care. Adjunctive dental hygiene procedures are introduced, including: pain and anxiety control with emphasis on local anesthesia; intraoral photography; ultrasonics; advanced fulcruming techniques; phase microscopes; and alternative instruments and techniques. Portfolio assessment is introduced as a means to document the development of dental hygiene competencies. Students are responsible for client recruitment.

DH 202**Clinical Dental Hygiene IV***Prerequisite: DH 201*

1 lecture, 16 lab hrs per week: 5 hrs credit

Students continue to provide comprehensive dental hygiene care by assessing, diagnosing, planning, implementing, and evaluating dental hygiene care on clients in the clinical setting. Additional clinical procedures include care and maintenance of instruments, maintenance of oral hygiene (recare), air polishing, whitening, debonding, use of alternative instruments, advanced root morphology, and setting up a tobacco control program, portfolio development, and dentinal hypersensitivity. Students provide complete preventive and therapeutic care of a periodontally involved client. Students are responsible for selected client recruitment.

DH 203**Clinical Dental Hygiene V***Prerequisite: DH 202*

1 lecture, 16 lab hrs per week: 5 hrs credit

Dental Hygiene students provide comprehensive client care in a clinical setting. Emphasis is on advanced dental hygiene theory and adjunctive therapies to treat complex dental hygiene clients. This course includes utilizing alternative hand instruments and therapies, radiology skills review and update, and preparation for board examinations.

DH 204**Ethics, Law, and Administration***Prerequisite: DH 202*

2 lectures per week: 2 hrs credit

This course examines the relationship of the dental hygienist to the practice of dental hygiene and dentistry. It explores the ethics, laws, and administrative issues involved in the practice of dental hygiene.

DH 205**Pharmacology***Prerequisite: DH 109*

2 lectures per week: 2 hrs credit

This course presents a study of drugs by groups, with special consideration of those used in dentistry, including their physical and chemical properties, dosage, and therapeutic effects.

DH 207**The Science and Application of Dental Material***Prerequisite: DH 201*

2 lectures, 4 lab hrs per week: 4 hrs credit

This course covers the basic science, clinical indications, manipulative variables and procedures, physical and mechanical characteristics and clinical performance of materials used in dentistry. Lecture and laboratory emphasizes an understanding of the science of dental materials, which is essential to assess patient needs, to plan for and treat those needs, and to evaluate treatment outcomes.

DH 220**Community Dental Health***Prerequisite: DH 201 (or taken concurrently with DH 201)*

2 lectures per week: 2 hrs credit

Students learn the history and influence of public health concepts and practices on the dental hygiene profession. The theory, functions, services, and administration of public health organizations are summarized. Students use research tools and statistical analysis to review and interpret dental scientific literature.

Drafting

DRAFT 101

Drafting Essentials

Prerequisite: None

2 lectures per week: 2 hrs credit

This course provides an introduction to blueprint reading and drafting which includes class exercises in interpreting lines, view positions, conventions, and standards found on prints; use of drawing tools, simple geometric construction, fundamentals of orthographic construction, use of finish symbols, and the application of scale and precision dimensioning.

DRAFT 102

Drafting Conventions and Symbols

Prerequisite: DRAFT 101

2 lectures per week: 2 hrs credit

This course introduces the notation used on detail and assembly drawings. In addition, assembly and detail drawings are used to illustrate print identification, holes, sections, tapers, and castings. Emphasis is placed on reading shop prints.

DRAFT 103

Three Dimensional Shapes

Prerequisite: DRAFT 102

2 lectures per week: 2 hrs credit

This course employs pictorial drawings to enable practice in three dimensional visualization interpretation, the accuracy of such interpretation being determined by the clay models students produce.

DRAFT 105

Design Applications for Mechanical Trades

Prerequisite: AMATH 101

2 lectures per week: 2 hrs credit

This course deals with the application of geometry and trigonometry to fundamental design problems in the mechanical trades. The areas of instruction include such topics as: computing pulley distances, finding patch diameter, finding the chord length on a bolt hole pattern, determining diameter given part of a circle, and determining fillet radius.

DRAFT 115

Blueprint Reading for Mechanical Trades

Prerequisite: None

2 lectures per week: 2 hrs credit

This course in blueprint reading emphasizes the sketching and reading of mechanical drawings. Topics include sketching of machine parts, common notations, fits and finish marks, threads and tapers, sectioning, isometric, and oblique drawings.

Early Childhood Education

ECED 102

Observation and Guidance of Children

Prerequisite: ED 101 or concurrent enrollment in ED 101

3 lectures per week: 3 hrs credit

This course examines the guidance and observation practices that support the development of the young child. Practice in observation, reflection, and guidance is included so students have the chance to apply child development theory to practical situations.

ECED 103

Health, Safety, and Nutrition

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course focuses on the personal health of the child and covers nutrition and safety issues. It meets the State of Illinois teacher certification requirement in health and general education.

ECED 104

Introduction to Early Childhood Education

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This overview of early childhood care and education includes basic values, structure, organization, and programming in early childhood education. A clinical component of 15 hours is required.

ECED 105

Creative Activities for Children

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces the theoretical framework for creativity and creative activities in the early childhood classroom and provides an overview of the developmental stages in children's creative growth. Students explore art, music, creative movement and drama curriculum for young children.

ECED 108

Science and Math for the Young Child

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a methods course introducing the theory and practice of teaching science and mathematics to young children. It focuses on developing a curriculum that emphasizes discovery methods of teaching and learning. It also includes model activities and instructional materials.

ECED 110**Care and Education: Infants, Toddlers, 2-Year Olds**

Prerequisite: ED 101

3 lectures per week: 3 hrs credit

This course provides an overview of developmentally appropriate infant, toddler, and 2-year old programs. Students focus on practices that foster children's well-being, and on creating a curriculum and environment that supports physical and social growth and good communication with parents.

ECED 120**Child, Family, and Community**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course examines ways in which the structure, values, and resources of family and community affect children. It explores the relationships between the child, family, community, and educators including parent education and involvement, family and community lifestyles, child abuse, and current family life issues. (*same as EDU 120*)

ECED 130**Guidance and Classroom Management**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course studies different approaches to classroom management with the aim of analyzing and modifying classroom behavior to facilitate the learning of diverse and exceptional students. (*same as EDU 130*)

ECED 201**Sign Language I—Manual Communications I**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is an introduction to sign language and deaf culture covering basic American sign language skills, both receptive and expressive. Course focus is on building sign vocabulary, fingerspelling, grammar and syntax rules as well as developing awareness of the deaf community.

ECED 202**Sign Language II—Manual Communications II**

Prerequisite: ECED 201

3 lectures per week: 3 hrs credit

This is a continuation of Sign Language I. It explores deaf culture, and introduces intermediate American sign language skills, both receptive and expressive. The course focuses on increasing sign language vocabulary, improving fingerspelling fluidity, and furthering knowledge of grammar and syntax.

ECED 205**Language Arts for Children**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course focuses on teaching methods that foster the development of language in the young child, and explores the role of the teacher in creating an effective language arts curriculum. Students learn how to incorporate activities and materials that enhance the development of language and literacy. (*same as EDU 205*)

ECED 213**Multicultural Education**

Prerequisite: Placement into ENG 099 or higher

3 lab hrs per week: 3 hrs credit

Multicultural education examines social factors that affect education decision-making and student achievement in United States schools. It addresses the need for intercultural competence, culturally informed instructional strategies, promotion of social justice, and reduction of racism in order to create democratic classrooms. (*same as EDU 213*)

ECED 214**Administration of Early Childhood Education Centers**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is for teachers or directors of early childhood centers who wish to improve their skills in administration and supervision, and for those who want to become directors. Students explore licensing and accreditation standards, management processes including fiscal and legal guidelines, and staff management and supervision.

ECED 216**Teaching Mathematics to the Young Child**

Prerequisite: MATH 090 with a C or better

3 lectures per week: 3 hrs credit

This course focuses on the development of mathematical reasoning in young children. It includes hands-on activities that foster problem solving skills and encourage further exploration. (*same as EDU 216*)

ECED 299**Early Childhood Education Internship**

Prerequisite: ED 101 and ECED 104 and consent of instructor

1 lecture, 10 lab hrs per week: 3 hrs credit

This course includes participation in the Prairie State College Children's Learning Center under faculty supervision. Students use knowledge and practice skills gained in early childhood education courses as they spend a minimum of 10 hours per week in the center. The course includes a one hour per week seminar that gives students a chance to discuss and review the internship experience.

Economics

ECON 201 (IAI: S3 901)

Macroeconomic Principles

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course provides an understanding of the structure, institutions, and general economic principles governing the operation of the American economy. Included are a study of the basic economic concepts and theories, and the forces which determine the level of production and employment in the economy. The basic principles of money and banking, economic growth and development and the world economy, and a study of the role that monetary and fiscal policy play in the determination of the economy's level of production, employment and income are presented.

ECON 202 (IAI: S3 902)

Microeconomic Principles

Prerequisite: ECON 201

3 lectures per week: 3 hrs credit

This course examines factors that determine the structure of resource and product markets, consumer choice, the sources that determine the level of production and employment in individual industries, and the factors which govern the level of price and output at which individual firms choose to operate. Attention is given to a study of international economics and certain contemporary economic problems.

Education

ED 100

Foundations of American Public Education

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is an overview of American education as both a profession and a public enterprise. The social, historical, and philosophical foundations are used to give perspective to an examination of current issues, policies and trends in the field of education, including cultural diversity and the standards movement. The organization and structure, financing, and curriculum issues in education are also discussed. A clinical component of 15 hours is required.

ED 101

Child Growth and Development

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a foundation course in the theories and principles of child growth and development from the prenatal through the adolescent years. It is an in-depth study of physical, cognitive, language, and social-emotional development. There is a special emphasis on the application of this knowledge in planning, implementing, and assessing student activities. A clinical component of 15 hours is required.

ED 160

Technology for Teachers

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces educators to the use of the computer as an educational tool. The course focuses on a solid understanding of educational technology, and how to integrate computers into the classroom curriculum. Hands-on technology activities are an important part of the course. Students begin to develop their teaching portfolios. (*same as ITAPP 160*)

ED 212

Exceptional Child

Prerequisite: ED 101

3 lectures per week: 3 hrs credit

This course provides an overview of children with exceptional cognitive, physical, social, and emotional characteristics. It includes an analysis of developmental and emotional needs imposed by exceptionality. Students consider identification protocols, intervention strategies, and teaching methods and programs designed to meet the needs of exceptional children (including but not limited to children with learning disabilities). Applicable federal and state laws and requirements are covered including the Individuals with Disabilities Education Act, Americans with Disabilities Act, Individualized Family Service Plan, Individualized Education Plan and inclusive programs. This course fulfills the requirements of School Code, Article 21-2a. A clinical component of 15 hours is required.

ED 220

Children's Literature

Prerequisite: ENG 101 with a C or better

3 lectures per week: 3 hrs credit

This course focuses on the importance of children's literature from preschool to adolescence and its enjoyment at home and in the classroom. Through reading a varied selection of books, students learn to evaluate, select, discuss, and use literature for children. It is recommended for teachers, aides, librarians and parents. (*same as ENG 220*)

Education – Paraprofessional

EDU 111

Mathematics for Paraprofessionals

Prerequisite: MATH 085 or placement into MATH 090

3 lectures per week: 3 hrs credit

This course is designed for the elementary school paraprofessional. This course strongly emphasizes hands-on learning; thus, manipulatives are used extensively. Topics covered include problem solving, sets, number theory, statistics, probability, geometry, and measurement. Students seeking general education mathematics credit for transfer are advised to register for the MATH 200/206 sequence. (*same as MATH 111*)

EDU 120**Child, Family, and Community**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course examines how the structure, values, and resources of family and community affect children. It explores the relationships between the child, family, community, and educators including parent education and involvement, lifestyles, child abuse, and current family life issues. (*same as ECED 120*)

EDU 130**Guidance and Classroom Management**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course studies different approaches to classroom management with the aim of analyzing and modifying classroom behavior to facilitate the learning of diverse and exceptional students. (*same as ECED 130*)

EDU 205**Language Arts for Children**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course deals with techniques and methods of encouraging the development of language in the young child. Methods for stimulating speech, discussion, and increasing vocabulary are included. (*same as ECED 205*)

EDU 213**Multicultural Education**

Prerequisite: Placement into ENG 099 or higher

3 lab hrs per week: 3 hrs credit

Multicultural education examines social factors that affect education decision-making and student achievement in United States schools. It addresses the need for intercultural competence, culturally informed instructional strategies, promotion of social justice, and reduction of racism in order to create democratic classrooms. (*same as ECED 213*)

EDU 216**Teaching Mathematics to the Young Child**

Prerequisite: MATH 090

3 lectures per week: 3 hrs credit

This is a methods course in the teaching of mathematics to children through grade 3. Topics covered include the study of math concept development in young children, hands-on activities, development of problem-solving skills, and methods for encouraging exploration. (*same as ECED 216*)

EDU 221**Clinical Experience**

Prerequisite: Consent of program coordinator

5 lab hrs: 1 hr credit

This course provides documented clinical experiences involving observation of the interaction between children and practitioners according to specified guidelines, within the appropriate subject matter and age category. Clinical sites are arranged in a variety of educational settings, including those with diverse student populations. Student work is planned, guided, and evaluated by a mentor or supervisor.

Electrician**ELECT 100****Electric Wiring I**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course is a beginning course in residential wiring and assumes no previous electrical background. The course is designed to help develop an understanding of the electrical principles involved as well as the physical wiring practices.

ELECT 101**Fundamentals of Electricity I**

Prerequisite: None

2 lectures per week: 2 hrs credit

This is an introductory course in direct current electricity. Students analyze series, parallel, and combination circuits using Kirchoff's current and voltage laws, electrical measuring instruments, and measurement techniques. Students verify basic principles of electricity in the laboratory.

ELECT 102**Fundamentals of Electricity II**

Prerequisite: ELECT 101; AMATH 101 or equivalent recommended

2 lectures per week: 2 hrs credit

This course is a more in-depth look at the fundamentals of electricity. Fundamental electric laws and relationships are studied. Electrical calculations and measurements are emphasized. Series, parallel, and combination circuits are analyzed.

ELECT 103**Alternating Current**

Prerequisite: ELECT 101; AMATH 101 or equivalent recommended

2 lectures per week: 2 hrs credit

This is a fundamental course in alternating current theory and analysis. Students analyze circuits that include series and parallel configuration of resistance, inductance, and capacitance. The analysis includes vector operations, complex impedance, phase angles, single- and three-phase representations, Delta circuits, and Wye circuits.

ELECT 105

Power, Transformers, Polyphase Circuits

Prerequisite: ELECT 101 or equivalent

2 lectures per week: 2 hrs credit

This course includes the study of the principles of transformer operation including on load conditions, efficiency, and testing. Polyphase principles are studied including calculation techniques, measurement, and power relationships.

ELECT 106

DC Motors and Generators

Prerequisite: ELECT 101

2 lectures per week: 2 hrs credit

This course is a study of DC generators and motors. Topics covered include the construction, basic principles, speed-voltage characteristics, and regulation of DC generators. Also covered are basic principles, speed-torque characteristics, types of field excitation, and starting procedures of motors.

ELECT 107

AC Motors and Generators

Prerequisite: ELECT 103 or ELECT 104

2 lectures per week: 2 hrs credit

This course is a study of AC generators and motors. The topics covered include the construction, basic principles, speed-voltage characteristics, and regulation of AC generators. Also covered are basic principles, speed-torque characteristics, types of field excitation, and starting procedures of motors. Single- and poly-phase generators, motors, and switching equipment are covered.

ELECT 108

Electrical Control for Machines I

Prerequisite: ELECT 101 or equivalent

2 lectures per week: 2 hrs credit

This is a course in industrial controls which are frequently used in industry to control motors. Single- and three-phase systems are covered. Industry standards and codes are presented throughout for promoting an understanding of safety and preventive maintenance. Practical experiences include wiring relays, motor starters, and controlling these with different control devices and sensors.

ELECT 109

Electrical Control For Machines II

Prerequisite: ELECT 101 or equivalent

2 lectures per week: 2 hrs credit

This course is a continuation of ELECT 108. Industry controls which are frequently used in industry to control motors are analyzed. Single- and three-phase systems are covered. Industry standards and codes are presented throughout for promoting an understanding of safety and preventive maintenance. Practical experiences include wiring motor starters, control transformers reversing and motor sequencing, and controlling these with various control devices and sensors.

ELECT 110

DC Crane Control

Prerequisite: ELECT 101 or equivalent

2 lectures per week: 2 hrs credit

This course is designed to train and aid in the maintenance of overhead cranes powered by direct current motors. Servicing and troubleshooting techniques are taught by referring to the electrical diagrams provided by crane control manufacturers.

ELECT 111

Electronic Principles I

Prerequisite: AMATH 101 or equivalent recommended

2 lectures per week: 2 hrs credit

This is a course in electronic devices covering the principles of how electronic devices work and how they are connected into basic electronic circuits. The content includes introductory analysis of device parameters and circuit application.

ELECT 112

Electronic Principles II

Prerequisite: ELECT 111

2 lectures per week: 2 hrs credit

This is a course in electronic devices covering the bipolar and field effect basic theory, transistor biasing, and amplification. The SCR is also studied. The course includes an introduction to digital logic.

ELECT 113

Blueprint Reading for Electricians

Prerequisite: None

2 lectures per week: 2 hrs credit

This course provides students with a background in reading and interpreting blueprints and wiring diagrams pertaining to single-family dwellings, commercial locations, industrial locations, special and hazardous locations. Students are exposed to the National Electrical code and the use of electrical tables.

ELECT 114

National Electrical Code

Prerequisite: None

2 lectures per week: 2 hrs credit

This course is a review of the National Electrical Code, and the areas to which it is most frequently applied are covered in detail. Topics covered include: maximum current for each wire size, overcurrent protection, wiring methods and materials, motor controllers, transformers, switchboards, and emergency systems.

ELECT 120**Electrical Safety**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers the basic electrical dangers and safety precautions that should be observed when working with electricity or electrical circuits. Safety procedures are emphasized along with the purpose of fuses, circuit breakers, disconnect boxes, insulation, and grounding.

ELECT 141**Conduit Bending - Thinwall**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course teaches how to calculate and bend one-inch and 3/4-inch EMT conduit for electrical use.

ELECT 142**Conduit Bending and Threading**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course teaches how to calculate and bend and thread rigid conduit and how to thread thickwall conduit for electrical use.

ELECT 150**Preventive Maintenance - Electrical**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course in methods of preventive maintenance of electrical equipment includes insulation testing and evaluation, electronic testing, AC generator and motor checking, overcurrent protection, and system distribution problems.

ELECT 160**Electrical Wiring II**

Prerequisite: ELECT 100

2 lectures per week: 2 hrs credit

This is a continuation of Electric Wiring I. It focuses on the technical skills required to perform electrical installations, including calculating conductor sizes and voltage drops, determining circuit requirements, sizing service, and grounding procedures.

ELECT 201**Digital Fundamentals I**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course in digital systems is an introduction to number systems and codes, logic gate representation, and combinatorial logic circuits.

ELECT 202**Digital Fundamentals II**

Prerequisite: ELECT 201 or equivalent recommended

2 lectures per week: 2 hrs credit

This course in digital systems is a continuation of ELECT 201 advancing into the study of counters, registers, integrated circuit logic, logic families, interfacing, and memory devices.

ELECT 203**Industrial Electronics I**

Prerequisite: ELECT 101, 112

2 lectures per week: 2 hrs credit

This course is a study of the underlying concepts and operation of electronic devices, circuits, and systems used in industrial control. Concepts instead of design topics are emphasized.

ELECT 204**Industrial Electronics II**

Prerequisite: ELECT 101, 203

2 lectures per week: 2 hrs credit

This course is a continuation of the study of underlying concepts and operation of electronic devices, circuits, and systems used in industrial control. Concepts instead of design topics are emphasized.

ELECT 206**Instrumentation Fundamentals I**

Prerequisite: ELECT 101

2 lectures per week: 2 hrs credit

This course is a study of electronic instrumentation with applications to the control of the industrial processes. Topics covered include an introduction to process control, transducers, controller principles, and control elements.

ELECT 207**Instrumentation Fundamentals II**

Prerequisite: ELECT 206

2 lectures per week: 2 hrs credit

This course is a continuation of ELECT 206 and covers instrumentation applications to the process control.

ELECT 208**Programmable Logic Controllers I**

Prerequisite: None

2 lectures per week: 2 hrs credit

This is a course that studies programmable controller operations as used in industry. This course is based on the principle that the technician must understand programmable controller terminology as well as relationships of the input/output, processor section, programmable devices, memory, and interfacing sections of the programmable controller. The use of ladder diagrams and programming techniques are explained along with the programmable controller versatility to control integrated processes.

ELECT 209

Programmable Logic Controllers II

Prerequisite: ELECT 208 or equivalent

2 lectures per week: 2 hrs credit

This course is a continuation of Programmable Logic Controllers I. Students continue to learn more programming techniques as well as manipulation of data, such as data comparison, connection of peripheral devices, and controller logic and hardware troubleshooting. Certain brand-name programmable controllers are identified and used. Practical wiring, troubleshooting, and programming of a particular model programmable controller are emphasized.

ELECT 220

Programmable Logic Controllers

Prerequisite: None

4 lectures per week: 4 hrs credit

This course studies programmable controller operations as used in industry. The use of ladder diagrams and programming techniques is explained along with programmable versatility to control integrated processes. Students develop expertise in connection of peripheral devices, controller logic and hardware, troubleshooting, and practical wiring procedures. (equivalent to ELECT 208 and 209 combined)

ELECT 290

Special Topics in Electricity

Prerequisite: Consent of program coordinator

3 lectures per week: 3 hrs credit (variable credit offered; may be repeated for credit 3 times with different topics)

Topics pertaining to current and emerging technology in electricity are covered. Content and format of this course is variable and may be initiated by company training needs, updates in technology in the electrical field, and the need to adhere to rules such as the revisions that occur in the National Electrical Code. Subject matter is indicated in the class schedule.

ELECT 298

Electrical Seminar

Prerequisite: Completion of 24 credits of ELECT courses and the consent of program coordinator

1 lecture per week: 1 hr credit

This seminar is taken in conjunction with ELECT 299-Internship. The content of the seminar relates to the internship work which is correlated with students' fields of study.

ELECT 299

Electrical Internship

Prerequisite: Completion of 24 credits of ELECT courses and the consent of program coordinator

10 lab hrs per week: 2 hrs credit

Student interns are assigned to an approved training site. This is scheduled by joint agreement of the student, the site supervisor, and the program coordinator. Students must also register for ELECT 298 - Electrical Seminar.

Emergency Medical Services

(including First Responder)

EMS 101

Emergency Medical Technician

Prerequisite: 18 years of age and COMPASS reading score of 78 or better or placement in ENG 101. Immunizations, CPR certification.

Obtain information packet from Prairie State College Nursing department prior to start of course. Must enroll in person

6 lectures, 2 lab hrs per week: 7 hrs credit

Care, handling, and extrication of the critically ill and injured is taught. Emphasis is on the development of student skills in recognition of symptoms of illnesses and injuries, and proper emergency care and procedures. Subjects covered include the human body, cardiac arrest, resuscitation, fractures, injuries, childbirth, lifting and moving patients, and extrication from automobiles.

EMS 200

Paramedicine I

Prerequisite: BIOL 221, 222 with C or better; concurrent enrollment in EMS 205, 210, and 215; consent of instructor

12 lectures per week: 12 hrs credit

This course introduces the field of paramedicine. Students study the roles and responsibilities of the pre-hospital care provider, medical/legal issues, ethics, principles of pathophysiology, pharmacology, medication administration, airways management and ventilation, patient assessment, trauma, and gynecological and obstetrical emergencies. Skill acquisition is integrated into the course of study.

EMS 205

Paramedicine: Field Practicum I

Prerequisite: Concurrent enrollment in EMS 200, 210, and 215

8 lab hrs per week: 2 hrs credit

This course allows students opportunities to perform or observe assessments and procedures learned in the classroom in a pre-hospital setting under the supervision of a licensed paramedic. Students focus on trauma, acute/chronic illness, and life threatening emergencies of various etiologies. They function as team members while riding with the assigned ALS unit.

EMS 210

Paramedicine: Hospital Practicum

Prerequisite: Concurrent enrollment in EMS 200, 205, and 215

8 lab hrs per week: 2 hrs credit

This course allows students opportunities to perform or observe assessments and procedures learned in the classroom in various departments within a hospital setting. Students focus on trauma, acute/chronic illness, and obstetrics. They function as team members in the respective hospital units. Upon successful completion of the required activities and skill sets, students are able to advance to the Paramedicine II course and the final program practicums.

EMS 215**Paramedicine: Seminar I**

Prerequisite: Concurrent enrollment in EMS 200, 205, and 210

1 lecture hour per week: 1 hour credit

This course is designed to provide students with an opportunity to discuss their first-semester field and hospital-based experiences. It provides a forum to help insure the successful transition to the work world. Previously determined topics are discussed that go beyond the scope of the core curriculum. Students present small group projects based on real-world issues in pre-hospital care to the class that involve both written and oral communication skills.

EMS 220**Paramedicine: Seminar II**

Prerequisite: EMS 200, 205, 210, 215 with a C or better

12 lectures per week: 12 hrs credit

This course is a continuation of Paramedicine I. Students study medical emergencies including, but not limited to: cardiac, neurology, endocrinology, allergies and anaphylaxis, gastrointestinal disorders, urinary and renal disorders, toxicology, hematology and environmental conditions, infectious and communicable diseases, and psychiatric disorders. Additionally, students focus on the use of the intravenous route of administration in all its forms, pharmacology, and life span considerations from neonatal, to pediatrics and through gerontological considerations.

EMS 225**Paramedicine: Field Practicum II**

Prerequisite: Concurrent enrollment in EMS 200, 230, and 235

8 lab hrs per week: 2 hrs credit

This course is a continuation of Field Practicum I. Students perform or observe assessments and procedures learned in the classroom in a pre-hospital setting under the supervision of a licensed Paramedic. This practicum focuses more heavily on care of the cardiac client and the standard medical orders related to the treatment of cardiac conditions. Related to treatment of cardiac conditions, students function as team members while riding with the assigned advanced life support (ALS) unit. This course must be completed successfully in order to be eligible to write the state licensure exam.

EMS 230**Paramedicine: Leadership Practicum**

Prerequisite: Concurrent enrollment in EMS 220, 225, and 235

8 lab hrs per week: 2 hrs credit

This course focuses on the management and leadership responsibilities of a professional paramedic. Students have a project based experience that introduces the paramedic to the role of instructor, EMS coordinator, quality assurance manager, and the like. Students are assigned to observe and assist various individuals who function in a management or leadership role in emergency pre-hospital care or the education of pre-hospital care providers. Assignments reflect hands-on experience related to the preceptor's daily responsibilities. This experience also includes observational and hands-on experience with end-of-life and pastoral care.

EMS 235**Paramedicine: Seminar II**

Prerequisites: Concurrent enrollment in EMS 220, 225, and 230

1 lecture hour per week: 1 hour credit

This course is designed to provide students with an opportunity to discuss field and hospital-based experiences they encounter during the final semester of their core curriculum. It provides a forum to help insure the successful transition to the work world. Previously determined topics are discussed that go beyond the scope of the core curriculum. Students present group projects to the class that deal with leadership or staff development topics. This presentation requires the use of several instructional methodologies that match the topic being presented.

FRESP 101**First Responder**

Prerequisite: Placement into ENG 099 or higher

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides students with the knowledge and skills necessary in an emergency to sustain life, reduce pain, and minimize the consequences of injury or of sudden illness until advanced medical help can arrive.

English

(including Literature)

ENG 097

Fundamental English I

Prerequisite: Qualifying score on English Placement Test

4 lectures per week: 4 hrs non-degree, non-transfer credit
(may be repeated two times)

This course provides basic writing skills for students who need individualized instruction. The emphasis is on grammar and sentence structure.

ENG 098

Fundamental English II

Prerequisite: ENG 097 with a C or better or qualifying score on English Placement Test

4 lectures per week: 4 hrs non-degree, non-transfer credit
(may be repeated two times)

This course provides a review of basic writing and grammar. Emphasis is placed on sentence structure, grammatical and mechanical problems, and spelling. Through the writing of short essays, students learn to combine clear correct sentences into a coherent, organized whole.

ENG 099

Fundamental English III

Prerequisite: ENG 098 and RDG 098 with a C or better or qualifying score on English Placement Test

6 lectures per week: 6 hrs non-degree, non-transfer credit
(may be repeated two times)

This course is designed to equip students with the critical inquiry and writing skills necessary to succeed in college-level courses. Through prewriting and rewriting of essays and a research paper, students learn to combine clear, correct sentences into a coherent, organized whole, reflecting critical understanding of assigned texts. Note: All students must complete the English 099 Exit Test with a passing grade in order to pass English 099.

ENG 101 (IAI: C1 900)

Composition I

Prerequisite: ENG 099 with a C or better or qualifying score on English Placement Test

3 lectures per week: 3 hrs credit

This is the first course in the composition sequence. It develops the ability to write clear, correct, effective personal, expository, and argumentative prose. It emphasizes critical reading skills, collaborative peer work, and use of library resources. Students write a minimum of five essays with extensive revisions. Review of grammar and mechanics is included. Note: All students must write a passing English 101 Portfolio in order to pass English 101.

ENG 102 (IAI: C1 901R)

Composition II

Prerequisite: ENG 101 with a C or better

3 lectures per week: 3 hrs credit

This is the second course in the composition sequence. Emphasis is on the writing process with special attention to the research paper. Writing activities include both short and longer forms of traditional academic writing including critical essays and a documented investigative paper.

ENG 110

Creative Writing: Poetry

Prerequisite: ENG 101 with a C or better or consent of instructor

3 lectures per week: 3 hrs credit

Students write poetry in a variety of genres, learn the structure and elements of poetry and the writing process, and demonstrate an understanding of the critical terminology of the creative writer.

ENG 111

Creative Writing: Nonfiction Prose

Prerequisite: ENG 101 with a C or better

3 lectures per week: 3 hrs credit

Students study the elements of nonfiction and the critical terminology of the creative writer, and produce fully developed works of nonfiction. Students explore themselves, their identity, and their world through writing autobiography, family history, and observations on culture, places, and time periods.

ENG 211 (IAI: H3 914)

American Literature I

Prerequisite: ENG 101 with a C or better

3 lectures per week: 3 hrs credit

This course studies American literature from the pre-colonial period to the Civil War and includes the style, techniques, and themes of the major writers responsible for shaping the traditions of American literature. Emphasis is on understanding major literary movements in their intellectual, social, and political contexts.

ENG 212 (IAI: H3 915)

American Literature II

Prerequisite: ENG 101 with a C or better

3 lectures per week: 3 hrs credit

This course is a study of American literature from the Civil War to the present. Emphasis is placed on the peculiarly American as well as universal themes which recur throughout poetry, drama, short stories, and novels of major American writers. Major literary movements are studied in relation to intellectual, social, and political contexts.

ENG 215 (IAI: H3 910D)**African-American Literature***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This survey course examines the varieties of the Black experience in America as it is found in poetry, the novel, the short story, and drama. Particular emphasis is placed on trends and themes as revealed in changes in style and content.

ENG 220**Children's Literature***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course focuses on the importance of children's literature from preschool to adolescence and its enjoyment at home and in the classroom. Through reading a varied selection of books, students learn to evaluate, select, discuss, and use literature for children. It is recommended for teachers, aides, librarians, and parents. (*same as ED 220*)

ENG 221 (IAI: H3 903)**Introduction to Poetry***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

Students read and enjoy poetry of various types and periods. Through close reading of selected poems, students learn to appreciate the beauty and art of poetry and its relevance to their own lives and emotions.

ENG 231 (IAI: H3 912)**British Literature I***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course surveys British literature from its Anglo-Saxon beginnings through 18th-century Neoclassicism. Writers and their works are studied in relation to their intellectual, social, and political contexts.

ENG 232 (IAI: H3 913)**British Literature II***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course surveys British literature from 1800 to the present with an emphasis on major literary movements understood in relation to their intellectual, social, and political contexts.

ENG 240 (IAI: H3 901)**Introduction to Fiction***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course is an introduction to fiction with special emphasis on understanding and appreciation of the short story. The primary focus is on developing students' ability to read critically, to learn about the principal literary elements of fiction, and to improve writing skills through the use of literature as subject matter.

ENG 243 (IAI: H3 908N)**Non-Western Literature In English***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course examines non-Western literature written during the twentieth century. Emphasis is placed on understanding the works both as part of local and global aesthetic traditions and within their intellectual, political, social, and historical contexts.

ENG 252 (IAI: H3 902)**Introduction to Drama***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course emphasizes drama as literature and studies plays of various genres from a variety of literary periods. Eight to ten plays are analyzed in terms of meaning, form, and value.

ENG 256 (IAI: HF 908)**Film and Literature***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course examines the formal, thematic, and historical relationships between literature and film, and includes an examination of the adaptations and influences that demonstrate the strengths of each artistic medium.

ENG 261 (IAI: H3 906)**Western/World Literature I***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course surveys masterpieces of Western/World literature from the beginnings in the ancient world through the 16th century. Themes of major writers are explored through consideration of their lives and work in the context of their times.

ENG 262 (IAI: H3 907)**Western/World Literature II***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course surveys masterpieces of Western/World literature from the 17th, 18th, 19th, 20th, and early 21st centuries. Writers and their works are discussed within the context of their times.

ENG 271 (IAI: H3 905)**Introduction to Shakespeare***Prerequisite: ENG 101 with a C or better*

3 lectures per week: 3 hrs credit

This course includes selected sonnets of Shakespeare and six-eight of his plays: representative selections from the comedies, tragedies, historical dramas, and romances. Emphasis is on the dramatic and literary qualities of the works, but attention also is given to film versions of the plays.

Fire Science Technology

FST 101

Introduction to Fire Science Technology

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is an introduction to fire science technology programs. Topics covered include the history of fire service; objectives, roles, and responsibilities of the fire service and its personnel; accountability and liability. An overview of the educational requirements of EMS certification and recertification systems, and the role of the Office of the State Fire Marshal and National Fire Protection Association are discussed.

FST 102

Fire Prevention Principles I

Prerequisite: FST 101 or FST 119 with a C or better

3 lectures per week: 3 hrs credit

The emphasis of this course is on objectives and techniques of fire prevention programs. Included among the topics are building and electrical codes, zoning controls and other prevention standards, evaluation of fire hazards, and techniques for inspecting various types of buildings. Basic blueprint reading and sketching are also covered.

FST 104

Fire Tactics and Strategy I

Prerequisite: FST 119 with a C or better

3 lectures per week: 3 hrs credit

This course is an introduction to the basic principles and methods associated with fireground tactics and strategy as required by the company officer. It emphasizes size-up, fireground operations, prefire planning, and basic engine and truck company operations. Included are a survey of fire apparatus and equipment, its operation, the distribution of equipment and personnel, and preplanning of fireground operations.

FST 105

Construction and Fire Systems

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is an analysis of various methods of building design, construction, and materials. Fire-resistant features of materials, life safety methods of construction, and an introduction to building codes are included. An in-depth study of automatic extinguishing and detection systems with emphasis on automatic sprinkler equipment is covered. Also included are water spray, foam, carbon dioxide, and dry chemicals, stand pipe systems, and protection systems for special hazards.

FST 106

Hazardous Materials Operations

Prerequisite: FST 119 with a C or better

3 lectures per week: 3 hrs credit

This course identifies the competencies required of the first responder at the operational level responding to hazardous materials incidents. Included are the skills and techniques required to reduce and prevent the possibility of accidents, injuries, disabilities, and fatalities during response to hazardous materials.

FST 119

Firefighter II

Prerequisite: 18 years of age and COMPASS reading score of 78 or better or placement into ENG 101; FST 101; and documented affiliation with a fire department. Students must enroll in person.

6 lectures, 2 lab hrs per week: 7 hrs credit

This course equips students with basic knowledge and skills in areas such as fire behavior, equipment use, firefighter safety, rescue, and prevention. After successful completion of this course, students are eligible to write the State Fire Marshal Certification Exam. This program meets National Fire Protection Association (NFPA) standards.

FST 121

Introduction to Homeland Security

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course examines the programs and activities that have been implemented to improve the safety of our country. Special emphasis is placed on the threat of terrorism and strategies to address that threat. (same as CJ 120)

FST 201

Arson Investigation

Prerequisite: FST 101 with a C or better

3 lectures per week: 3 hrs credit

This course acquaints students with basic investigative techniques used in examining an arson case from its origin to a successful conclusion in the court system. It covers such topics as motives for arson, determining origin, scientific aids in investigation, interviews, statements, reports, interrogation, and presentation of the case in court. The course is of particular significance for firefighters, police, and insurance investigators.

FST 202

Vehicle and Machinery Operations

Prerequisite: FST 119 with a C or better

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides information on extrication and rescue of victims from vehicles involved in accidents. Emphasis is placed on equipment and techniques used in hazardous rescue operations.

FST 204**Fire Tactics and Strategy II**

Prerequisite: FST 104 with a C or better

3 lectures per week: 3 hrs credit

This course covers advanced principles and methods associated with the fire ground strategies, and tactics required of the multi-company officer or chief officer. It emphasizes multi-company alarm assignments, handling disasters, and major fire incidents by occupancy classification.

FST 205**Hazardous Materials Technician A**

Prerequisite: FST 106 with a C or better

3 lectures per week: 3 hrs credit

Methods of developing preplans for use by local departments are covered. Identification of hazards in communities and the designing of functional highway, rail, and industrial preplans to fit community needs are discussed.

FST 207**Fire Department Management I**

Prerequisite: FST 119 with a C or better

3 lectures per week: 3 hrs credit

This course covers responsibilities of fire service of various ranks. Included are qualifications and sources of authority, role of the company officer, and basic management theories, practices, and functions. This is one of two management courses required of eligible candidates pursuing Illinois Fire Marshal certification as a Fire Officer I.

FST 208**Fire Department Management II**

Prerequisite: FST 207 with a C or better

3 lectures per week: 3 hrs credit

This course is an introduction to the elements of management as they apply to fire department administration. Included are principles of management, communication, and group dynamics as they relate to the company officer. This is the second of two management courses required of eligible candidates pursuing Illinois State Fire Marshal certification as a Fire Officer I.

FST 209**Fire Prevention Principles II**

Prerequisite: FST 102 with a C or better

3 lectures per week: 3 hrs credit

The emphasis of this course is on public relations and inspection techniques and procedures. The course covers evaluation of fire hazards, inspection techniques, procedures for conducting inspection, record-keeping procedures, arson investigation, and on-site field inspections.

FST 210**Fire Apparatus Engineer**

Prerequisite: FST 119 with a C or better

3 lectures per week: 3 hrs credit

This course is designed to train Illinois fire service personnel to the Certified Fire Apparatus Engineer level. Based on State Fire Marshal standards, this course emphasizes terminology, preventive maintenance, pumps, pump controls, water supply, calculations, operations, supply and support of sprinklers and standpipe systems, foam and specialized equipment, pumping apparatus tests, and troubleshooting problems that occur during pump operations.

FST 212**Fire Service - Instructor I**

Prerequisite: FST 119 with a C or better

3 lectures per week: 3 hrs credit

This course is designed to meet the needs of firefighters wishing to expand their fire science knowledge in the area of instruction. It provides basic information about human relations in the teaching-learning environment, instructional methodologies, and techniques used in developing lesson plans.

FST 213**Fire Service - Instructor II**

Prerequisite: FST 212 with a C or better

3 lectures per week: 3 hrs credit

This course is a continuation of Fire Service - Instructor I. It provides basic information on program management, program development, lesson plan development, instructional development, and techniques used to create evaluation instruments.

FST 218**Fire Department Management III**

Prerequisite: FST 208 with a C or better

3 lectures per week: 3 hrs credit

This course covers principles and techniques used by mid-level managers and chief officers in fire service. Principles of time management, decision-making, motivation, and delegation are emphasized. This is one of two management courses required of eligible candidates pursuing Illinois certification as a Fire Officer II.

FST 219**Fire Department Management IV**

Prerequisite: FST 218 with a C or better

3 lectures per week: 3 hrs credit

This course covers the techniques used by mid-level managers and chief officers in fire service. Principles of time management, decision-making, motivation, and delegation are emphasized. This is the second of two management courses required of eligible candidates pursuing Illinois certification as a Fire Officer II.

First Responder

(See Emergency Medical Services)

Geography

GEOG 101 (IAI: S4 900N)

Cultural Geography

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course provides a basic study of the cultural systems and practices of man as these developed in particular regions of the earth, and the interrelationships which developed through time. It is a study of the broad elements of human interaction, the systems of developmental growth, the systems of cultural transfer between groups, and the increasing levels of conceptual growth by which particular cultural groups may perceive their environments during different time periods. It provides a study of institutionalized human systems and their distribution over the surface of the earth.

GEOG 105 (IAI: PI 909)

Introduction to Physical Geography

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a non-lab physical science course emphasizing the physical aspects of the Earth's environment. Topics surveyed include weather, climate, water, and geologic processes. The distribution of geographic features around the world is studied. Emphasis is on the relationships between human society and the physical environment.

Geology

GEOLO 101 (IAI: PI 907L)

(was GEOLO 210)

Physical Geology

Prerequisite: Placement into ENG 099 or higher

3 lectures, 2 lab hrs per week: 4 hrs credit

Physical geology is a general education course which introduces basic geologic principles. It examines processes that have shaped the Earth including plate tectonics, earthquakes, volcanoes, mountain building, minerals, rocks, water, and glaciers. Laboratory work and field trips emphasize these topics and the scientific method.

Graphic Communications

(See also Art and Photographic Studies)

GC 115

Introduction to Computer Art

Prerequisite: Placement into ENG 099 or higher

6 lab hrs per week: 3 hrs credit

This studio course introduces students to the history and use of computer applications in the visual arts. Students learn to generate, combine, and manipulate traditional and contemporary visual ideas using both raster paint/photo retouching programs and professional quality vector drawing programs. (same as ART 115)

GC 151

Principles of Graphic Design

Prerequisite: GC 115 or ART 115 or concurrent registration

6 lab hrs per week: 3 hrs credit

Students are introduced to theoretical and practical aspects of visual communication. Techniques, processes, and terminology of graphic design are covered.

GC 154

Typography

Prerequisite: GC 151

1 lecture, 2 lab hrs per week: 2 hrs credit

This course investigates the effective use of type in visual design. Students experiment with the creation of original fonts using digital applications along with some traditional methods.

GC 156

Design Software Workshop: Special Topics

Prerequisite: Placement into ENG 099 or higher

1 lecture, 2 lab hrs per week: 2 hrs credit (may be repeated 3 times)

This course provides orientation, concentration, and practical application of a specific computer imaging software programs. Each workshop features one of six leading software packages identified by graphic design professionals.

GC 160

Design for Publishing

Prerequisite: GC 115 or ART 115

1 lecture, 4 lab hrs per week: 3 hrs credit

This course focuses on design opportunities in publishing and teaches students how to develop newsletters, ads, catalogs, and presentations.

GC 162**Introduction to Web Site Development**

Prerequisite: Placement into ENG 099 or higher

1 lecture, 4 lab hrs per week: 3 hrs credit

This course introduces professional Web site creation and management using basic features of Web design software. Students apply basic principles of mass communication; translate copy, sound, and still and moving images into the Web environment; use design principles to develop story boards, site maps, and navigation structures; and upload and maintain a Web site. Web-related legal and ethical issues are covered. Successful completion prepares students to pass exams leading to various Certified Internet Webmaster (CIW) credentials. (*same as ITWEB 103*)

GC 171**Illustration**

Prerequisite: GC 151 (recommended)

1 lecture, 4 lab hrs per week: 3 hrs credit

Offered fall term only

In this studio environment students learn to draw controlled illustrations with confidence. Emphasis is placed on perception and rendering ability, with a variety of techniques and media. Digital and traditional media are used.

GC 175**Animation Techniques**

Prerequisite: GC 115 or ART 115

1 lecture, 4 lab hrs per week: 3 hrs credit

This course introduces the concepts, processes, and history of animation and covers both traditional and two-dimensional computer-based animation techniques. It incorporates the use of drawn, vector and bit-mapped formats as a means of generating animated sequences.

GC 182**Digital Video**

Prerequisite: GC 115 or ART 115

1 lecture, 2 lab hrs per week: 2 hrs credit

This course covers the theory and practical techniques required to create and produce digital video. Computer software and production tools are used.

GC 185**Digital Sound**

Prerequisite: GC 115 or ART 115

1 lecture, 2 lab hrs per week: 2 hrs credit

Students use digitized sounds, traditional foley effects, general midi music and dubbed effects to develop sound tracks for film, video, and multimedia. The use of professional sound and editing techniques is emphasized. This is a studio course in which the primary emphasis is development of a student's portfolio.

GC 262**Flash/Interface Design**

Prerequisite: GC 151; ITWEB 103 or GC 162 recommended

1 lecture, 4 lab hrs per week: 3 hrs credit

This studio course develops students' understanding of interactive Web and interface design with an understanding of graphic design and interface design principles. Students develop an integrated and consistent interface for a Web site using graphic programs including, but not limited to, Dreamweaver, Flash, and Photoshop. Students practice extensive use of scripting and programming with an emphasis on using professional design techniques and standards. Sound, video, animation, and interactivity are combined in interactive work. The primary emphasis of this course is development of students' portfolios. Writing appropriate to the profession is required. (*same as ITWEB 203*)

GC 265**Interactive Design Project**

Prerequisite: GC 162

1 lecture, 4 lab hrs per week: 3 hrs credit

This course develops students' ability to work as part of a creative team. Students develop a group multimedia project using professional management techniques and standards. Sound, video, animation, and interactivity are used to create an interactive work. This is a studio course in which the primary emphasis is development of a student's portfolio.

GC 270**Advanced Web Site Development**

Prerequisite: GC 162 or ITWEB 103

2 lecture, 2 lab hrs per week: 3 hrs credit

This course teaches students advanced Web site development techniques including CSS layout techniques, interactivity with AJAX and the Spry framework, advanced navigation and dropdown menus, image manipulation, and Web site development deployment and management. (*same as ITWEB 270*)

GC 287**Professional Design**

Prerequisite: GC 160

1 lecture, 4 lab hrs per week: 3 hrs credit

This course concentrates on advanced projects in computer image manipulation and design with emphasis on quality print output, film recording, and other methods of production. Use of flatbed and film scanner techniques are also covered.

GC 298

Independent Visual Study

Prerequisite: GC 151; consent of instructor

1 lecture, 4 lab hrs per week: 3 hrs credit

This course is an investigation of independent visual problems as they relate to student-generated projects which require advanced research and development.

GC 299

Internship/Seminar

Prerequisite: Minimum 12 credit hrs in ART, GC; consent of instructor

1 lecture, 15 lab hrs per week: 4 hrs credit (variable credit)

This internship and seminar provides an opportunity for students to earn credit while working in a graphic design related area. Formalized student-employer agreements identify objectives, work plan, and guidelines for evaluation.

Health

HLTH 100

Orientation to Health Careers

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

Students will learn about health care systems and the various health care careers available as well as qualities needed to be a health care worker. Medical terminology, anatomy and physiology, health promotion, and disease prevention are stressed.

HLTH 101

Health and Wellness

Prerequisite: Placement into ENG 099 or higher

2 lectures per week: 2 hrs credit

This course offers a study of the physical and mental workings of the body in sickness and in health. It provides information on topics related to mental and physical health such as holistic health, stress management, fitness, nutrition, lifestyle choices, diseases, and related issues.

HLTH 102

Workplace Issues for Allied Health

Prerequisite: Placement into ENG 099 or higher

1 lecture per week: 1 hr credit

Workplace issues in Allied Health are examined. Emphasis is on communication, stress management, negotiating within organizational structures, power, and dealing with life/death situations.

HLTH 105

General Medical Terminology

Prerequisite: Placement into ENG 099 or higher

1 lecture per week: 1 hour credit

This course provides a foundation in the structure of common medical terms, relating word elements to specific organs of the body, and identifying commonly used medical abbreviations. It is designed for students seeking admission to health career programs or working in medical settings. Applicants for surgical technology and paramedicine programs should take SRT 100.

Heating, Ventilation, Air-Conditioning, and Refrigeration

HVACR 101

Fundamentals of Refrigeration

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers the basic principles and theory of refrigeration. Topics include refrigeration cycle, compressors, condensers, evaporators, and metering devices. Safe and efficient use of tools and brazing techniques in the installation of copper tubing and piping are also introduced.

HVACR 102

Advanced Refrigeration

Prerequisite: HVACR 101

2 lectures per week: 2 hrs credit

This course focuses on the basic refrigeration cycle, system components, and applications. Special emphasis is given to temperature controls, installation techniques, testing, servicing, charging, and location of refrigeration troubles.

HVACR 103

Air Conditioning

Prerequisite: HVACR 102, 107, 108

2 lectures per week: 2 hrs credit

Topics covered in this course include basic air conditioning theory and principle, air conditioning systems, psychrometric properties of air, process and human comfort load analysis, load calculation, and equipment selection.

HVACR 104

Advanced Air Conditioning

Prerequisite: HVACR 103, 108

2 lectures per week: 2 hrs credit

This course provides an in-depth understanding of the air conditioning system, components and their applications. Special emphasis is given to maximizing system operations which includes mechanical and electrical installation, service repair, and troubleshooting.

HVACR 105**Heating System Applications**

Prerequisite: HVACR 104, 108

2 lectures per week: 2 hrs credit

This course is an introduction to gas heating equipment which includes theory of gas combustion, venting, operation and efficiency of heating units; servicing and repairing mechanical and electrical components; and proper installation of units.

HVACR 107**Electrical Control Applications**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers the practical study of electricity as it applies to the servicing and installation of refrigeration, air conditioning, and heating equipment, with emphasis on electrical safety, meters, and circuits.

HVACR 108**Advanced Controls**

Prerequisite: HVACR 107

2 lectures per week: 2 hrs credit

This course covers the installation, diagnosis and servicing of the electrical systems used in split residential and small commercial air conditioning, heating and refrigeration systems. Emphasis is placed on the advanced control system needed to achieve total comfort and safety.

HVACR 109**Installation and Service of HVACR Systems**

Prerequisite: HVACR 104, 105, 108

2 lectures per week: 2 hrs credit

This course covers the proper procedures used during the installation and servicing of residential and commercial air conditioning, heating, and refrigeration equipment. Emphasis is placed on weekly examinations on how to diagnose both electrical and mechanical service problems.

HVACR 110**Troubleshooting HVACR Systems**

Prerequisite: HVACR 104, 105, 108

2 lectures per week: 2 hrs credit

This course covers the systematic evaluation of air conditioning, heating, and refrigeration systems. Troubleshooting topics include system pressures, temperature, compressor efficiency, mechanical, and electrical components.

HVACR 112**Sheet Metal Layout and Fabrication**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers the introduction to heating, ventilation, and air conditioning sheet metal duct systems. Basic fitting layout is covered. Emphasis is placed on various types of seams, edges, elbows, and ducts. Drawing and actual fabrication are done.

HVACR 114**Special Topics in HVACR**

Prerequisite: Instructor consent

2 lectures per week: 2 hrs credit (may be repeated for credit 3 times with different topics)

Topics pertaining to current and emerging technology in the heating, ventilation, air conditioning, and refrigeration industry are covered. Content and format of this course is variable and may be initiated by updates in technology in the HVACR field.

History**HIST 111 (IAI: S2 912N)****World History: Origins to 1714**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course covers the political, social, and economic history of the world to 1714, including the origins and developments of its peoples and societies. Equal emphasis is placed on the development of Western and non-Western civilizations.

HIST 112 (IAI: S2 913 N)**World History: 1714 to Present**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course covers the political, social, economic, and cultural history of the world including the origins and development of its peoples and societies from 1714 to the present. Equal emphasis is placed on the development of Western and non-Western civilizations.

HIST 115 (IAI: S2 906N)**African Civilizations I**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course examines the roots of African civilizations, with a focus on the development of major African societies prior to the period of European imperialism.

HIST 116 (IAI: S2 907N)**African Civilizations II**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

A continuation of HIST 115 with major emphasis on the development of modern African societies as they react to the twin forces of imperialism and nationalism.

HIST 140 (IAI: S2 910N)

History of Latin America

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

Students study the growth and development of Hispanic America from the Age of Discovery to the present day. Special emphasis is placed on the success and failure of democratic procedures, and the relationship between Latin America and the United States. The influences of the Roman Catholic Church, the military, and the business community on the development of society and government are also described.

HIST 151 (IAI: S2 902)

History of Western Civilization I

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course examines the political, social, and economic history of the Western world, including the origins and development of cultures from human origins to the Age of Exploration.

HIST 152 (IAI: S2 903)

History of Western Civilization II

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course explores the political, social, cultural, and economic history of the Western world from the Age of Exploration to modern times.

HIST 201 (IAI: S2 900)

U.S. History: 1492 to 1877

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is a study of the political, economic, and social factors in the growth of the United States from the Age of Discovery through the Civil War and Reconstruction.

HIST 202 (IAI: S2 901)

U.S. History: 1877 to Present

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course looks at the political, social, and economic history of the United States from 1877 to the present, including the development and origins of its peoples and society.

HIST 230

African American History

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

Designed to acquaint students with the African roots of the African American with emphasis on the transition of Blacks from African warrior to American slave.

Humanities

(See also Philosophy)

HUMAN 101 (IAI: H5 904N)

Comparative Religions

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

The goal of the course is to enhance the understanding of what religion is through a study of some of the forms it takes.

HUMAN 102 (IAI: H5 901)

Foundational Religious Texts

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a humanistic study of one or more of the foundational documents of the world's religions such as the Hebrew Bible, the New Testament, the Qur'an, or the Vedas.

HUMAN 201 (IAI: H9 900)

Humanities Themes: Myth, Reason, and God

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course deepens students' understanding of their own moral, political, and religious beliefs through examining the major humanities themes in Greek and Hebrew texts basic to Western culture. Literary, historical, and philosophical perspectives are explored in readings which include Homer, Plato, and the Bible.

HUMAN 202 (IAI: HF 900)

Form and Structure in the Arts

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

Coursework is divided among literature, painting, and music. Emphasis is on formal structure of these works, and on analysis rather than appreciation.

Hydraulics

HYDR 101

Fundamentals of Hydraulics

Prerequisite: None

2 lectures per week: 2 hrs credit

This is a general course covering the basic components of hydraulic systems, and the basic laws and formulas involved in simple fluid power calculations. Topics include pumps, control valves, actuators, the use of ASAIS symbols, and maintenance procedures.

HYDR 102

Hydraulic Pumps

Prerequisite: HYDR 101

2 lectures per week: 2 hrs credit

This is a study of various fluid power pumps and their principles of operation, construction, and maintenance. Fixed gear, vane, axial, and radial piston, and variable delivery pumps are covered in addition to combination pumps and self-contained power units.

HYDR 103

Hydraulic Controls

Prerequisite: HYDR 101

2 lectures per week: 2 hrs credit

This course provides a study of the various controls used in fluid power. Topics covered: pressure and volume theory, operation and construction of valves, and circuit applications. Also covered are valves and their assemblies, the relief, pressure reducing sequence, counterbalance, brake, volume and control and directional, in addition to various types of valve controls.

HYDR 104

Basic Hydraulic Circuits

Prerequisite: HYDR 103

2 lectures per week: 2 hrs credit

This is a study of fluid power circuit fundamentals, calculations and design. Circuits studied: pump-unloading, speed, pressure, volume, deceleration, sequence, servo, oil conditioning, and transfer line.

HYDR 106

Pneumatics

Prerequisite: AMATH 101

2 lectures per week: 2 hrs credit

This course offers a study of fundamental pneumatic principles, gas laws, calculations, ASAIS symbols and terminology. Also considered are the way air is compressed, the compressed air system, controlling pneumatic power, and the introduction of fluidics.

Industrial Electrician

(see Electrician)

Information Technology

Course prefixes indicate the content emphasis of each course. Courses applied for completion of current degrees or certificates must have been completed within the past five years.

Applications - ITAPP

ITAPP 100

Basic Computing Skills

Prerequisite: None

1 lecture per week: 1 hour credit

This course is designed for students who have little or no computer experience. Topics covered include using e-mail, searching for and evaluating Internet sites, creating basic documents using Word, creating basic presentations using PowerPoint, using basic operating system functions, using textbook supplemental materials such as CDs and online resources, and using WebAdvisor and Blackboard.

ITAPP 101 (IAI: BUS 902)

Introduction to Computers

Prerequisite: Keyboarding (recommended)

3 lectures per week: 3 hrs credit

This course provides an overview of current computer technology and trends. Topics include computer terminology, hardware, application software, networks, and the Internet. Students are also introduced to the latest business software – word processing, spreadsheets, database management, and presentation graphics. Students with little or no computer experience are strongly encouraged to enroll in ITAPP 100 Basic Computing Skills before taking this course.

ITAPP 109

Introduction to the Internet

Prerequisite: None

2 lab hrs per week: 1 hr credit

This is a comprehensive study of the Internet through online experience. All the basic Internet applications are covered, including e-mail, www, gopher, search strategies, USENET news groups, FTP, Telnet, Web page construction, encryption on the Internet, Internet service providers, and social issues.

ITAPP 121

Word Processing Applications - Level I

Prerequisite: ITOFS 100 (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit (may be repeated three times)

This course prepares students to work with the latest word processing software in a career setting or for personal use. Students develop a mastery-level competence in word processing by creating and editing business documents.

ITAPP 122

Word Processing Applications - Level 2

Prerequisite: ITAPP 121 with a grade of C or better (recommended)

2 lectures, 2 labs per week: 3 hrs credit (may be repeated three times)

This course is a continuation of hands-on skill development using the latest word processing software. Topics covered include creating and modifying styles, creating templates, preparing reference documents, and customizing documents.

ITAPP 125

Spreadsheet Applications - Level 1

Prerequisite: Keyboarding (recommended)

1 lecture, 2 lab hrs per week: 2 hrs credit

This course prepares students to work with the latest spreadsheet software. Topics covered include creating and editing worksheets, using range commands, using copy and move commands, creating formulas and functions, developing queries, and designing macros.

ITAPP 126

Spreadsheet Applications - Level 2

Prerequisite: ITAPP 125 with a grade of C or better (recommended)

1 lecture, 2 lab hrs per week: 2 hrs credit

This course provides further hands-on study into the capabilities of the current commercial spreadsheet software. Topics covered include macros, advanced functions, file operations, and sophisticated applications.

ITAPP 128

Database Applications - Level 1

Prerequisite: Keyboarding (recommended)

1 lecture, 2 lab hrs per week: 2 hrs credit

Hands-on experience with the most current and widely used database software. Topics covered include creating and editing a database file, queries, forms, grouping data for reports, indexing, labels, SQL commands, menu structures, and macros.

ITAPP 129

Database Applications - Level 2

Prerequisite: ITAPP 128 with a grade of C or better, or equivalent (recommended)

1 lecture, 2 lab hrs per week: 2 hrs credit

Further hands-on study into the capabilities of the current commercial database software. Topics covered include operations, multiple files, relational database operations, SQL, command file creation and program flow, and applications.

ITAPP 130

Software Integration and Application

Prerequisite: ITAPP 121, 125, 128

1 lecture, 2 lab hrs per week: 2 hrs credit

This course explores the powerful merging capabilities of word processing, database and spreadsheet software packages. Students import data and graphics, explore mail merge, write macros, and create integrated software systems for business applications.

ITAPP 132

Desktop Publishing

Prerequisite: ITOFS 100

2 lectures, 2 lab hrs per week: 3 hrs credit

This desktop publishing course utilizes a personal computer to create high-quality publications by using an advanced page layout software package to combine text and graphics to produce master copy. Text and graphics can be combined to produce brochures, newsletters, magazines, technical documents, and books. Students completing this course are expected to demonstrate their knowledge of desktop publishing by producing assigned and personal projects.

ITAPP 133

Presentation Applications

Prerequisite: None

1 lecture, 2 lab hrs per week: 2 hrs credit

This course teaches students to use current desktop presentation software to plan, construct, and produce effective desktop presentations. Students complete assigned projects using special predefined layout features in the software to produce slide presentations.

ITAPP 160

Technology for Teachers

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces educators to the use of the computer as an educational tool. The course focuses on a solid understanding of educational technology, and how to integrate computers into the classroom curriculum. Hands-on technology activities are an important part of the course. Students begin to develop their teaching portfolios. (same as ED 160)

ITAPP 232

Advanced Desktop Publishing

Prerequisite: ITAPP 132 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

Students use current hardware and software to apply knowledge gained in previous Desktop Publishing courses to complete assigned projects. Emphasis is placed on job specifications and reproduction requirement.

ITAPP 240**Application Development in Database**

Prerequisite: ITAPP 129

1 lecture, 2 lab hrs per week: 2 hrs credit

Students develop and prepare tables, queries, forms, and reports using database software. Programming is used to develop database applications. Students are challenged to use critical thinking and analysis to find efficient solutions to real-life situations.

Networking - ITNET**ITNET 160****Computer Repair**

Prerequisite: ITPRG 140 with a grade of C or better (recommended)

2 lectures, 4 lab hrs per week: 4 hrs credit

This course is an introduction to personal computer upgrades, maintenance, and repair. Topics include computer hardware, software, operating systems, troubleshooting, and how to fix, upgrade, and build a computer. This course covers the latest technologies and objectives of the CompTIA A+ certification exams.

ITNET 165**Introduction to Networking**

Prerequisite: ITNET 160 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course covers the skills and concepts needed to configure and operate a variety of networking products, including a wide range of vendor and product neutral networking technologies. Topics include networking theory, protocols, connectivity devices, Internet addressing, internetworking servers, security, and troubleshooting. Successful completion prepares students to pass CompTIA's entry-level networking certification exam.

ITNET 250**Introduction to LAN Administration**

Prerequisite: ITPRG 140 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

Topics include local area network (LAN) terminology, hardware and software components required in a networked environment, and administration of common network operating systems. Hands-on activities include creating and managing user accounts, file sharing, printing, and other tasks related to network administration.

ITNET 260**Network Security Fundamentals**

Prerequisite: ITNET 165 with a grade of C or better or Network+ certification (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course covers the fundamentals of network security including communication security, infrastructure security, cryptography, access control, authentication, external attack, and operational and organization security. Successful completion prepares students for the CompTIA Security+ certification exam.

ITNET 270**Computer Forensics**

Prerequisite: CJ 101 or ITPRG 140 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides an introduction to computer forensics, preparing students to acquire and analyze digital crime evidence. Students learn tools and techniques for conducting digital investigations, preserving evidence, and preparing expert witness testimony. Topics include file structures, data recovery, forensic analysis, e-mail and network investigations, and ethics. (*same as CJ 270*)

ITNET 280**Ethical Hacking**

Prerequisite: ITNET 260 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course introduces students to the art of ethical hacking and network defense, preparing students to be efficient security professionals. Topics include computer ethics, penetration testing, network and computer attacks, social engineering, operating system vulnerabilities, cryptography, and network intrusion issues regarding Web servers and wireless networks.

ITNET 299**Internship**

Prerequisite: 12 credit hours in IT and consent of instructor

10 lab hrs per week: 2 hrs credit

Student interns will be employed at an approved training site. This is scheduled by joint agreement of the student, the site coordinator, and the program coordinator.

Office Skills- ITOSF

ITOFS 100

Keyboarding

Prerequisite: None

2 lab hrs per week: 1 hr credit

Keyboarding is inputting information through the use of the computer keyboard. The purpose of this course is to teach students to develop basic touch keyboarding skills on a computer.

ITOFS 111

Business Document Formatting

Prerequisite: ITOFS 100

1 lecture, 2 lab hrs per week: 2 hrs credit

This course is a continuation of skill development in touch keyboarding. The purpose of this course is to enable students to develop keyboarding skill at a minimum of 30 wpm within four errors. Students create business applications such as letters, memorandums, tables, and manuscripts.

ITOFS 112

Intermediate Keyboarding Applications

Prerequisite: ITOFS 111, ITAPP 121

1 lecture, 2 lab hrs per week: 2 hrs credit

This course is a continuation of skill development in touch keyboarding. The purpose of this course is to enable a person to develop a keyboarding skill at minimum of 50 wpm within three errors. Students produce a variety of letter forms, memorandums, tables, manuscripts, and business forms.

ITOFS 117

Keyboarding Skill Development

Prerequisite: ITOFS 100

2 lab hrs per week: 1 hr credit

This course is designed to improve keyboarding speed and accuracy skills. Students analyze his/her own error patterns and then practice specific drills to correct those particular weaknesses. Anyone who can use the touch method of keyboarding and is interested in improving that skill will benefit from the course.

ITOFS 119

Office Procedures

Prerequisite: ITOFS 111 recommended

3 lectures per week: 3 hrs credit

The many techniques, skills, routines, and procedures which are relevant to and identified with general office work are included in this course. Topics include the high-tech workplace, success behaviors, office communication, and mail records and management.

ITOFS 122

Transcription Skills

Prerequisite: ITOFS 111, ITAPP 121

2 lecture, 2 lab hrs per week: 3 hrs credit

The skills and techniques for transcription from voice processing machines are covered. Emphasis is on correct spelling, punctuation, formatting, and English mechanics as well as equipment operation.

ITOFS 199

Office Assistant Practicum

Prerequisite: Completion of 15 credit hours required IT courses and consent of coordinator

2 lab hrs per week: 1 hour credit

This practicum provides an opportunity for students to work within a simulated office environment and to perform duties relevant to office support personnel.

ITOFS 219

Office Management

Prerequisite: ITOFS 112, 119, or equivalent

3 lectures per week: 3 hrs credit

Offered spring term only

The social and professional competence required of people working and relating together in the office is explored with special emphasis on the secretarial role in the office. Skills, techniques, and procedures basic to the modern office are developed. The development of acceptable office behavior and attitudes with secretarial decision-making is stressed.

ITOFS 221

Advanced Keyboarding Applications

Prerequisite: ITAPP 121, 122

1 lecture, 2 lab hrs per week: 2 hrs credit

This course is a continuation of skill development using word processing software. The technique and topics learned in Word Processing Applications-Levels 1 and 2 are applied using realistic projects. Cooperative learning, critical thinking, and problem solving are stressed.

ITOFS 299

Internship

Prerequisite: Consent of instructor

10 lab hrs per week: 2 hrs credit

Student interns will be employed at an approved training site. This is scheduled by joint agreement of the student, the site supervisor, and the program coordinator.

Programming - ITPRG

ITPRG 103

Introduction to Programming Logic

Prerequisite: None

2 lectures, 2 lab hrs per week: 3 hrs credit

This course introduces structured programming logic and includes reports, control breaks, extracts, tables, input validation, updates, and file handling concepts. Standard logic charts include flowcharting, pseudo-code, and other charting methods. Solutions to programming projects are in QuickBasic and Visual Basic.

ITPRG 106

Mathematics for Computers

Prerequisite: MATH 090 or qualifying score on Math Placement Test

3 lectures per week: 3 hrs credit

This course is designed to provide an understanding of the numerical concepts required for data processing. Included in the course are the following topics: binary, octal and hexadecimal number systems, set theory, logic, floating and fixed point numbers, problem solving, and algebra as it relates to data processing.

ITPRG 140

Introduction to Operating Systems

Prerequisite: Keyboarding (recommended)

2 lecture, 2 lab hrs per week: 3 hrs credit

This course describes the purpose of operating systems and how they work from a business, personal, and PC support perspective. This course provides hands-on experience in file maintenance, configurations, Windows customization, file systems, basic trouble-shooting, and running applications with Windows operating systems. Other operating systems (command prompt, Linux, and networking) are reviewed, compared and discussed.

ITPRG 142

Introduction to Visual Basic Programming

Prerequisite: Keyboarding and ITPRG 103 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

In this introduction to the Visual Basic programming language, object-oriented and event-driven programming essentials, techniques, and applications are stressed. Topics include control objects, decisions and conditions, menus, procedures, looping structures, and array manipulations.

ITPRG 144

Introduction to C++ Programming

Prerequisite: ITPRG 103 or 140 with a grade of C or better, or equivalent (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides an introduction to the capabilities of the C++ programming language. Topics covered include variables, operators, control structures, input and output, functions, simple data types, arrays, and strings.

ITPRG 147

Introduction to Java Programming

Prerequisite: ITPRG 103 or 140 with a grade of C or better, or equivalent (recommended)

2 lecture, 2 lab hrs per week: 3 hrs credit

This course provides JAVA programming basics. Object-oriented programming fundamentals are covered as they apply to stand-alone JAVA programs.

ITPRG 154

C#.Net Programming

Prerequisite: ITPRG 103 or 140 with a grade of C or better, or equivalent (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course covers C#.NET programming concepts. C#.NET was introduced as part of the .NET platform designed to accommodate Internet and Windows applications. Topics covered include writing C#.NET programs using OOP, declaring variables, manipulating data types, creating methods, performing procedures, creating graphical user interfaces, using XML Web Services, developing standalone class libraries, and programming event-driven applications.

ITPRG 157

Javascript Programming

Prerequisite: ITPRG 140 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This introductory course in JavaScript programming provides basic programming concepts for designing, developing and integrating scripts into Web pages. The focus includes the use of tags, HTML, objects, event-handling, writing JavaScript functions, and calling JavaScript functions. JavaScript prepares students with a universally accepted scripting language, used for creating dynamic and interactive Web pages.

ITPRG 171

Game Design I

Prerequisite: Placement into ENG 099 or higher

2 lectures, 2 lab hrs per week: 3 hrs credit

This course introduces students to basic game theory (including game play and strategy) as well as the historical development of all types of games. Games used for education, training, and entertainment are explored. Strong focus is on the design process, from developing a basic concept, to selling the proposal, to production and marketing.

ITPRG 173

Digital Storytelling

Prerequisite: Placement into ENG 101 or higher.

2 lectures, 2 lab hrs per week: 3 hrs credit

This course focuses on the planning, storyboard design, and scripting of interactive digital productions, such as text, audio, and still and moving images, with a focus on video games. Narrative scripts and design are developed with an emphasis on scene design, characterization, plotting, target audience, messages, and script format. Topics include the advantages and limitations of multimedia as conduit for mediated messages, and the nuances between writing for multimedia and stand-alone text, audio, and video.

ITPRG 201

Systems Design and Development

Prerequisite: ITAPP 101 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides an analysis of the information flow within the business organization. The systems development life cycle is studied with both physical and logical design considerations. Case studies are used to illustrate the steps of a system study.

ITPRG 205

Ethics in Information Technology

Prerequisite: None

2 lectures per week: 2 hrs credit

This course explores the legal, ethical, and societal issues in the information technology (IT) world. Students examine various ethical situations that arise in IT and formulate ideas for addressing these issues. Topics include computer and Internet crime, privacy rights, freedom of expression, intellectual property, and employer/employee issues.

ITPRG 240

Linux Operating System

Prerequisite: ITPRG 140 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides an in-depth study of and hands-on experience with the primary functions of the Linux operating system. The major essential command-line commands, as well as use of the graphical user interface are covered. This course provides theoretical and practical concepts including file systems, elementary shell scripting, and other end-use knowledge necessary to move to the next level of basic system administration. Basic administrative tasks that are necessary for maintaining a working system are explored.

ITPRG 242

Advanced Visual Basic Programming

Prerequisite: ITPRG 142 with a grade of C or better, or equivalent (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This is a continuation of ITPRG 142. Advanced topics in Visual Basic are explored including arrays, multiple forms, data files, and databases, grids, SQL, graphics, OLE, DLL's, and custom objects. Emphasis is on finding creative solutions to application problems. During the last several weeks of the semester, the class works on a group project for an outside company.

ITPRG 244

Advanced C++ Programming

Prerequisite: ITPRG 144 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course is a continuation of the C++ introduction. After a review of the introductory topics, study focuses on pointers, arrays, structs, linked lists, recursion, operator overloading, inheritance, and polymorphism.

ITPRG 247

Advanced Java Programming

Prerequisite: ITPRG 147 with a grade of C or better, or equivalent (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course is a continuation of ITPRG 147 and provides broader JAVA programming concepts. Object oriented programming concepts are covered as they apply to building event-driven JAVA applets, stand-alone JAVA programs, and GUI programming.

ITPRG 248

Introduction to Cobol Programming

Prerequisite: ITPRG 103 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

Offered fall term only

The most widely used language today is COBOL, and this course introduces students to COBOL's programming essentials and techniques. Structured design is stressed, and lab assignments give students experience in the applications of creating and editing business reports, calculations and comparisons, logic techniques, input/output techniques, data validation and testing, and table handling.

ITPRG 249**Advanced Cobol Programming**

Prerequisite: ITPRG 248 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

Offered spring term only

This course is a continuation of ITPRG 248. Emphasis is placed on learning and applying more advanced COBOL programming techniques and language conventions. Topics covered include subscripted and indexed tables, matching records logic, VSAM file creation and update, the COBOL sort, subprograms, and COPY and CALL statements.

ITPRG 299**Internship**

Prerequisite: 12 credit hrs IT courses successfully completed with C or better, and consent of instructor

10 lab hrs per week: 2 hrs credit

Student interns will be employed at an approved training site.

This is scheduled by joint agreement of the student, the site coordinator, and the program coordinator. Students must enroll in ITPRG 298 in the same semester as their internship. Student interns meet with the program coordinator in a class or individually for an hour per week.

Web Development - ITWEB**ITWEB 101****Web Page Authoring**

Prerequisite: Placement into ENG 099 or higher

2 lectures, 2 lab hrs per week: 3 hrs credit

This course is for students interested in developing specific Internet skills as a Web designer, developer or administrator. Topics include Internet fundamentals, Web page authoring with XHTML and CSS, and networking concepts. Successful completion prepares students to pass exams leading to various Certified Internet Webmaster (CIW) credentials.

ITWEB 103**Introduction to Web Site Development**

Prerequisite: Placement into ENG 099 or higher

1 lecture, 4 lab hrs per week: 3 hrs credit

This course introduces professional Web site creation and management using basic features of Web design software. Students apply basic principles of mass communication; translate copy, sound, and still and moving images into the Web environment; use design principles to develop storyboards, site maps, and navigation structures; and upload and maintain a Web site. Web-related legal and ethical issues are covered. Successful completion prepares students to pass exams leading to various Certified Internet Webmaster (CIW) credentials. *(same as GC 162)*

ITWEB 105**Multimedia Writing**

Prerequisite: Placement into ENG 101

3 lectures per week: 3 hrs credit

This course provides an introduction to basic writing skills necessary to create messages for the multimedia environment such as Web sites, graphics, animations, and digital audio. Upon successful completion, students will be able to write multimedia scripts; demonstrate an understanding of the nuances between writing for multimedia and writing for standalone text, audio and video; describe the advantages and limitations of multimedia as a conduit for mediated messages; and integrate standard expectations of writing including style, grammar, spelling, and punctuation.

ITWEB 201**Technology of E-Commerce**

Prerequisite: ITWEB 101 or 103 with a grade of C or better (recommended)

2 lecture, 2 lab hrs per week: 3 hrs credit

This course teaches students how to conduct business online and how to manage the technological issues associated with constructing an e-commerce Web site. Students implement a genuine transaction-enabled business-to-consumer Web site, examine strategies and products available for building E-commerce sites, examine how such sites are managed, and explore how they can complement an existing business infrastructure. Successful completion prepares students to pass exams leading to various Certified Internet Webmaster (CIW) credentials.

ITWEB 203**Flash/Interface Design**

Prerequisite: GC 151 and ITWEB 103 or GC 162 with a grade of C or better (recommended)

1 lecture, 4 lab hrs per week: 3 hrs credit

This studio course develops students' understanding of interactive Web and interface design with an understanding of graphic design and interface design principles. Students develop an integrated and consistent interface for a Web site using graphic programs including, but not limited to, Dreamweaver, Flash and Photoshop. Students practice extensive use of scripting and programming with an emphasis on using professional design techniques and standards. Sound, video, animation, and interactivity are combined in interactive work. The primary emphasis of this course is development of students' portfolios. Writing appropriate to the profession is required. *(same as GC 262)*

ITWEB 205

Web Languages

Prerequisite: ITWEB 101 with a grade of C or better (recommended)

2 lectures, 2 lab hrs per week: 3 hrs credit

This course teaches students to use advanced Web programming languages to create interactive Web sites. Topics include form processing, file access and manipulation, and database connectivity. Both client and server side programming techniques are emphasized. Upon successful completion, students are prepared to take various Certified Internet Webmaster (CIW) exams.

ITWEB 225

Web Workshop:Advanced Topics

Prerequisite: None

1 lecture, 2 lab hrs per week: 2 hrs credit

This course provides orientation, application, and hands-on experience with a particular Web development language or software application. Emphasis is placed on techniques used by Web development professionals and practical application of Web programming concepts to real-world scenarios.

ITWEB 270

Advanced Web Site Development

Prerequisite: ITWEB 103 or GC 162

2 lecture, 2 lab hrs per week: 3 hrs credit

This course teaches students advanced Web site development techniques including CSS layout techniques, interactivity with AJAX and the Spry framework, advanced navigation and dropdown menus, image manipulation, and Web site development deployment and management. (*same as GC 270*)

ITWEB 299

Internship

Prerequisite: 12 credit hours in IT and consent of instructor

10 lab hrs per week: 2 hrs credit

Student interns will; be employed at an approved training site. This is scheduled by joint agreement of the student, the site coordinator, and the program coordinator.

Journalism

JRNLM 101 (IAI: MC 919)

Introduction to Journalism

Prerequisite: ENG 101 with C or better

3 lectures per week: 3 hrs credit

This course introduces students to the journalism industry and its practices, including techniques of news gathering, reporting, and interviewing. Students learn to use the library and do online database research. Students write basic stories under real-time constraints.

Languages

(See Spanish)

Literature

(See English)

Manufacturing Technology

MT 101

Metal Working Processes I

Prerequisite: None

2 lectures, 2 lab hrs per week: 3 hrs credit

This course introduces students to machine tool processes and operation by giving consideration to the efficient use of tooling, speeds, feeds, and fixtures in production processes; to metal processing; to precision measurement; and to the use and operation of lathes, drill presses, mills, saws, and grinders.

MT 102

Metal Working Processes II

Prerequisite: MT 101

2 lectures, 2 lab hrs per week: 3 hrs credit

This course continues development of the skills and knowledge attained in MT 101 by additional training in thread calculation and chasing, tool bit geometry and sharpening, basic CNC machine tool operation, foundry processes and machining of castings.

MT 105

Metal Working Processes III

Prerequisite: MT 102

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides students with information on horizontal milling, boring, drilling machines, and their operations. Coursework consists of lectures and demonstrations on the construction of the different types of horizontal machines, the type of work done, the workpiece setup, the tools used and safety practices.

MT 120 (was APPMT 120)

Industrial Safety

Prerequisite: None

2 lectures per week: 2 hrs credit

This course provides safety training for those in industrial plant situations. Topics include tool and machine safety, lock out/tag out procedures, fire protection, eye safety, basic electrical safety, ladder safety, and government safety regulations as well as general safety practices.

MT 210**CNC Programming I***Prerequisite: MT 102*

2 lectures, 2 lab hrs per week: 3 hrs credit

This is an introductory course in computer numerical control programming. It covers CNC system operations; machine tool setup and tooling; G-code and M-code utilization; and 2 and 3-axis lineal and circular interpolation programming. Emphasis is placed on part programming and machine tool operation for CNC vertical milling and lathe work.

MT 211**CNC Programming II***Prerequisite: MT 210*

2 lecture, 2 lab hrs per week: 3 hrs credit

This course is a continuation of MT 210. It covers such topics as cutter compensation, fixed and variable canned cycles, subroutine programming, and the calculation of machining process. Part programs are written for the lathe, the vertical mill, and the horizontal mill.

MT 212**Introduction to Robotics***Prerequisite: None*

2 lectures, 2 lab hrs per week: 3 hrs credit

This course introduces students to the use of robotic devices in various manufacturing environments. It covers topics ranging from the development of robotics, to robotic systems and the operation and programming of robotic devices. Students receive hands-on instruction in the use of the teach-pendant and computer-based robotic language programming.

MT 214**CAD/CAM Systems***Prerequisite: MT 210; CADMD 243 recommended*

2 lectures, 2 lab hrs per week: 3 hrs credit

This course introduces students to the relationship, use, and operations of CAD and CAM systems to generate CNC programs. Students learn to create CAD files for use with a CAM system; to use a CAM system to create geometry, tooling, and post-processor files; and to transmit CAM-generated programs to CNC equipment.

MT 215**Manufacturing Systems***Prerequisite: MT 210 and 212*

3 lectures, 2 lab hrs per week: 4 hrs credit

This course covers the identification, operation, and application of both basic industrial processes and various systems that can be integrated into a computer integrated manufacturing system (CIM). These include CNC, CAD, CAM, and robotics. Students design, program, and implement workcells that include material handling, manufacturing and assembly operations. Emphasis is placed on fully automated production system design and operation.

MT 220**Metallurgy – Ferrous***Prerequisite: None*

2 lectures per week: 2 hrs credit

Iron, steel and their alloys, standard classification systems, properties, and methods of testing are considered. Heat treatment processes, critical temperatures, crystalline structure changes, and standard physical tests and welding metallurgy are studied.

MT 221**Metallurgy – Nonferrous***Prerequisite: None*

2 lectures per week: 2 hrs credit

This course studies types of nonferrous metals and their applications. Standard classification systems, properties, and methods of testing properties are discussed. In addition, development of new nonferrous metals and their applications are studied.

Applied Mathematics**AMATH 100****Basic Mathematics for the Skilled Trades***Prerequisite: None*

2 lectures per week: 2 hrs credit

This course is for those students who have little or no skill in the operations of numbers. It includes topics on whole numbers, fractions, decimals, percents, powers, and square roots, measurement systems, and commonly used formulas.

AMATH 101**Algebra for the Skilled Trades***Prerequisite: AMATH 100 or equivalent*

2 lectures per week: 2 hrs credit

This course is for those students who have a knowledge of the arithmetic operations but have little or no background in algebra. It includes basic algebraic operations, factoring, solving equations, ratio and proportion, exponents, and radicals.

AMATH 103**Geometry for the Skilled Trades***Prerequisite: AMATH 101*

2 lectures per week: 2 hrs credit

An introduction to geometry which includes definitions and descriptions of geometric terms, axioms and theorems; explanations regarding dispositions dealing with straight lines, triangles, and circles; and application to practical shop problems.

AMATH 106

Applied Trigonometry for the Skilled Trades

Prerequisite: AMATH 103

2 lectures per week: 2 hrs credit

Topics in this course include definitions of trigonometric functions, fundamental trigonometric identities, solution of triangle problems and applications of trigonometry to practical shop problems.

AMATH 107

Trigonometry and Shop Applications I

Prerequisite: AMATH 106

2 lectures per week: 2 hrs credit

This course covers the solution of oblique triangles by use of altitude construction method, law of sines and cosines, cotangents, $t/2$ angle formula, and tangent law. Emphasis is placed upon standardized types of shop and drafting problems using above methods.

AMATH 108

Compound Angles for the Skilled Trades

Prerequisite: AMATH 107

2 lectures per week: 2 hrs credit

The principles of trigonometry are used to determine plane, base and base angles in solid figures for the purpose of classifying the solid geometric figures into basic types for analysis and recognition. Practice in solving shop problems is emphasized and includes determining angles of tilt and rotation for mounding paste on adjustable plates and methods of checking angular tapered dovetails.

AMATH 110

Gearing and Cams for the Skilled Trades

Prerequisite: AMATH 106

2 lectures per week: 2 hrs credit

This course covers the mathematics of standard screw threads such as American National, United States v. Acme and Worm. Standard notations and formulas for spur gears, bevel gears, worm, and worm wheels and helical gears. Replacement of spur gears with helical gears and use of an idler gear, and the calculations for plain and differential indexing. Charts, gear models, and gears are used as aids in visualizing the problems.

Developmental Mathematics

MATH 080

Computational Skills I

Prerequisite: Qualifying score on Math Placement Test

4 lectures per week: 4 hrs non-degree, non-transfer credit (may be repeated three times)

This course provides a background in mathematics for students who do not feel confident in the mastery of arithmetic skills. Topics covered include operations on whole numbers, fractions and decimals, percents, and ratio and proportions.

MATH 085

Computational Skills II

Prerequisite: MATH 080 with a C or better or qualifying score on Math Placement Test

4 lectures per week: 4 hrs non-degree, non-transfer credit (variable credit; may be repeated three times)

This course provides a background in mathematics for students who do not feel confident in the mastery of skills at the pre-algebra level. Topics covered include operations on integers, fractions, and decimals; percents; ratio and proportion; graphs; and measurement. Emphasis is placed on the development of algebraic skills.

MATH 090

Elementary Algebra

Prerequisite: MATH 085 with a C or better or qualifying score on the Math Placement Test

5 lectures per week: 4 hrs non-degree, non-transfer credit

This is a course in elementary algebra. Topics covered include linear equations and inequalities, graphs of linear equations, polynomials, factoring, rational expressions, and rational equations. Problem solving is emphasized throughout the course.

MATH 095

Intermediate Algebra

Prerequisite: MATH 090 with a C or better or qualifying score on the Math Placement Test

4 lectures per week: 4 hrs non-degree, non-transfer credit

This is a course in intermediate algebra. It is a prerequisite for transferable college mathematics courses. Topics covered include functions and graphs, systems of linear equations, one- and two-variable inequalities, roots and radicals, complex numbers, and quadratic equations. Emphasis is placed on the development of algebraic skills.

MATH 096**Geometry**

Prerequisite: MATH 090 with C or better or qualifying score on a placement test

3 lectures per week: 3 hrs non-degree, non-transfer credit

This is a course covering the fundamental concepts of geometry. It is intended for students who lack credit in one year of high school geometry or need review in the subject matter. Emphasis is placed on learning geometric facts as well as the development of deductive reasoning. Topics covered include plane and solid geometry, properties of congruence, similarity, area, perimeter, and volume.

College-Level Mathematics

Prerequisites for MATH 112, 115, 151, and 200 may be met by one of the following options:

Option 1 – MATH 095 and MATH 096, both with at least a C

Option 2 – MATH 095 and one year of high school geometry, both with at least a C

Option 3 – A qualifying score on the Math Placement Test

MATH 111**Mathematics For Paraprofessionals**

Prerequisite: MATH 085 or placement into MATH 090

3 lectures per week: 3 hrs credit

This course is designed for the elementary school paraprofessional. This course strongly emphasizes hands-on learning; thus, manipulatives are used extensively. Topics covered include problem solving, sets, number theory, statistics, probability, geometry, and measurement. Students seeking general education mathematics credit for transfer are advised to register for the MATH 200/206 sequence. (*same as EDU 111*)

MATH 112 (IAI: MI 904)**General Education Mathematics**

Prerequisite: Option 1, 2, or 3 above

3 lectures per week: 3 hrs credit

This course is designed for the liberal arts student who is not a mathematics, science, or business major. The course focuses on mathematical reasoning and the solving of real-life problems. The following topics are studied in depth: set theory and logic, the mathematics of finance, probability, and statistics. The use of calculators or computers is a component of the course.

MATH 115 (IAI: MI 902)**General Education Statistics**

Prerequisite: Option 1, 2, or 3 above

3 lectures per week: 3 hrs credit

The general education statistics course provides students with an opportunity to acquire a reasonable level of statistical literacy and thus expand their base for understanding a variety of work-related, societal, and personal problems, and statistical approaches to the solution of these problems. The main objective of the course is statistical reasoning. Detailed techniques of statistical analysis and the mathematical development of statistical analysis of statistical procedures are not emphasized. The course is intended to meet the general education requirement. It is not intended to be a prerequisite to nor a replacement for courses in statistical methods for business, social science or mathematical statistics. Students who complete this course cannot also receive credit for BUS 240 or MATH 153.

MATH 151**College Algebra**

Prerequisite: Option 1, 2, or 3 as noted at beginning of section

4 lectures per week: 4 hrs credit

This course extends on the concepts previously studied in intermediate algebra. Course material is approached both algebraically and graphically. The graphing calculator is used extensively. Topics covered include linear, quadratic, polynomial, rational, exponential, and logarithmic functions and their applications. Matrices, matrix operation, and matrix equations are also introduced.

MATH 153 (IAI: MI 902)**Probability and Statistics**

Prerequisite: MATH 151 or qualifying score on the Math Placement Test

4 lectures per week: 4 hrs credit

This course is an introductory course in probability and statistics. Topics covered include frequency distribution, percentiles, measures of central tendency, measures of dispersion, standard deviation, correlation, elementary probability, line of regression, statistical inference, the binomial distribution, the normal distribution, student t-distribution, and the chi-square distribution. Computer software such as MINITAB is used. A comprehensive project is assigned. Students who complete this course cannot also receive credit for BUS 240 or MATH 115. (*same as BUS 240*)

MATH 155 (IAI: M1 906)

Finite Mathematics

Prerequisite: MATH 151 with a C or better or qualifying score on Math Placement Test

4 lectures per week: 4 hrs credit

This course is an introduction to finite mathematics to meet the needs of business, social science, and liberal arts students. Topics covered include compound interest, annuities, systems of equations and inequalities, matrices, linear programming and its applications, probability, game theory, and logic. Throughout the course, emphasis is placed on concepts and applications.

MATH 157 (IAI: M1 900-B)

Calculus for Business and Social Science

Prerequisite: MATH 151 with a C or better or qualifying score on Math Placement Test

4 lectures per week: 4 hrs credit

This is a one-semester calculus course for business and social science majors. Topics covered include equations of lines, limits, differentiation and integration of algebraic, exponential and logarithmic functions. Throughout the course, emphasis is placed on the applications of the basic concepts of calculus. This course does not count for credit toward a mathematics major or minor.

MATH 165

Pre-Calculus

Prerequisite: MATH 151 with a C or better

5 lectures per week: 5 hrs credit

This pre-calculus course covers trigonometry, polar and parametric equations, conic sections, sequences, and series. It is a preparatory course designed to provide students with the essential skills needed for success in the sequence of courses covering calculus for scientists and engineers.

MATH 171 (IAI: M1 900-1; MTH 901)

Calculus with Analytic Geometry I

Prerequisite: MATH 165 with a C or better, or qualifying score on the Math Placement Test

5 lectures per week: 5 hrs credit

This is the first course in a three semester sequence of courses covering calculus for scientists and engineers. Topics covered include lines, derivatives, applications of derivatives, antiderivatives and definite integrals, and applications of integrals.

MATH 172 (IAI: M1 900-2; MTH 902)

Calculus with Analytic Geometry II

Prerequisite: MATH 171

5 lectures per week: 5 hrs credit

This is the second course in the three-semester sequence of courses covering calculus for scientists and engineers. Topics covered include applications of integrals, transcendental functions, integration techniques, L'Hopital's rules, improper integrals, infinite sequences and series, and polar coordinates.

MATH 173 (IAI: M1 900-3; MTH 903)

Calculus with Analytic Geometry III

Prerequisite: MATH 172

5 lectures per week: 5 hrs credit

This is the final course in the three-semester sequence of courses covering calculus for scientists and engineers. Topics covered include basic operations on vectors, vector-valued functions, functions of several variables, partial derivatives, multiple integrals, and vector calculus.

MATH 200

Mathematics for Elementary Teaching I

Prerequisite: Option 1, 2 or, 3 as noted at beginning of section

4 lectures per week: 4 hrs credit

This course covers the fundamental ideas and theories of mathematics beginning with arithmetic. It is designed for prospective and present elementary school teachers. Topics include sets, functions, whole numbers, integers, rational numbers, and irrational numbers to complete the real number system. This course is recommended to meet the requirements for teacher certification in Illinois. This is not a methods course in teaching mathematics.

MATH 201

Engineering Computer Programming

Prerequisite: MATH 171

3 lectures per week: 3 hrs credit

This course is designed to use the computer in the study of problems in engineering, mathematics, or physical sciences. The emphasis is on problem analysis and problem solving.

MATH 206 (IAI: M1 903)

Mathematics for Elementary Teaching II

Prerequisite: MATH 200 with a C or better

4 lectures per week: 4 hrs credit

This course is a continuation of Mathematics for Elementary Teaching I. The topics studied include geometry, probability, statistics, and measurement. Mathematical reasoning and problem solving are emphasized. This course is the second in a two course sequence recommended to meet the requirements for teacher certification in Illinois. It is not a methods course in teaching mathematics. This course provides general education credit for elementary education majors only.

MATH 210 (IAI: M1 905; CS 915)**Discrete Mathematics**

Prerequisite: MATH 151 with a C or better or qualifying score on the Math Placement Test

3 lectures per week: 3 hrs credit

This beginning course in the mathematics of computer science introduces mathematical analysis of finite collections and mathematical analysis of sequential machines, computer system design, data structures, and algorithms. Topics include sets, counting, recursion, graph theory, trees, networks, Boolean algebra, and formal grammars.

MATH 216 (IAI: MTH 912)**Differential Equations**

Prerequisite: MATH 172

3 lectures per week: 3 hrs credit

Offered spring semester only

This is a first course in ordinary differential equations with applications to the physical sciences. Topics covered include recognition, classification and solution of differential equations, as well as the expression of applied problems as differential equations. This course is designed to prepare students for more advanced study in mathematics, science, and engineering.

MATH 220**Linear Algebra**

Prerequisite: MATH 172

3 lectures per week: 3 hrs credit

This course is intended as a transition between the calculus sequence and upper level courses in mathematics. Topics covered include vectors, vector spaces, matrices, determinants, matrix algebra, linear independence, linear transformations, eigenvalues, and eigenvectors. A significant portion of the course is devoted to theory and proof construction.

Mechanical Design Technology

(See CAD/Mechanical Design Technology)

Meteorology**METEO 150** (IAI: PI 905)**Introduction to Meteorology**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a non-lab physical science course surveying topics related to weather, climate, and the atmosphere. Studies include air masses and fronts, global circulation, severe weather, and climate. Students examine weather's impact on humans, and humans' impact on weather and climate.

Millwright**MILL 101****Industrial Maintenance Techniques I**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course teaches reading and use of micrometers, vernier calipers, dial indicators, and other measuring tools. Other topics include hand and power tools used by the millwright, fastener identification, layout and drilling operations, as well as reaming and tapping drilled holes.

MILL 102**Industrial Maintenance Techniques II**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers the installation of machinery coupled with the principles of steel construction. Also covered are friction bearings, non-friction bearings, couplings, gearing, and reduction build-up.

MILL 103**Lubrication**

Prerequisite: None

2 lectures per week: 2 hrs credit

This unit of study introduces students to the theories of lubrication, lubrication oils, greases, and solid lubricants, as well as the principles of lubrication, lubricating machine parts, lubrication storage, and safety. Other topics include lubricant application and its history, as well as centralized lubricating systems, system components, conductors, and connectors.

MILL 105**Rigging**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course familiarizes students with the safe and accepted industry practices as applied to rigging, rigging equipment, and its proper maintenance.

MILL 106**Power Train Elements**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course introduces the installation and alignment of component parts found in industrial equipment and machinery. Topics include the mounting of bearings, gearings, couplings, pulley clutches, and belts. Conveyors and chain drives are also covered. Equipment and coaxial alignment are stressed.

MILL 107

Machine Vibration Analysis I

Prerequisite: None

2 lectures per week: 2 hrs credit

This course provides industrial maintenance technicians with an understanding of vibration analysis, rotating machine monitoring techniques, data collection, and analysis techniques.

MILL 108

Machine Vibration Analysis II

Prerequisite: MILL 107

2 lectures per week: 2 hrs credit

This course provides industrial maintenance technicians with enhanced vibration diagnostics for rotating machines. Topics covered include selecting instrumentation, natural frequency, phase analysis, journal bearing problems, and anti-friction bearing problems using vibration signature analysis.

Music

MUSIC 100

Fundamentals of Music Theory

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces the basic principles of interpreting and understanding the language of music. It includes the study of notation, rhythm, scales, intervals, basic forms, musical terms, and introduction to the keyboard.

MUSIC 101

Musicianship I

Prerequisite: MUSIC 100 (or equivalent)

4 lecture hrs per week: 4 hrs credit

This course is the first in a sequence of four that provides extensive training in the fundamentals of music theory and ear training. It deals with the notational and aural aspects of Western music including clefs, scales, key signatures, intervals, meter, rhythm, melody, and chords, and uses 4-part chorale writing for a basis for study of chord progressions. It provides training in sight-singing and melodic and rhythm dictation. It is required for all music majors and minors.

MUSIC 102

Musicianship II

Prerequisite: MUSIC 101

4 lecture hrs per week: 4 hrs credit

This course is the second in a sequence of four that provides extensive training in the fundamentals of music theory and ear training. It deals with the notational and aural aspects of Western music including scales, intervals, meter, rhythm, melody, and chords, using 4-part chorale writing for a basis for the study of chord progressions. It provides training in sightsinging, melodic and rhythmic dictation, and chord recognition. It is required for all music majors and minors.

MUSIC 110

Community Chorus

Prerequisite: Placement into ENG 099 or higher

2 lab hrs per week: 1 hr credit

(May be repeated three times)

Open to all students interested in choral activities. This ensemble provides an opportunity for singers to participate in a large chorus.

MUSIC 115

Orchestral String Ensemble

Prerequisite: Placement into ENG 099 or higher

2 lab hrs per week: 1 hr credit

This ensemble provides an opportunity for musicians who play traditional orchestral string instruments (violin, viola, cello, double bass) to study and perform significant string ensemble literature. Students must know how to read music and have at least an intermediate playing ability to participate.

MUSIC 120

Wind Ensemble

Prerequisite: Consent of instructor

2 lab hrs per week: 1 hr credit

(May be repeated three times)

This course provides the opportunity for students to study and perform significant concert band literature in an ensemble.

MUSIC 130 (IAI: FI 900)

Music Appreciation

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces representative masterpieces and focuses on helping students develop listening skills and the ability to identify, analyze, and appreciate different kinds of music. Emphasis will be placed on the elements of music, various musical forms and periods, and great composers and performers.

MUSIC 132 (IAI: FI 904)

American Music

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is an historical survey of the development and major cultural contributions of American music and composers including symphonic, jazz, and popular forms within the context of American culture and society.

MUSIC 143

Class Voice I

Prerequisite: Placement into ENG 099 or higher

1 lecture, 2 lab hrs per week: 2 hrs credit

Group instruction in fundamentals of singing, voice production, breathing, diction, vocalizing, and technical exercises; elementary song literature is introduced as progress is made.

MUSIC 144**Class Voice II**

Prerequisite: MUSIC 143

1 lecture, 2 lab hrs per week: 2 hrs credit

A continuation of MUSIC 143, this course provides group instruction at a more advanced level. In addition to correct vocal production, breathing, diction, and technical exercises, learning of songs is emphasized.

MUSIC 152**Jazz Ensemble I**

Prerequisite: Consent of instructor

1 lecture, 2 lab hrs per week: 1 hr credit

Instrumental ensemble performance. Open to intermediate level or higher students of piano and band or orchestral instruments.

MUSIC 153**Jazz Ensemble II**

Prerequisite: MUSIC 152

1 lecture, 2 lab hrs per week: 1 hr credit

This course is a continuation of MUSIC 152. It provides instrumental ensemble experience with an emphasis on improvisation.

MUSIC 162**Vocal Jazz Ensemble I**

Prerequisite: Consent of instructor

1 lecture, 2 lab hrs per week: 1 hr credit

This course provides rehearsal and performance experience in a vocal jazz ensemble.

MUSIC 163**Vocal Jazz Ensemble II**

Prerequisite: MUSIC 162

1 lecture, 2 lab hrs per week: 1 hr credit

This course provides continuing rehearsal and performance experience in a vocal jazz ensemble.

MUSIC 171**Digital Keyboard Techniques**

Prerequisite: Placement into ENG 099 or higher

1 lecture, 2 lab hrs per week: 2 hrs credit

This course develops basic piano keyboarding skills and teaches the foundations of MIDI (musical instrument digital interface) technology. It is a required course for students in music technology or production.

MUSIC 172**Music in Film and Television**

Prerequisite: MUSIC 130 or 132

3 lectures per week: 3 hrs credit

This course examines the uses of music in film and television and provides an overview of the industry. The breadth of music is explored through critical analysis of significant works and consideration of aesthetic, technical, historical, psychological and social tools, and trends.

MUSIC 174**Computer-Assisted Music Production**

Prerequisite: Placement into ENG 099 or higher

4 lectures per week: 4 hrs credit

Students learn the basics of Musical Instrument Digital Interface (MIDI), computer sequencing, and multitrack recording using software applications and tools. Through a series of projects, each student will produce an audio CD using Sonar 8.

MUSIC 176**Sound Recording Techniques**

Prerequisite: Physics 101 Conceptual Physics (3) or concurrent enrollment

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides students hands-on training in recording audio of music and sound. Microphone types and set-up, mixing board set-up and management, room acoustics evaluation, sound isolation, and post-production techniques are covered.

MUSIC 181**Private Lessons I**

Prerequisite: Placement into ENG 099 or higher

1 lecture per week: 1 hr credit (may be repeated 3 times)

Private instruction in voice or an instrument is provided for students who are not music majors. Students meet weekly with the instructor for a half-hour lesson emphasizing technique, reading skills and repertoires. Instruction is offered in voice, piano, brass, woodwinds, strings, percussion, organ, bass, or guitar.

MUSIC 182**Private Lessons II**

Prerequisite: MUSIC 181

1 lecture per week: 1 hr credit (may be repeated 3 times)

Continued private instruction in voice or an instrument is provided for students who are not music majors. Students meet weekly with the instructor for a half-hour lesson emphasizing technique, reading skills and repertoires. Instruction is offered in voice, piano, brass, woodwinds, strings, percussion, organ, bass, or guitar.

MUSIC 191

Private Applied Music I

Prerequisite: Consent of instructor
2 lectures per week: 2 hrs credit
(may be repeated 3 times)

Private instruction is provided in voice or an instrument, emphasizing techniques, performance, and pedagogical fundamentals. Students who plan to transfer to an upper-division program as music majors are required to enroll each semester in a selected area of performance concentration. Instruction is offered in voice, piano, brass, woodwinds, strings, percussion, organ, bass, or guitar.

MUSIC 192

Private Applied Music II

Prerequisite: MUSIC 191
2 lectures per week: 2 hrs credit
(may be repeated 3 times)

Continued private instruction in voice or an instrument, emphasizing techniques, performance, and pedagogical fundamentals. Students who plan to transfer to an upper-division program as music majors are required to enroll each semester in a selected area of performance concentration.

MUSIC 201

Musicianship III

Prerequisite: MUSIC 102
4 lectures hrs per week: 4 hrs credit

This course is the third in a sequence of four that provides extensive training in the fundamentals of music theory and ear training. It deals with the notational and aural aspects of Western music including scales, intervals, meter, rhythm, melody, and chords, and provides an introduction to polyphony and common musical forms including binary, ABA, and sonata-allegro. It continues a study of chord progressions and training in sight-singing, melodic, and rhythmic dictation, and chord recognition, and introduces two-part singing and harmonic dictation.

MUSIC 202

Musicianship IV

Prerequisite: MUSIC 201
4 lectures hrs per week: 4 hrs credit

This course is the fourth in a sequence of four that provides extensive training in music theory and ear training. It deals with the notational and aural aspects of Western music, with an introduction to non-Western scales and tonality. It continues a study of form and focuses on 20th century theory and compositional developments. It continues a study of chord progressions and training in sight-singing; melodic, rhythmic, and harmonic dictation; and part singing.

MUSIC 252

Jazz Ensemble III

Prerequisite: Consent of instructor
1 lecture, 2 lab hrs per week: 1 hr credit

This course is a continuation of MUSIC 153. It provides instrumental ensemble experience with an emphasis on improvisation.

MUSIC 253

Jazz Ensemble IV

Prerequisite: Consent of instructor
1 lecture, 2 lab hrs per week: 1 hr credit

This course is a continuation of MUSIC 252. It provides instrumental ensemble experience with an emphasis on improvisation.

MUSIC 262

Vocal Jazz Ensemble III

Prerequisite: MUSIC 163
1 lecture, 2 lab hrs per week: 1 hr credit

This course provides continuing rehearsal and performance experience in a vocal jazz ensemble.

MUSIC 263

Vocal Jazz Ensemble IV

Prerequisite: MUSIC 262
1 lecture, 2 lab hrs per week: 1 hr credit

This course provides continuing rehearsal and performance experience in a vocal jazz ensemble.

MUSIC 274

Digital Composition for Video

Prerequisite: MUSIC 174
4 lectures per week: 4 hrs credit

This course teaches the creative and technical aspects of composing and synchronizing music for video using computer-assisted digital technology (Sonar 8 and Adobe Audition), and existing visual media.

MUSIC 281

Private Lessons III

Prerequisite: MUSIC 182
1 lecture per week: 1 hr credit
(may be repeated 3 times)

Continued private instruction in voice or an instrument is provided for students who are not music majors. Students meet weekly with the instructor for a half-hour lesson emphasizing technique, reading skills, and repertoires.

MUSIC 282**Private Lessons IV***Prerequisite: MUSIC 281*

1 lecture per week: 1 hr credit
(may be repeated 3 times)

Continued private instruction in voice or an instrument is provided for students who are not music majors. Students meet weekly with the instructor for a half-hour lesson emphasizing technique, reading skills, and repertoires. Instruction is offered in voice, piano, brass, woodwinds, strings, percussion, organ, bass, or guitar.

MUSIC 291**Private Applied Music III***Prerequisite: MUSIC 192*

2 lectures per week: 2 hrs credit
(may be repeated 3 times)

Continued private instruction in voice or an instrument, emphasizing techniques, performance, and pedagogical fundamentals. Students who plan to transfer to an upper-division program as music majors are required to enroll each semester in a selected area of performance concentration. Instruction is offered in voice, piano, brass, woodwinds, strings, percussion, organ, bass, or guitar.

MUSIC 292**Private Applied Music IV***Prerequisite: MUSIC 192*

2 lectures per week: 2 hrs credit
(may be repeated 3 times)

Continued private instruction in voice or an instrument, emphasizing techniques, performance, and pedagogical fundamentals. Students who plan to transfer to an upper-division program as music majors are required to enroll each semester in a selected area of performance concentration.

MUSIC 299**Music Production Internship***Prerequisite: MUSIC 172, 176, 274; consent of instructor*

10 lab hrs per week: 2 hrs credit

This course provides workplace experience for students in the field of music technology and production.

Nursing

(See also Registered Nursing)

Financial Aid recipients should check with the Office of Financial Aid/Veterans Affairs prior to enrolling in Nursing 100. Some financial aid programs will not pay for this course.

NURS 100**Nurse Assistant Training**

Prerequisite: COMPASS reading score of 60 or above. Must be 16 years of age and have Social Security card. Must enroll in person.
6 lectures, 3 lab hrs per week: 7 hrs credit

This course teaches the basic nursing skills necessary to become a nursing assistant. Students are led from the integrated roles of the health care team to the specific duties of the nursing assistant and the skills necessary to give basic patient care and to deal with families.

NURS 101**Basic Care Needs***Prerequisite: Registration in the Nursing program*

4 lectures, 6 lab hrs per week: 6 hrs credit

A course designed to assist students in recognizing the basic needs of clients. The communication process introduces the basic psychosocial needs of people, incorporating specific needs of clients and the dynamics of interpersonal relationships along with group process. Emphasis is placed upon the needs of the individual client made dependent through illness, including principles related to activities of daily living, administration of medications, and nursing observation. The approach to nursing care utilizes the principles of the nursing process.

NURS 102**Acute Care Needs***Prerequisite: NURS 101 and BIOL 222*

5 lectures, 6 lab hrs per week: 7 hrs credit

This course is designed to introduce students to concepts related to the care and teaching of clients with acute care needs. The nursing process is instrumental in allowing students to explore and apply standards of care in meeting the needs of culturally diverse clients throughout the life span.

NURS 110**Seminar in Nursing Practice***Prerequisite: NURS 102*

1 lecture, 2 lab hrs per week: 2 hrs credit

The focus of this course is to enhance freshman nursing students' competence in decision making skills, critical thinking, and clinical judgments/practice.

NURS 111

Nursing as a Profession

Prerequisite: Registration in the Nursing program

1 lecture per week: 1 hr credit

A course designed to introduce students to the theories and concepts of nursing and health. Students explore how these concepts affect the study they are undertaking. Historical developments are presented as a basis for the current explosion of theories and concepts of emerging care and responsibilities. The conceptual framework of their program is discussed, and the legalities involving care they will administer are identified.

NURS 201

Family Care Needs

Prerequisite: NURS 102

6 lectures, 14 lab hrs per week: 11 hrs credit

This course is designed to present theories and concepts which deal with communication problems and the expanding family, including children with compromised basic human needs. This will enable students to use the nursing process to advocate for the needs of these clients with acute variations along the life span.

NURS 202

Advanced Care Needs

Prerequisite: NURS 201

6 lectures, 14 lab hrs per week: 11 hrs credit

This course is designed to present theories and concepts concerning clients presenting with variations of advanced care needs. Students continue to use the nursing process to manage the care of client groups.

NURS 211

Preparation for Professional Nursing

Prerequisite: Placement into ENG 099 or higher

2 lectures per week: 2 hrs credit

This course presents advanced concepts and theories in nursing which assist students in accepting the challenge of the adjustment to the role of the graduate nurse. Roles, functions, and legal implications for the graduate nurse are discussed along with recent developments and realities as they affect the everyday practice of nursing.

Office Administration and Technology

(See Information Technology)

Philosophy

PHILO 201 (IAI: H4 900)

Introduction to Philosophy

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

In this course students learn to think and write philosophically. They are introduced to major philosophers and schools of thought.

PHILO 202 (IAI: H4 904)

Ethics

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

In this course students examine the role of reason in ethical decision-making. Traditional types of ethical reasoning are studied, compared, and applied to topics of current concern.

PHILO 203 (IAI: H4 906)

Introduction to Logic

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces formal reasoning, including the nature and evaluation of deductive and inductive references, language and meaning, symbolization, formal and informal fallacies, and evidence and its nature and role in critical thinking.

PHILO 204 (IAI: H4 905)

Philosophy of Religion

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course covers religious concepts and theories such as the existence and nature of a deity, the nature of good and evil, reason and faith, ethics, and the after-life. It may also include an examination of the nature of religious language and experience.

PHILO 205 (IAI: H4 903N)

Eastern Philosophy

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course presents the thoughts of great philosophers of the Eastern Tradition, including the ideas of Siddhartha Gautama, Lao-Tzu, Kahlil Gibran, and others.

Photographic Studies

(See also Art and Graphic Communications)

PHOTO 170

Digital Camera Skills

Prerequisite: None

1 lecture per week: 1 hr credit

This course deals with basics of digital camera operation. Students explore solutions to visual problems posed during group field trips. (Digital cameras are provided)

PHOTO 171

Introduction to Black and White Photography

Prerequisite: Placement into ENG 099 or higher

6 lab hrs per week: 3 hrs credit

This course investigates the principles of photography using black and white light-sensitive materials. Students learn camera controls and apply the methods of film and print processing techniques. The course explores the medium through a series of visual problems and emphasizes photography as a means of personal expression.

PHOTO 174

Digital Darkroom Techniques

Prerequisite: PHOTO 171 recommended

1 lecture, 2 lab hrs per week: 2 hrs credit

This course provides the introduction to and practical application of computer hardware and software used to produce, scan, edit, transfer, record, archive, and print photographs.

PHOTO 175

Basic Lighting Skills

Prerequisite: PHOTO 174 or concurrent enrollment

1 lecture, 2 lab hrs per week: 2 hrs credit

Students in this course are introduced to the mechanics of continuous sources of photographic lighting. Application and practice of proper metering, studio set up, lighting adjustment, storage of equipment, and use of various accessories are featured. Digital cameras are supplied for in-class use.

PHOTO 176

Electronic Flash Techniques

Prerequisite: PHOTO 171 and PHOTO 175

1 lecture, 2 lab hrs per week: 2 hrs credit

This course covers the fundamental methods of flash photography using built-in, on-camera, and portable professional equipment. Students also gain a working knowledge of flash meter measurement and exposure calculation using multi-strobe studio systems.

PHOTO 180

Photoshop I

Prerequisite: PHOTO 174 or instructor consent

1 lecture, 2 lab hrs per week: 2 hrs credit

This is a detailed introduction to Adobe Photoshop tools and techniques used in the digital conversion and adjustment of photographic images. Students learn to correct, composite, retouch, and manipulate photographs in RGB color space. Digital printing, film scanning, and proper storage of images on disk are also covered.

PHOTO 196

Careers in Photography

Prerequisite: PHOTO 171

1 lecture per week: 1 hr credit

This course surveys the structure, working conditions, and specific job responsibilities within the field of photography. Classroom presentations, guest lectures, and AV materials provide students with an understanding of production methods as well as employment potential for each occupation and career covered.

PHOTO 273

Photographic Methods

Prerequisite: PHOTO 171, 174, or concurrent enrollment

1 lecture, 4 lab hrs per week: 3 hrs credit

This intermediate course is designed to deepen students' understanding of the visual process and production of photographs. Participants experience a variety of camera formats while creating images using both digital and film based methods.

PHOTO 275

Photographic Design

Prerequisite: PHOTO 171, 174, or concurrent enrollment

1 lecture, 4 lab hrs per week: 3 hrs credit

This course concentrates on the visual methods and skills of designing photographs. The emphasis of class projects is on the improvement of picture analysis, evaluation of composition, style, and development of individual photographic vision. Digital cameras are used and supplied by the program.

PHOTO 276

Commercial Techniques

Prerequisite: PHOTO 171, 175 PHOTO 273, or consent of instructor

2 lectures, 4 lab hrs per week: 4 hrs credit

This course concentrates on camera and lighting techniques used in the creation of product photography. Areas include medium- and large-format camera skills, use of high-res digital camera equipment, table-top setups, and specific studio lighting for the production of catalog, advertising, and special effects photography.

PHOTO 280

Photoshop II

Prerequisite: PHOTO 180

1 lecture, 2 lab hrs per week: 2 hrs credit

Students in this course explore advanced color correction, layering, and editing methods in Photoshop through a series of visual assignments using original photographs. Extensive use of film scanning and direct digital capture is encouraged. Final portfolio images are printed on standard, large, and wide format inkjet printers.

PHOTO 281

Digital Applications

Prerequisite: PHOTO 174 and 180

2 lectures, 4 lab hrs per week: 4 hrs credit

This course concentrates on advanced digital image production techniques available to photographers. Students explore the application of several imaging software programs that are used to solve unique visual problems.

PHOTO 282

Experimental Techniques

Prerequisite: PHOTO 171, 174, or concurrent enrollment

1 lecture, 4 lab hrs per week: 3 hrs credit

This course explores various experimental camera, darkroom and digital techniques. Projects include multiple composite, infrared film, digital filtration, optical distortion, Polaroid emulsion/ image transfers, cliché verre (enlargements, scans), and hand-coloring techniques.

PHOTO 283

Portraiture

Prerequisite: PHOTO 175 or consent of instructor

1 lecture, 4 lab hrs per week: 3 hrs credit

This course is an introduction to creating studio and available light portraits featuring tungsten and electronic strobe applications. Emphasis is placed on correct use of diffused, reflective and spot lighting techniques, proper metering, and posing of the sitter. Projects are completed using digital cameras and color inkjet production.

PHOTO 285

Digital Color Production

Prerequisite: PHOTO 174, 180, or consent of instructor

2 lectures, 2 lab hrs per week: 3 hrs credit

This course investigates color light theory and the digital controls of color reproduction currently available in photography. Students work with software designed to develop and maintain color management of photographic output by calibrating displays, profiling scanners, cameras, and small to wide format inkjet printers.

PHOTO 286

Independent Photo Project

Prerequisite: PHOTO 275

6 lab hrs per week: 3 hrs credit

This course encourages individual exploration of a personal visual direction or idea with emphasis on the fine art approach to photography. A proposal outline and complete portfolio are required of each participant.

PHOTO 287

Independent Photo Studio

Prerequisite: PHOTO 276 or 283

6 lab hrs per week: 3 hrs credit

Students in this course propose advanced photographic exploration with emphasis in portrait, fashion or commercial product photography. Each participant must have completed prior course work in their chosen area of concentration.

PHOTO 290

Advanced Color Photography

Prerequisite: PHOTO 180, 285, or consent of instructor

2 lectures, 4 lab hrs per week: 4 hrs credit

This course investigates advanced visual problems posed in color photography. Areas covered include positive color light theory, customized white balance, proper exposure calculation, advanced color management techniques and wide format color printing.

PHOTO 291

Survey of Contemporary Photography

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course provides a unique experience while learning about current trends in photography. Visits to major museums and galleries combined with attending lectures by photographers highlight the activities of the class. Students are required to write several reviews of exhibits they see and present a topic for class discussion.

PHOTO 292

Photo Workshop: Special Topics

Prerequisite: PHOTO 171, 174, 6 additional hours in PHOTO

2 lectures, 4 lab hrs per week: 4 hrs credit (may be repeated 3 times for credit with different topics)

This advanced course explores a single subject in photography. Topics for concentrated study may be selected from fashion photography, photojournalism, architecture, landscape, or other specific areas of specialization.

PHOTO 293**Advanced Portraiture**

Prerequisite: PHOTO 283, 285

2 lectures, 4 lab hrs per week: 4 hrs credit

This course features the use of sophisticated studio strobe systems in making professional portraits. Students work on multilight sets to produce photographs of individuals, couples, families, and groups. Radio transmitter operation, color burst background techniques and location lighting methods are also covered.

PHOTO 297**Professional Portfolio**

Prerequisite: PHOTO 275, 285, or consent of instructor

2 lectures, 2 lab hrs per week: 3 hrs credit

This course helps students understand the process of preparing a portfolio of creative commercial photographs for career readiness. Class activities include career planning, creation of portfolio content and assembly, resume organization, and personal presentation. Individual peer and/or professional critiques are conducted each week for career potential feedback.

PHOTO 298**Seminar**

Prerequisite: Concurrent enrollment in PHOTO 299

1 lecture per week: 1 hr credit

Students meet with program coordinator one hour per week to discuss various problems and issues encountered in the internship.

PHOTO 299**Internship**

Prerequisite: 12 credit hrs in PHOTO and consent of program coordinator

15 lab hrs per week: 3 hrs credit (variable credit)

The student internship program allows students to earn college credit while working in an approved photography-related business. This course is scheduled by joint agreement of the student, the site supervisor and the program coordinator.

Physical Education

Only four credits of physical education may be counted for an A.A. or A.S. degree, except for students transferring as physical education majors.

PE 101**Physical Fitness I**

Prerequisite: None

2 lab hrs per week: 1 hr credit

This course is designed to assist individuals in establishing a foundation for personal fitness. Students are administered basic fitness assessment and engage in a structured exercise program utilizing flexibility, strength, and cardiovascular efficiency. May be repeated three more times for credit.

PE 102**Physical Fitness II**

Prerequisite: PE 101

2 lab hrs per week: 1 hr credit

A continuation of PE 101, this course is designed to assist students in achieving an intermediate level of fitness. Students are administered fitness assessments to determine progress in the areas of flexibility, strength and cardiovascular efficiency.

PE 103**Physical Fitness III**

Prerequisite: PE 102

2 lab hrs per week: 1 hr credit

A continuation of PE 102, this course is designed to assist students in achieving a high level of fitness. Special emphasis is placed on maintaining target heart rate levels in order to determine further personal cardiovascular efficiency. Students are administered fitness assessments to determine personal progress.

PE 104**Physical Fitness IV**

Prerequisite: PE 103

2 lab hrs per week: 1 hr credit

A continuation of PE 103, this course is designed to assist students in maintaining a high level of fitness. Students achieve a basic understanding of the impact of increased duration, frequency, and intensity levels in regard to enhancing physiological performance.

PE 105**Aerobics I**

Prerequisite: None

2 lab hrs per week: 1 hr credit

(may be repeated 3 times)

This course assists individuals to improve strengthening, toning, and cardiovascular system through walking, Pilates, or yoga.

PE 106

Aerobics II

Prerequisite: None

2 lab hrs per week: 1 hr credit (may be repeated 3 times)

This course assists individuals to improve cardiovascular conditioning through step aerobics, kickboxing or low-impact aerobics. Strengthening and toning exercises are also introduced.

PE 107

Aerobics III

Prerequisite: None

2 lab hrs per week: 1 hr credit (may be repeated 3 times)

This course assists individuals to improve their cardiovascular conditioning through aqua aerobics. Strengthening and toning exercises are also introduced in the swimming pool environment.

PE 108

Aerobics IV

Prerequisite: None

2 lab hrs per week: 1 hr credit (may be repeated 3 times)

This course assists individuals desiring a higher level of intensity. This is accomplished through "Funk Aerobics", boot camp style aerobics, or indoor cycling.

PE 151

Basketball

Prerequisite: None

2 lab hrs per week: 1 hr credit

This course teaches the basic rules of basketball, playing court dimensions, and equipment needed. Fundamentals of passing, dribbling, shooting, rebounding, individual offense, and defense are emphasized.

PE 161

Soccer

Prerequisite: None

2 lab hrs per week: 1 hr credit

Learn the basic rules and fundamentals of soccer. Course instruction includes kicking, passing, trapping, heading, tackling, the throw-in, and goal keeping. Basic offensive and defensive strategies and tactics are also discussed.

PE 162

Volleyball

Prerequisite: None

2 lab hrs per week: 1 hr credit

This course teaches students the basic skills and rules associated with the game of volleyball. Skills covering overhead passing, forearm passing, serving, spiking, and blocking are explored. Practice games are conducted to emphasize each skill.

PE 163

Golf

Prerequisite: None

2 lab hrs per week: 1 hr credit

Examine rules and various skills associated with the game of golf. Techniques and skills such as proper grip, stance, swing, pitch, chip, sand shots, putting, and a variety of golf exercises are explored.

PE 164

Tennis

Prerequisite: None

2 lab hrs per week: 1 hr credit

This course teaches students basic rules of play and scoring procedures in tennis. Students are taught appropriate grip and techniques for a variety of tennis strokes.

PE 165

Softball

Prerequisite: None

2 lab hrs per week: 1 hr credit

This course teaches students the basic rules of play and the basic skills associated with softball. Hitting, catching, fielding, throwing, and running bases are explored.

Physical Education: Exercise Science

PES 200

Officiating Sports

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

Instruction is provided in the fundamental techniques, rules, procedures, and professional attitude required of officials in flag football, softball, volleyball, and basketball.

PES 201

Introduction to Physical Education

Prerequisite: Placement into ENG 099 or higher

2 lecture hrs per week: 2 hrs credit

This course provides introductory materials for pre-physical education majors. Emphasis is on pre-professional exposure to a variety of physical education related careers. The history of physical education, athletics, and related leisure activities are explored.

PES 202**Cultural Dance I**

Prerequisite: Placement into ENG 099 or higher

2 lectures per week: 2 hrs credit

This course introduces students to specific dance techniques, rhythmic patterns, instrumentation, and appropriate musical forms associated with African, Afro Brazilian, Latin, and/or Caribbean dance styles. This is accomplished through lecture and activity.

PES 210**Lifestyle Fitness Coaching**

Prerequisite: Program Coordinator consent required

2 lectures per week: 2 hrs credit

Students will learn communication and facilitation skills to help their clients achieve positive behavior changes and establish expectations for personal growth and healthy active living.

PES 215**Group Fitness Instructor Training**

Prerequisite: Consent of program coordinator

2 lectures, 2 lab hrs per week: 3 hrs credit

This course provides the methods, techniques, and skills that enable students to provide safe aerobic activities as instructors.

PES 220**Fitness Assessment/Exercise Program Design I**

Prerequisite: Consent of program coordinator

2 lectures, 2 lab hrs per week: 3 hrs credit

This course introduces students to the skills, organization, and methods of fitness testing. Students also learn exercise program design.

PES 225**Weight Training: Theory & Application**

Prerequisite: Consent of program coordinator

2 lectures per hr: 2 hrs credit

This course emphasizes the instructional techniques and skill development in progressive resistance strength training. Anatomical, physiological and biomechanical principles are studied and applied to design effective programs for individuals and groups.

PES 230**Nutrition for Sports and Exercise**

Prerequisite: Consent of program coordinator

3 lectures per week: 3 hrs credit

This course provides an overview of the basic principles of nutrition and weight management with particular application to exercise and sport.

PES 235**Athletic Training Techniques**

Prerequisite: Consent of program coordinator

3 lectures per week: 3 hrs credit

This course is a study of the basic concepts and techniques in prevention, recognition and management of common sport and exercise injuries, including methods in conditioning for injury prevention, evaluation, taping safety, and emergency procedures.

PES 250**Kinesiology**

Prerequisite: BIOL 108 or BIOL 221 and 222, and consent of program coordinator

3 lecture hrs per week: 3 hrs credit

This course focuses on the functional anatomical basis of human motion accomplished through studying the skeletal, neural, and muscular systems.

PES 255**Special Populations**

Prerequisite: BIOL 108 or BIOL 221 and 222, PE 220, and consent of program coordinator

3 lectures per week: 3 hrs credit

This course emphasizes safe and effective fitness programming by addressing physiological difference, and techniques and tools for motivating special populations.

PES 260**Fitness/Exercise Facility Management**

Prerequisite: Consent of program coordinator

3 lectures per week: 3 hrs credit

This course introduces students to fitness/exercise/recreation facilities and their operational procedures. The management process regarding facility design, personnel management, marketing, budgeting, and insurance issues are discussed.

PES 265

Physiology of Exercise

Prerequisite: Consent of program coordinator

3 lectures per week: 3 hrs credit

This course is designed to teach the basic physiological principles of exercise.

PES 298

Internship Seminar

Prerequisite: Concurrent enrollment in PE 299 and consent of program coordinator

1 lecture per week: 1 hr credit

This seminar is designed to provide direction on building a successful personal training business.

PES 299

Internship for Personal Trainers

Prerequisite: Concurrent enrollment in PE 298 and consent of program coordinator

15 lab hrs per week: 3 hrs credit

This course is designed to provide real-world experience. Students are supervised in Fitness Center arranged by the program coordinator.

Physical Science

PHYSC 111 (IAI: P9 900L)

Physical Science

Prerequisite: Placement into ENG 099 or higher

3 lectures, 2 lab hrs per week: 4 hrs credit

This is an introductory lab course focusing on everyday experiences in physics, chemistry, and astronomy. Basic ideas of motion, matter, and energy are explored and related to astronomy and the importance of scientific discoveries to our society.

PHYSC 112 (IAI: P1 905L)

Earth Science

Prerequisite: Placement into ENG 099 or higher

3 lectures, 2 lab hrs per week: 4 hrs credit

Earth Science is an introductory lab course which surveys topics in geology, meteorology, and environmental science. The geology portion includes rocks, streams, glaciers, earthquakes, plate tectonics, volcanism, and mountain building. The meteorology portion focuses on the atmosphere, weather and climate. Human influence on the environment is emphasized.

Applied Physics

APHYS 100

Applied Physics

Prerequisite: AMATH 100 or MATH 090

2 lectures per week: 2 hrs credit

This course surveys the physical principles of mechanics and is intended for students in apprentice certificate programs. Topics include metric system measurements, motion, Newton's laws, forces and equilibrium, simple machine elements, conservation laws, rotational motion, matter, and heat.

Physics

PHYSI 101 (IAI: P1 901L) (was PHYSI 110)

Conceptual Physics

Prerequisite: Placement into ENG 099 or higher

3 lectures, 2 lab hrs per week: 4 hrs credit

This course provides a non-mathematical introduction to the basic concepts of physics. This lab course is designed for those with little or no knowledge of physics. Topics include motion, energy, fluids, sound, heat, light, electricity and magnetism, and an overview of concepts like relativity.

PHYSI 120 (IAI: P1 900L)

College Physics I

Prerequisite: MATH 151 or equivalent

3 lectures, 2 lab hrs per week: 4 hrs credit

This introductory course in a two-semester, algebra-based sequence is designed to meet the needs of liberal arts, life and health science, and pre-professional students. Topics include kinematics, Newton's laws of motion, conservation laws, rotational motion, wave phenomena, fluids, and heat. Students may not receive credit for both PHYSI 120 and 210.

PHYSI 130

College Physics II

Prerequisite: PHYSI 120 or equivalent

3 lectures, 2 lab hrs per week: 4 hrs credit

This continuation of PHYSI 120 is designed to meet the needs of students in the liberal arts, science majors, and pre-professional students. Topics include light, optics, electricity, magnetism, and modern physics.

PHYSI 210 (IAI: P2 900L; PHY 911)**University Physics I**

Prerequisite: MATH 171 and high school physics

3 lectures, 3 lab hrs per week: 4 hrs credit

This calculus-based course is designed for physical science, pre-engineering, and mathematics majors and introduces the major topics of mechanics, including kinematics, dynamics, momentum, energy, gravitation, harmonic motion, and fluids. Microcomputers are used for data gathering and simulation. Students cannot receive credit for both PHYSI 120 and 210.

PHYSI 220 (IAI: PHY 912)**University Physics II**

Prerequisite: MATH 171 and PHYSI 210 with minimum grade of C or better

3 lectures, 3 lab hrs per week: 4 hrs credit

This is the second course in the introductory sequence for physical science, pre-engineering, and mathematics majors. Topics covered include heat, thermodynamics, electric and magnetic fields, law of electricity and magnetism, DC and AC circuits, and electromagnetism.

PHYSI 230**University Physics III**

Prerequisite: MATH 171 and PHYSI 210 with minimum grade of C or better

3 lectures, 3 lab hrs per week: 4 hrs credit

This is the third course in a three-semester sequence for physical science, pre-engineering, and mathematics majors. Topics include properties and equations of waves, sound optics, and modern physics.

**Plumbing, Pipefitter/
Steamfitter****PLUMB 101****Fundamentals of Plumbing**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers the specifications, applications and maintenance of pipes, fittings and valves; simple pipe calculations and template development; tools used in piping; proper valve installation and maintenance; and consideration of safe working pressures of pipes and valves are covered.

PLUMB 102**Drains, Wastes, and Vents**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course is designed to acquaint students with the proper materials for sewer, soil, vent, and waste pipes; principles of drainage flow and proper venting; traps and installation of unit sanitation equipment, and joints and fittings used on drainage systems.

PLUMB 103**Plumbing and Pipefitting Heating**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers the principles of steam and hydronic heating, various types of steam systems in use, and proper sizing and tapping of steam units. The study of hydronics includes one-pipe, two-pipe, high temperature and pressure systems, heat loss calculations, and the design of hydronic systems.

PLUMB 104**Plumbing and Pipefitting Code**

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers current plumbing rules and regulations governing installation of plumbing systems, rules and regulations pertaining to joints, traps, cleanouts, water distribution, fixtures, and drainage.

Political Science**POLSC 101** (IAI: S5 903)**Principles of Political Science**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course provides an introduction to the core concepts of political science. Students explore the questions political scientists ask, the means by which they answer those questions, and the types of answers that have emerged in response to contemporary problems.

POLSC 140 (IAI: S5 900)**Introduction to U.S. Government and Politics**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces students to the core concepts in political science that allow for a better understanding of the principles and organization of government and politics in the United States at the national, state and local levels.

POLSC 152 (IAI: S5 902)**U.S., State, and Local Government**

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course describes the politics, function, and decision-making process of state and local governments in the United States. Special emphasis is placed on the historical development of Illinois government and political culture. Current issues facing state and local government agencies are also described and discussed.

POLSC 230 (IAI: S5 905)

Introduction to Comparative Government

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This introduction to comparative politics encompasses both Western and Non-Western political structures. Emphasis is on the political economy of development, the causes and effects of different systems of government, and the historical and cultural context of political formations across the globe.

POLSC 240 (IAI: S5 904)

Introduction to International Relations

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces students to the core concepts and major issues shaping international relations and world politics. Topics to be explored may include: globalization, international organizations, human rights, environmental problems, development, terrorism, war, and peace.

Psychology

PSYCH 101 (IAI: S6 900)

Introduction to Psychology

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces psychology as a scientific approach to understanding human behavior. The history of the field, its methods, and research tools are covered. Topics include physiology, sensation, perception, motivation, learning and memory, maturation and development, personality, individual differences, social behavior, and abnormal behavior and its therapies.

PSYCH 102 (IAI: S6 902)

Human Growth and Development: Life Span

Prerequisite: PSYCH 101

3 lectures per week: 3 hrs credit

This course surveys the normal biological, cognitive, social, emotional and personality development characteristics of life phases from conception through adulthood to death.

PSYCH 202

Educational Psychology

Prerequisite: PSYCH 101

3 lectures per week: 3 hrs credit

This course focuses on the psychological principles, theories and current research related to the roles and functions of teachers and learners in educational settings. From the perspective of students, special emphasis is placed upon theories of motivation, creativity, learning theories, individual learning differences, and cultural and gender diversity. From the teacher's perspective, special emphasis is placed upon classroom management principles, effective instructional approaches, measurement and assessment techniques, and aligning instruction with the growth of students' social, cognitive, and personal development.

PSYCH 203 (IAI: PSY 905)

Abnormal Psychology

Prerequisite: PSYCH 101

3 lectures per week: 3 hrs credit

This course covers theories and techniques applied to the labeling of "abnormal" behavior as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). Topics include research methods; definition, assessment, and categorization of abnormal behavior; diagnosis, treatment, and prevention.

PSYCH 204 (IAI: PSY 906)

Industrial/Organizational Psychology

Prerequisite: PSYCH 101

3 lectures per week: 3 hrs credit

This course studies the behavior of men and women as they adjust to the people, objects, and surroundings encountered in the workplace. Emphasis is on applying data gathered to maximize the economic and psychological well-being of all employees and constituencies. Topics include research methods; personnel selection, placement, and training; job analysis and performance appraisal; job satisfaction and motivation; leadership; organizational decision making; and organizational development.

PSYCH 212 (IAI: PSY 907)

Theories of Personality

Prerequisite: PSYCH 101

3 lectures per week: 3 hrs credit

This course studies the development and structure of human personality. Students consider a variety of theoretical approaches to understanding human personality: psychoanalytical, humanistic, behavioral/social, cognitive, and traits. Readings include works by Freud, Adler, Horney, Sullivan, Fromm, Rogers, Jung, Maslow, Jourad, and others. Emphasis is on the application of personality theories to the understanding of self.

PSYCH 215 (IAI: S8 900)**Social Psychology***Prerequisite: PSYCH 101*

3 lectures per week: 3 hrs credit

As an introduction to social psychology, this course is organized around five broader perspectives of social behavior: cultural differences, the life span, the individual, the situation, and the social group. Topics include attitudes, social perceptions, the establishment of norms, conformity, leadership, group dynamics, and research methods, with emphasis on their effects on the individual.

PSYCH 217**Human Sexuality***Prerequisite: Placement into ENG 099 or higher*

3 lectures per week: 3 hrs credit

Principles, theories, and points of view concerning human sexuality with emphasis on the psychological and social aspects of human sexuality. The primary aim of this course is to provide a framework for and encourage responsible decision making with respect to the sexual aspect of our total being.

Reading**RDG 097****Fundamental Reading I***Prerequisite: Qualifying score on Reading Placement Test*

4 lectures per week: 4 hrs non-degree, non-transfer credit (may be repeated two times)

This course provides individualized instruction for students who need review of word analysis, vocabulary, and comprehension skills.

RDG 098**Fundamental Reading II***Prerequisite: RDG 097 or qualifying score on Reading Placement Test*

4 lectures per week: 4 hrs non-degree, non-transfer credit (may be repeated two times)

This course is designed for students who have mastered basic reading techniques. Its purpose is to increase students' vocabulary and comprehension skills for effective reading and clear thinking.

Registered Nursing

(See also Nursing)

RN 100**R.N. First Assistant**

Prerequisite: Professional registered nurse, current license, current CNOR and 2 years surgical nursing experience, or eligible for CNOR at end of courses; sponsoring surgeon and letter of recommendation from employer. Consent of instructor.

3 lectures per week: 3 hrs credit

This course provides prospective RN first assistants with advanced knowledge of anatomy/physiology and techniques related to operative procedures. It focuses on collaboration of the RN First Assistant and surgeon in delivery of optimal perioperative care and its impact on professional nursing. The course provides theoretical knowledge of asepsis/infection control, hemostasis, retracting/wound exposure, tissue handling, proper instrument usage, clamping, ligation, and suturing. It also provides a theoretical foundation based on extensive scientific knowledge and includes nursing concepts and clinical judgment for advanced nursing practice.

RN 101**R.N. First Assistant Internship***Prerequisite: RN 100*

6 lab hrs per week: 3 hrs credit

This course provides theoretical instruction and practical skills attainment for the role and responsibility of a registered nurse first assistant.

RN 120**Perioperative Nursing**

Prerequisite: Current RN, PPD, CPR and immunizations, and health insurance coverage.

3 lecture, 4 lab hrs per week: 5 hrs credit

This course provides instruction to a licensed registered nurse seeking didactic and clinical experience in perioperative nursing. This course instructs students on operating room asepsis and sterile technique, scrubbing, gowning, gloving, instrumentation, positioning, prepping and documentation, and legal aspects. Surgical specialties to be covered: general and gynecologic.

Social Work

SWK 201

Introduction to Social Work

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces students to the historical background and nature of social work theory, agencies and policy. It provides insight into social service organizations and agencies. Students examine the human concerns of various at-risk populations. This course also presents the knowledge bases and skills of social work practice, and enables students to evaluate their interests and capacities for entering the profession of social work. (*same as SOCIO 201*)

Sociology

SOCIO 101 (IAI: S7 900)

Introduction to Sociology

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course explores the major concepts, theories, and research methods within the field of sociology. Students examine how their behavior is shaped by the groups they belong to and the society in which they live. Topics for discussion include culture, socialization, social institutions, deviant behaviors, social stratification, and social inequalities, particularly classism, racism, and sexism.

SOCIO 111 (IAI: S7 901)

Contemporary Social Issues

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course provides an analysis of the major social problems facing the world today. Students examine issues of contemporary interest from a sociological perspective. Topics for discussion may include crime and violence, technology, the role of the media, problems of the family, educational and workplace issues, and the environment. Also included are issues of social class, race and ethnicity, gender, age, and sexual orientation.

SOCIO 201

Introduction to Social Work

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course introduces students to the historical background and nature of social work theory, agencies, and policy. It provides insight into social service organizations and agencies. Students examine the human concerns of various at-risk populations. This course also presents the knowledge bases and skills of social work practice, and enables students to evaluate their interests and capacities for entering the profession of social work. (*same as SWK 201*)

SOCIO 210 (IAI: S7 902)

Marriage and the Family

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course provides an understanding of sociological concepts, theories, and research methods in relation to marriage and family issues. It focuses on the ever-changing dynamics of relationships and the influence of contemporary society on family life. Special emphasis is placed on communication in relationships, dating and mate selection, love, parenting, balancing work and family, violence in relationships, and divorce.

SOCIO 215 (IAI: S7 904D)

Sex, Gender, and Power

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course explores the origins of gender inequities. It examines the development of gender roles, the consequences of dividing society along gender lines, and the effects of changing cultural definitions of masculinity and femininity.

SOCIO 220 (IAI: S7 903D)

Race Relations: A Multicultural Perspective

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course focuses on the analysis of racial, religious, ethnic, and other groups. It examines the persistence of group identity, inter-group relations, social movements, government policy, and related social problems. Groups studied include African-Americans, Latinos, European-Americans, Asian-Americans, and Native-Americans.

Spanish

SPAN 101

Spanish I

Prerequisite: Placement into ENG 099 or higher

4 lectures per week: 4 hrs credit

This course introduces students to the basic skills of understanding, speaking, reading, and writing the Spanish language. The workbook and homework complement class work. Classes are conducted mainly in Spanish.

SPAN 102

Spanish II

Prerequisite: SPAN 101

4 lectures per week: 4 hrs credit

This is a beginning course designed to continue development of the basic skills of understanding, speaking, reading and writing the Spanish language. The workbook and homework complement class work. Classes are conducted mainly in Spanish.

SPAN 201**Spanish III**

Prerequisite: SPAN 101 and 102 or two years of high school Spanish or placement test

4 lectures per week: 4 hrs credit

This course provides a review of basic phonetic elements and syntax as an aid to improvement and expansion of good pronunciation and composition. It introduces Hispanic cultures. Classes are conducted in Spanish.

SPAN 202 (IAI: HI 900)**Spanish IV**

Prerequisite: SPAN 201

4 lectures per week: 4 hrs credit

This is a literature-based course designed to increase students' knowledge of the Spanish language and Hispanic cultures. It includes a review of grammar, composition, conversation, reading and comprehension.

Speech

(See Communication)

Surgical Technology**SRT 100****Medical Terminology**

Prerequisite: Consent of instructor

2 lectures per week: 2 hrs credit

This course provides instruction in medical terminology needed by health care workers including surgical technologists, emergency medical technicians, paramedics, nursing assistants, students, nurses, and medical transcriptionists. This course is taught as a blended course: online with scheduled face-to-face meetings.

SRT 102**Patient Care I**

Prerequisite: Acceptance into Surgical Technology program

2 lecture hrs per week: 2 hrs credit

Students learn to assess patient needs and response to illness and hospitalization. Emphasis is on routine care and procedures for surgical patients. Students also learn patient rights and care of specimens. Basics of medical terminology are incorporated.

SRT 103**Patient Care II**

Prerequisite: SRT 102

1 lecture per week: 1 hr credit

Concepts of documentation, emergency procedures and thermoregulatory devices are covered. The basics of pharmacology and anesthesia are incorporated.

SRT 110**Introduction to Surgical Technology**

Prerequisite: Acceptance into Surgical Technology program

5 lecture, 4 lab hrs per week: 7 hrs credit

The basic concepts and principles for developing skill competencies required to assist in surgery are covered beginning with the health care system and continuing with specifics of the surgical area. Microbiology and asepsis are stressed.

SRT 120**Surgical Procedures I**

Prerequisite: SRT 110

5 lecture hrs per week: 5 hrs credit

Basic surgical procedures including the pre-operative, intraoperative, and post-operative phases commonly performed in the operating room setting are covered. Emphasis is on general/ rectal surgery, obstetrical/ gynecological surgery, and genito-urinary surgery.

SRT 122**Applied Surgical Procedures I**

Prerequisite: Concurrent registration in SRT 120

8 lab hrs per week: 1 hrs credit

Students learn to apply concepts and skills learned in SRT 120 in clinical settings arranged by program coordinator.

SRT 130**Surgical Procedures II**

Prerequisite: SRT 120

6 lectures per week: 6 hrs credit

This course continues the study of basic surgical procedures, emphasizing the following surgical specialties: ophthalmic surgery; ear, nose and throat surgery; head and neck surgery; oral and maxillofacial surgery; plastic surgery; orthopedic surgery; hand surgery; and endoscopic surgery.

SRT 132**Applied Surgical Procedures II**

Prerequisite: Concurrent registration in SRT 130

12 lab hrs per week: 2 hrs credit

Students learn to apply concepts and skills learned in SRT 130 in clinical settings arranged by program coordinator.

SRT 140**Surgical Procedures III**

Prerequisite: SRT 130

6 lectures per week: 6 hrs credit

This course continues the study of basic surgical procedures, emphasizing these surgical specialties: neurosurgery, thoracic surgery, cardiac surgery, vascular surgery, and general pediatric surgery.

SRT 142

Applied Surgical Procedures III

Prerequisite: Concurrent registration in SRT 140

12 lab hrs per week: 2 hrs credit

Students learn to apply concepts and skills learned in SRT 140 in clinical settings arranged by program coordinator.

SRT 298

Surgical Technology Seminar

Prerequisite: Concurrent registration in SRT 299

4 lecture per week: 4 hr credit

This seminar is designed to provide direction and feedback on workplace issues for students enrolled in the Surgical Technology Internship. Additionally, accreditation, certification, resume preparation, interviewing, and employee attributes are discussed.

SRT 299

Applied Surgical Procedures IV

Prerequisite: SRT 142 and concurrent registration in SRT 298

12 lab hrs per week: 2 hrs credit

This course is designed to provide real-world experience for students in Surgical Technology programs. Students are supervised in clinical settings arranged by the program coordinator.

Technology of Mathematics and Science

TECH 109

Technical Mathematics I

Prerequisite: High school algebra with a C or better

4 lectures per week: 4 hrs credit

This course is a study of beginning to intermediate algebra with right angle trigonometry. Topics for study are based upon application to technical subjects. Some of the topics are algebraic operations, factoring, functions, systems of equations, quadratics, and vectors.

Theatre

THTRE 101 (IAI: FI 907)

Understanding Theatre

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This course is a survey of theatre arts including a study of aesthetic and dramatic principles in selected plays, analysis of representative theatrical forms for cultural and social significance, critiques of theatre performances, and an overview of stage formats and technology.

THTRE 111 (IAI: TA 914)

Fundamentals of Acting

Prerequisite: Placement into ENG 099 or higher

3 lectures per week: 3 hrs credit

This is a beginning course in acting. A proper balance of theory and actual practice is maintained to develop both inner and outer acting techniques. An attempt is made to relate acting to good plays and to play production.

THTRE 112

Theatre Practicum/Acting

Prerequisite: Placement into ENG 099 or higher

6 lab hrs per week: 3 hrs credit

This course provides practical experience in acting in a preapproved theatre production. Audition required.

Tool and Die Making

TOOL 101

Tool and Die Processes

Prerequisite: None

2 lectures per week: 2 hrs credit

This course introduces students to tool, die and stamping fundamentals. Topics specifically covered include bending, forming, stretching, drawing, and coining operations of sheet metal. Additionally, sheet metal stamping processes and their components are discussed.

TOOL 102

Tool and Die Maintenance

Prerequisite: None

2 lectures per week: 2 hrs credit

This course introduces students to tool, die, and stamping maintenance fundamentals. Topics specifically covered include troubleshooting techniques, analytical methods, and process optimization for stamping machinery and the associated dies.

Welding

WELD 101

Principles of Flat Welding

Prerequisite: None

2 lectures per week: 2 hrs credit

This course covers basic welding fundamentals related to arc and oxy-acetylene welding theory and practice, AC and DC welding equipment, and applications that position welding techniques, arc welding electrodes, and ferrous metal identification.

WELD 102

Horizontal Welding and Brazing

Prerequisite: WELD 101

2 lectures per week: 2 hrs credit

This course expands arc and oxyacetylene skills. Topics include oxyacetylene cutting equipment and applications, arc and carbon arc cutting, soldering, brazing, inspection and testing of welding, metal identification and welding in flat and horizontal positions.

WELD 103

Metal Inert and Vertical Welding

Prerequisite: WELD 102

2 lectures per week: 2 hrs credit

Students develop an understanding of and manipulative skills needed with gas metal arc welding (GMAW) equipment. Topics include GMAW welding equipment, MIG, special welding processes, mechanical testing of welds and welding in flat, horizontal and vertical positions (SMAW Shielded Metal Arc Welding).

WELD 104

Tungsten Inert and Overhead Welding

Prerequisite: WELD 103

2 lectures per week: 2 hrs credit

This course increases students' welding background by acquainting them with gas tungsten arc welding, automatic welding and cutting equipment, special cutting processes.

WELD 105

AWS Structural Certification

Prerequisite: WELD 104

2 lectures per week: 2 hrs credit

This course is designed for persons experienced in all-position welding who wish to become certified to weld stress structures. All welding test procedures conform to American Welding Society standards. Though test specimens are prepared in class, passing of the course is not contingent upon whether or not the specimens are sent to a materials testing laboratory for analysis or the results of the analysis. However, if the student requests certification and pays the required fee, test specimens can be sent to a local materials testing laboratory where the mechanical tests will be performed and from where the welder certification papers may be issued.

WELD 106

Pipe and Pressure Vessel Certification

Prerequisite: WELD 105

2 lectures per week: 2 hrs credit

This course prepares students for certification in the most advanced stage of welding. Emphasis is placed on welding a vessel or pipe which will be used for a high pressure application.

WELD 201

Advanced Gas Metal Arc Welding

Prerequisite: WELD 103

2 lectures per week: 2 hrs credit

Advanced gas metal arc welding techniques are taught. Topics include metal transfer, types of equipment and supplies, equipment set-up, and troubleshooting.

WELD 202

Advanced Gas Tungsten Arc Welding

Prerequisite: WELD 104

2 lectures per week: 2 hrs credit (may be repeated 3 times)

Advanced gas tungsten arc welding techniques are taught. Topics include types of equipment and supplies, equipment set-up, and open-root welding on plate and pipe.

