## JOHN WOOD COMMUNITY COLLEGE 2018-2019 CATALOG AND STUDENT HANDBOOK

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This catalog contains information on John Wood Community College programs, services, activities, and policies. Information is subject to change at any time and without notice. The most up-to-date catalog and information is available online at jwcc.edu. While efforts have been made to ensure the accuracy of information, this information does not override applicable laws, regulations, rules or policies. This catalog does not create a contract or extend rights to applicants, students, or others. Questions regarding information in this catalog may be directed to the Vice President of Instruction.

## TELEPHONE DIRECTORY

### 217.224.6500

(Area Code: 217)
Academic Advising Services ..... 641.4355
Admissions ..... 641.4314
Adult Education/Literacy ..... 641.4962
Agricultural Sciences Office ..... 641.4558
Athletics ..... 641.4976
Bookstore ..... 641.4231
Business Office ..... 641.4211
Campus Police Department 641.4291 (non-emergency)OR 641.4949 (emergency)
Career Services Center ..... 641.4974
Community-Based Outreach/Continuing Education ..... 641.4941
Educational Talent Search/Upward Bound ..... 641.4343
Financial Aid Office ..... 641.4332
Health Sciences ..... 641.4551
Help Desk ..... 641.4325
Instruction ..... 641.4214
Library ..... 641.4537
Online Learning ..... 641.4512
Open Learning ..... 641.4527
RSVP/Volunteer Services ..... 641 .4961
Student Life ..... 641.4944
Support Services ..... 641.4343
Truck Driver Training ..... 641.4971
Other Numbers:
Agricultural Education Center ..... 236.4711 OR 641.4558
Kinscherff Adult Education and Learning Center ..... 641.4338
Mt. Sterling Education Center ..... 773.2002 OR 641.4144
Southeast Education Center ..... 285.5319 OR 641.4570
Workforce Development Center ..... 641 .4971

John Wood Community College is committed to non-discrimination and equal opportunity for all applicants and members of its student body, faculty and staff. It does not discriminate on the basis of race, color, national or ethnic origin, religion, sex, age, disability or other factors prohibited by law in the administration of its educational policies, admission and recruitment policies, financial aid programs, employment policies or other school-administered programs. Further, the College administers all educational programs and implements the terms, conditions, and privileges of employment free of sexual harassment. Questions in reference to educational opportunities may be directed to the following individuals at the College (1301 South 48th Street, Quincy, Illinois 62305): Cody Baggett, Title VI Coordinator and Title IX Coordinator, 217.641.4300; Rob Hodgson, ADA/504 Compliance Officer, 217.641.4349; or Dana Keppner, Affirmative Action Officer, 217.641.4241.

## GREETINGS FROM PRESIDENT MICHAEL ELBE



Thank you for your interest in John Wood Community College. The College appreciates the opportunity to serve you and your needs. Whether you are interested in taking a personal enrichment class, completing a transfer degree or pursing a workforce program, I am confident you will find outstanding educational facilities, a dedicated faculty, a supportive staff and an academic environment that will help you achieve your personal goals.

Your success is our number one priority. John Wood Community College is structured to provide you with the individual attention you deserve, yet large enough to offer you a wide variety of courses, programs, and services to enhance your overall learning experience. We are all here for your individual success and wish you the very best on your educational journey.


Michael L. Elbe
President

## BOARD OF TRUSTEES AND PRESIDENT

The Board of Trustees of John Wood Community College is the official governing board of the College. Membership is composed of seven trustees elected at-large from the District and one student selected by the student body. Regular Board meetings are normally held the third Wednesday of every month at 7:00 p.m. at one of JWCC's educational facilities. Board meetings are open to the public. Board members as of March 2018 included the following:


LARRY L. FISCHER of Quincy was elected to the Board in 2011. He currently serves as Chair. Mr. Fischer retired from John Wood Community College after serving as Vice President for Instruction for seven years and director of agricultural programs for nearly 26 years. He holds a master's degree from the University of Illinois-Urbana/Champaign and a bachelor's degree from Southern Illinois University-Carbondale. He is a former president and past member of the Illinois 4-H Foundation Board of Directors, University of Illinois College of Agriculture/ACES Alumni Association, Southern Illinois University College of Agricultural Sciences Alumni Association, Greater Pike Industrial Development Corporation Board and Chaddock School Board.

DIANE B. ARY of Quincy was appointed in April 2015 to fill the vacant board seat left open due to the resignation of a previous board member. She currently serves as vice-chair. Mrs. Ary is the senior manager of information technology at ADM Animal Nutrition in Quincy. She holds a bachelor's degree in business administration and management and a master's degree in business administration from Quincy University. Mrs. Ary has been active in a variety of community organizations and has served on several boards, including past president and
 member of Quincy Service League, past co-president and member of St. Peter Grade School Council, a volunteer for various committees and activities for both Quincy Parochial and Public School organizations, and a mentor in the Quincy Public Schools Child and Family Mentor Program. Mrs. Ary is a member and past president of the JWCC Foundation Board and currently serves as its president.


JERRY T. HAGMEIER of Quincy was re-elected to the Board in 2013 and was a member of the Board from 2005-2011. He is a former Chair of the Board and currently serves as Secretary. He previously taught computer-aided design and computer science classes for the College for 16 years, retiring in 2004. Mr. Hagmeier is a member of the Quincy/Adams County Enterprise Zone Board, the Gem City Kiwanis, and the Great River Corvette Club and is also a lifetime elder of Trinity United Church of Christ in Quincy. He is a graduate of Truman State University and is currently serving as a member of the JWCC Foundation Board.

JAMES C. GAY of Rockport was appointed to the Board in July 2005 and elected in 2009 and in 2015. He is a Past Chair of JWCC and currently serves on the Executive Committee. Owner/operator of a grain and beef cow operation, Mr. Gay has been active in a variety of community organizations and has served on several boards, including the Illinois Soybean Checkoff Board, the Pike County Farm Bureau Board, the Pikeland School Board and the Blessing Care Corporation (Illini Hospital) Board. He also served on the Illinois Rural Electric Cooperative and previously served as President of the National Biodiesel Board
 for four years. He is a graduate of the University of Illinois and has served on the Field Crops Advisory Committee for the UI-U/C Crop Science Department. He also chaired an advisory committee for the American Farm Bureau for two years.


DON L. HESS was elected to the board in 2013. He is a native of Southern California and earned his bachelor's degree in Communication, with a minor in Cultural Anthropology from the University of Nebraska-Lincoln. Prior to that, Don had been an over the road truck driver and has hauled dry freight, refrigerated, suspended beef, tankers and flammables. After college, Don served as a lead instructor for the transportation and defensive driving programs at the Center for Transportation Education and Emergency Vehicle Operations Center
in Oklahoma. Don was recruited to John Wood Community College to start a truck driver training program in 1994 and ultimately served as director of transportation and public safety programs until he retired in 2013. Don currently operates DLH Associates, Inc., which provides assistance to the legal community through crash analysis, training reviews and new program start up assistance. He is a former two-term president of the National Association for Publicly Funded Truck Driving Schools, former board member of the Truckload Carriers Association, board member and evaluation team leader of the Professional Truck Driver Institute, and member of the Illinois and California Trucking Associations.

BOB L. RHEA was elected to the JWCC Board in April 2017. He has assisted clients with accounting, tax, and consulting services in west-central Illinois through the University of Illinois FBFM program since July 1, 1984. His education path includes degrees from John Wood Community College, Western Illinois University and the University of Illinois. He has achieved enrolled agent status from the Internal Revenue Service and is an instructor for the University of Illinois Tax School. Bob is the national executive director for his professional organization, NAFBAS, and previously was that group's national president. As
 of April 2017, he served as chairman of the board for Farmers State Bank of Camp Point. He is past chairman of the Panther Pride Foundation for Central Schools. He was selected to the Illinois Agricultural Leadership Program Class of 1990. He has been recognized as the John Wood Community College alumnus and teacher of the year, and has been inducted into the Illinois Basketball Coaches Association Hall of Fame as a friend of basketball.


ANDREW SPRAGUE of Kinderhook was appointed to the John Wood Community College Board in September, 2017 to fill the vacant board seat left open due to the resignation of a previous board member. Mr. Sprague is owner of Sprague's Kinderhook Lodge, LTD., Paxton Farms Inc., and partner in Sprague Farms Inc. He majored in Agriculture Economics at the University of Illinois at Urbana -Champaign. Andy was a Director of Development for the University of Illinois Foundation before returning to Pike County to start his lodging and special events business in 2001. Andy has a passion for his community and has enjoyed serving a variety of organizations. He is the immediate past chairman of the board for the Community Foundation Serving West Central Illinois and Northeast Missouri, served as chairman for the Illini Community Hospital Growing Our Care Campaign, is a past president of the Hull Lions Club and has held leadership positions for the Pike County Farm Bureau. Andy was part of the early effort to establish the Western Community Center YMCA in Barry. He is a graduate of the Illinois Agricultural Leadership Foundation Program Class of 2012. He plays an active role with Quincy Young Life and Madison Park Christian Church Worship ministries.

CLAYTON THOMPSON is the graduate of Unity High School in Mendon, Illinois. Clayton is an active member of the Student Government Association at John Wood Community College and was elected Student Trustee for the 2017-2018 school year. Clayton is also the 2017-2018 Mr. John Wood. He plans on transferring to Southern Illinois University Edwardsville to major in Mechanical Engineering.


MICHAEL L. ELBE became John Wood Community College's sixth president in April 2014. Prior to becoming president of the college, he was Vice President for Student Services, where he served as Chief Student Services Officer. He served as Assistant Dean of Students/Director of Athletics at the University of Dubuque (IA), served on the faculty and was an Academic Advisor at the University of North Carolina at Wilmington. President Elbe has served the college for 20 years starting with his first appointment in 1990 when he was hired as the first Director of Student Life and Athletics to build a student life and athletic program at JWCC. Growing up in Camp Point, Illinois and knowing many people from the nine counties served by the college, he is no stranger to the John Wood Community College district area. Elbe earned an Educational Specialist in Administration (Ed.S.) as part of his doctoral work. He received a Master of Science in Education from the University of South Alabama (M.Ed.) and a Bachelor of Science in Education from Quincy University with a state of Illinois teaching certificate.

## Mission, Vision Statement, Philosophy \& Core Values of John Wood Community College

## Mission Statement

John Wood Community College enriches lives through learning by providing accessible educational opportunities and services at an exceptional value.

## Vision Statement

John Wood Community College will be the community's partner and leader in education, workforce training and lifelong learning.

## Core Values

Excellence: We will put forth our personal and professional best in all we do.
Accountability: We will take ownership of our actions, programs, and services.
Integrity: We will be honest and ethical in our work and relationships.
Servant Leadership: We will put the needs of others first and help people reach their full potential.
Lifelong Learning: We will encourage everyone to continually improve their knowledge and skills.

## Strategic Goals

1. Student Success
2. Excellence In-Programs, Services, and Employees
3. Enrollment Growth and Stability
4. Leadership and Partnerships
5. Responsible Management of Resources

Adopted October, 21, 2015
JWCC Board of Trustees

## JOHN WOOD COMMUNITY COLLEGE (DISTRICT \#539) MAP



Copies of the residency policy may be obtained from the Admissions Office. You are a resident of John Wood Community College District 539 if you live in any of the following high school districts: Bluffs, Brown County, Central, Griggsville-Perry, Liberty, Meredosia-Chambersburg, Payson, Pikeland, Pleasant Hill, Quincy, Southeastern*, Unity, or Western.

Out-of-District Residents: Persons living outside the JWCC District are welcome to enroll at the out-of-district tuition rate. John Wood Community College makes a special effort to serve all residents of the Tri-State Area. For details on out-of-district tuition, see Tuition and Fees, elsewhere in the catalog.
*Students who attend Southeastern High School but live in the former Plymouth School District are residents of the Carl Sandburg College District and should contact Car Sandburg's Admissions Office.

## QUINCY IOCATIONS:

Main Campus
1301 S. 48th Street
217.224.6500

Located at 48th \& Harrison


Workforce Development Center
1220 Kochs Lane
217.641 .4971

Northeastern Quincy at corner of 42 nd $\&$ Kochs Lane


## Kinscherff Adult Education and Learning Center

122 N. 5th Street
217.228.9489

Devwnatawn Quinc y arn cass side of Washington Park


MT. STERIING IOCATION:
Mt. Sterlling Learning Center
108 N. Capitol
217,641,4144
Located in Uptown Mt. Sterling in the back
of Brown County State Bank


BAYLIS/PERRY LOCATION:
Agricultural Education Center
37803 Street Hwy 104, Baylis
217.641 .4558 or 217.236 .4711

Nonth of l-72, Iceur milks, werst of Illinojis Highway Junction 10/ \& 101


SOUTHEASt LOCATION:
Southeast Education Center
39637 260th Ave.
(north of Pittsfield Industrial Park)
217.285.5319 or 217.641.4570

Located two miles north of intersection US Highway 54 and Washington Street


## COLLEGE TERMINOLOGY

ACT/SAT - a national test used for academic advising and placement.
Area of Concentration (emphasis) - the subject matter field of study which a student selects to emphasize. Students declaring an area of concentration must complete courses as described in the appropriate program of study.
Associate Degree - a degree offered by community colleges. JWCC offers six degrees: the Associate in Arts (AA), the Associate in Science (AS), the Associate in Engineering Science (AES), the Associate in Fine Arts (AFA), the Associate in Applied Science (AAS), and the Associate in General Studies (AGS).
BlazerNet - JWCC's web portal giving single sign-on access to various services including, but not limited to, JWCC Online, Student On-Line Access to Records (SOLAR), email, Smarthinking, and important messages.
Blended/Hybrid Course - a course that is delivered using a combination of class meetings and Internet instruction.
Canvas - The learning management system used for all classes including online, structured, open learning, and hybrid classes. It is utilized by both students and faculty to access classroom information such as grades, assignments, and due dates.
Career/Technical Programs - programs designed to lead directly to employment.
Class Section - a group of students meeting to study a particular course at a definite time. Sections are identified by specific section letters and times.
Course - a particular portion of a subject selected for study. A course is identified by a course number. For example--Psychology 101.
Course Description - statements identifying the content of a course. Course descriptions are found in the college catalog.
Course Title - a phrase descriptive of course content. For example, the course Psychology 101 is called Introduction to Psychology.
Credit (Semester) Hour - the amount of credit usually earned by attending a non-laboratory class for 50 minutes a week for 16 weeks.
Currency of Technical Course - the time that knowledge and skills of a course are current for the job market.
Curriculum - a group of courses planned to lead to some specific competence in a field of study and to a certificate or associate degree. For example, the computer science curriculum.
Degree - a title conferred by a college or university upon completion of a particular program of academic work. Typical degrees are the Associate in Arts (AA), the Bachelor of Science (BS), and the Master of Arts (MA).
Elective - a non-designated course within a curriculum. An elective permits students to select some courses of their choice within their program.
Grade Point Average - a weighted numerical average which indicates how well a student has done in college classes. At JWCC, this is based on a four-point scale ranging from 4 (A) to $O(F)$.
Grant - an outright award of funds, usually based on need, which does not have to be repaid.
High School Equivalency - Achieved by taking a series of examinations approved by a state authorized agency with the result being equal to a high school diploma (i.e. GED and HiSET program).

HiSET - Beginning January 2014, HiSET exam, the new alternative to the GED test, can help students achieve state-issued high school equivalency credential. More information can be found at http://hiset.ets.org/test_takers/.

IAI (Illinois Articulation Initiative) - statewide transfer program to make transferring easier for students planning to attend college and transfer from one Illinois institution to another. For additional information, see the IAI section in this catalog or go to the IAI web site, www.iTransfer.org.
Late Registration - a designated period of time prior to the start of classes (usually the week before) when students may still register but will be required to pay a late registration fee.
Loan - a loan may be either federal, private, short-term or emergency awarding of money to students in need of financial assistance; it must be repaid.
Online Courses - courses offered via the Internet.
Open Learning Courses - individualized within a designated term.
Placement Testing - a computer-adapted assessment given to new and developmental students to assist in course placement.
Prerequisite - requirements which must be met and/or courses which must be taken before enrolling in a specific course.
Registration - the process of selecting courses, completing college forms, and paying fees, all of which must be completed prior to the beginning of classes each term.
Residency - classification of students: in-district (a resident of the JWCC district) or out-of-district (a person who resides outside the JWCC district either in Illinois or outside Illinois); tuition rates vary for each group.
Return to Title IV - Process to determine the amount of financial aid earned during a term by a given student who has stopped attending.
Schedule Adjustment Period - a period at the beginning of each term when an enrolled student may drop or add classes with a full refund of fees for any courses dropped.
SOLAR (Student On-Line Access to Records) - Through the BlazerNet portal, students who have completed the admissions process are eligible to view their financial aid information and other records including grades, transcripts and financial accounts.
Scholarships - monetary awards given to students in recognition of outstanding academic or leadership achievement and/or financial need.
Starfish - The retention software used by staff and faculty to monitor student success as well as provide early alerts for the various issues impacting student academic achievement.
Term - the time period in which the student is enrolled (i.e., fall term, summer term).
Transcript - a record of a student's academic progress. It includes a term-by-term listing of courses, grades and degrees/certificates earned.
Transfer Programs - programs with courses leading to an Associate in Arts, Associate in Science, Associate in Engineering Science or Associate in Fine Arts degree that are generally accepted in transfer to baccalaureate-degree-granting colleges and universities.
Tuition - an amount of money charged to a student for each course. Tuition is subject to change without notice.
Withdrawal Period - the period between the drop/add period and the point where 75 percent of a course is complete during which a student may withdraw from a course, receive a grade of "W" or "WI" but not receive a refund.
Work-Study - a need-based federal program to provide funds for part-time employment on campus.


## GENERAL INFORMATION

## John Wood-The Man

John Wood was an early pioneer who played a key role in the settlement and development of West Central Illinois. He was born in New York but came west seeking adventure. In 1821, he came to what is now Pike County. He and a friend, Willard Keyes, set up a bachelors lodge near New Canton and made a home for bachelors until they could find brides to aid them in settling the frontier.

In 1822, John Wood headed for the Illinois bulge on the Mississippi now known as Quincy. He built Quincy's first log cabin and widened the Fort Edwards Trail to lower Pike County to help in the settling of his new frontier community. He served as Quincy's mayor several times, served in the General Assembly, and in 1856 was elected Lieutenant Governor. Upon the death of Governor William Bissell in 1860, John Wood became Governor of Illinois, fulfilling a life of adventure and pioneer vision.

It seems appropriate that John Wood Community College, often called a pioneer because of its innovations in education, has been named in honor of John Wood, a pioneer in this area with bold ideas and an innovative mind.

## JWCC-A Pioneer in Education

John Wood Community College was created to provide quality, affordable programs in higher education for District residents. The first meeting of the Board of Trustees was held in November 1974, and the College's initial 668 students began attending classes in August 1975. When the College opened, it relied heavily on an innovative "common market" approach to education to serve District residents. Over the years, the College responded to enrollment demands and community needs by expanding its own curricula and services to provide a full scope of baccalaureate transfer and career/technical programs and student life opportunities. JWCC's early reputation for being a pioneer in higher education, however, set a direction that the College still follows today: that of exploring innovative ways to share resources and partnering with other community entities to serve its constituents.
In another innovative effort to serve residents of the District, the College introduced Open Learning courses, offering individualized, self-paced instruction. In addition, JWCC has developed online associate degrees and courses; an extensive community outreach program; and is a pioneer in efforts to develop cooperative programs with business and industry.

This innovative approach to education-with its emphasis on cooperation and collaboration-has been one of the reasons for the College's continued success. In the fall of 2017, nearly 2,000 students were enrolled in credit classes. These students ranged in age from 14 to 68 , with 33 percent of all students 25 years of age or older. More than one-half of all students were attending part time.

## Facilities

John Wood Community College provides students modern, technologically advanced learning environments at all its sites. The College features 32 different labs, including a Mac lab at the campus in Quincy. Computer technology and software are continuously updated. All JWCC facilities are wireless environments and the College provides a portal system that allows students to access emails, online classes, and student records.

The College's campus at 48th and Harrison in Quincy features several modern buildings that are connected for students' convenience. The Science and Technology Center houses classrooms and labs for natural sciences, health sciences and computer sciences programs as well as faculty offices.

The Learning Center and the Student/Administrative Center are the hub of student learning. The Learning Center houses the Academic Support Center (which combines the library and an open learning area), classrooms and offices. The Student/ Administrative Center features a student lounge and cafeteria, bookstore, classrooms, faculty offices, additional administrative offices, and student services.

The Paul Heath Community Education and Fine Arts Center (named in honor of the College's founding president) houses community-based outreach and adult education/literacy programs, fine arts programs, 293 seat theater, and the Advancement Office.

The Student Activity Center includes a 1,800 seat gymnasium, a fitness room, an aerobics room, and locker rooms. The site includes a baseball field, softball field, soccer field and additional parking.

The campus also includes a greenhouse which serves as a laboratory to support academic programs. The Spring Valley Trails and Arboretum are located on the southeastern area of the campus and include public hiking/walking trails, an outdoor classroom and butterfly garden.

Workforce Development Center: The College opened its Workforce Development Center in 2009 at 4220 Kochs Lane in Quincy. Located on 14 acres, the facility enables the College to meet the training needs of area businesses and industry. Career, Technical, and Workforce Education Programs and Transportation Programs, including Truck Driver Training, electrical technology, computer-aided design, industrial maintenance, logistics, manufacturing technology, robotics and welding are housed in the center.

Southeast Education Center: The JWCC Southeast Education Center opened in 2017 two miles north of Pittsfield on US 54 (39637 260th Avenue). JWCC has operated a center to serve the residents within the southeastern portion of its district since 1979 at the Old East School. This new center offers high-speed fiber optic internet access, health science labs, a community activity center, a cyber lounge and multiple classrooms. Courses to complete the first two years of a bachelor's degree, career/ technical and health sciences programs are offered with classes available both day and evening. Students can take a combination of traditional, structured and online courses in addition to individualized open learning coursework.

The center also offers concurrent enrollment for area high school students, student services, community education and a JDub Academy for K-8 youth. The facility is also the headquarters for the Pike County Retired and Senior Volunteer Program (RSVP).

Agricultural Education Center: The JWCC Agricultural Education Center is located on the University of Illinois Orr Agronomy Research Center on Route 104 northwest of Perry. The Agricultural Education Center offers career/technical and transfer agriculture program options, including Ag Business, Ag Transfer and Animal Science. The center also features a welding lab. The Ag Center has been recognized nationally for high quality educational programs. The nearby University of Illinois Animal Science (Beef) Research Unit serves as the laboratory for the JWCC Beef Specialist certificate program and Animal Science degree.
Students may enroll in classroom or online courses and take part in ag-related internships with regional companies.
The center has an active Agriculture Club and Agriculture Alumni Association, which allow students and graduates a superb learning, leadership and growth experience. The center frequently serves as the site for seminars and meetings for local residents, particularly members of the agricultural community.

Mt. Sterling Education Center: The center located in uptown Mt. Sterling offers lecture-based, open learning and online courses for Brown County area residents. Short-term business classes, personal enrichment offerings, GED preperatory classes and adult education courses and concurrent enrollment courses for high school students are also offered at the center. The center features two smart classrooms, a computer lab, multi-purpose room, and serves as headquarters for the Brown County Retired and Senior Volunteer Program (RSVP) and the University of Illinois Extension.

Kinscherff Adult Education Learning Center: Located in the Quincy Historic Business district, this center serves area residents seeking adult education classes and/or tutoring in reading. The center is also the headquarters for the Retired and Senior Volunteer Program. Located at 122 North 5th Street, the building was donated to the College by John E. and Wanda Lee Kinscherff.

## Library Facilities

JWCC's library supports the College's mission by providing information and research services to students, faculty and staff. Located in the Learning Center on the Quincy campus, the library is the central service provided in the Learning Resources Center; other instructional services include testing, tutoring, the Writing Center, and Open Learning. The library collects and maintains a variety of print, audiovisual, and electronic materials. These resources support the curricula of the College in both credit and noncredit courses, and most of JWCC's electronic resources are available off campus as well.
The library has more than 90 computers and collaborative study rooms with touch screen and interactive technology for student use. Working with faculty, the library staff teaches information literacy skills and library usage to students. The Agricultural Education Center and the Southeast Education Center maintain program-specific collections that support the curricula at those locations. Students and faculty at outlying centers have access to the traditional print and electronic resources available on the main campus through the College's network.

The JWCC library is a member of CARLI (Consortia of Academic and Research Libraries in Illinois). CARLI uses the Voyager system to provide an online catalog, circulation and cataloging functions to its member libraries. Voyager provides access on and off campus to the JWCC library's collection of materials, as well as access to the collections of over 80 other academic CARLI members.

Services offered in the library include a media center for viewing and listening, charging stations, reference assistance, interlibrary loan services, as well as quiet study areas and four technology enhanced collaborative study rooms. A photocopier and a scanner are also available for student use.

Open to the greater community, the library features public access computers made possible by a grant from Illinois Secretary of State Jesse White through the "Eliminate the Digital Divide Grant" funded by the Illinois Department of Commerce and Economic Opportunity.

## Accreditations and Memberships

John Wood Community College is accredited by The Higher Learning Commission and a member of the North Central Association. For accreditation information contact The Higher Learning Commission at 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604 (telephone 312.263 .0456 or 800.621 .7440 ). In addition, the College is recognized by the Illinois Community College Board and the Illinois Board of Higher Education; all programs offered by JWCC have been approved by both boards. The College's Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) at 1361 Park St., Clearwater, FL 33756 (telephone 727.210.2350). Numerous organizations assist JWCC in meeting its educational goals.

## JWCC Foundation

The John Wood Community College Foundation was established in 1985 to promote the College throughout the District; to build goodwill and friendships for the College; and to seek financial support for the College, its programs and development from private sources within and beyond the District. Under Section 501 (c) (3) of the IRS Code, the Foundation exists as a tax-exempt, charitable foundation governed by a volunteer Board of Directors.

The JWCC Foundation Board is committed to advancing the mission of the College and works to secure private contributions, planned gifts and other donations from individuals, foundations and corporations through personal solicitations, grant applications and fundraising events.
Funds raised through the JWCC Foundation are used for student scholarships, program support and many other activities that advance the goals and mission of the college. To make a contribution to the JWCC Foundation, call 217.641.4105 or email foundation@jwcc.edu.

## Retired and Senior Volunteer Program

The College sponsors the RSVP (Retired and Senior Volunteer Program), for Adams, Pike and Brown counties. The purpose of RSVP is to engage persons ages 55 years and older in volunteer service to meet critical community needs and to provide a high-quality experience that will enrich the lives of volunteers. The program currently has more than 800 active volunteers who serve in over 120 agencies and organizations throughout the JWCC district.

## Educational Opportunities at John Wood

JWCC is a comprehensive community college, offering its students a broad range of educational opportunities in a variety of learning environments.

## College Transfer Programs

College transfer courses, generally courses numbered 100 and higher, parallel the freshman and sophomore courses offered at four-year colleges and universities. Students need to remember in transferring credits that the receiving institution determines whether or not a course will be accepted in transfer. To avoid difficulty in transferring, students should work closely with a JWCC advisor. By working with an advisor and the institution to which the student desires to transfer, a course of study can be planned which will facilitate a smooth transition.
The first two years of college work at most four-year institutions include basic courses that can be taken at JWCC. While students are not required to work on associate degrees, there are a number of advantages in doing so. First of all, a student will have something to show for efforts after two years of college. Second, and more important, the general education requirements for a two-year degree at John Wood are very similar to the requirements at most four-year colleges and universities. Finally, earning an associate degree actually assists the student in transferring to most four-year private and public universities in Illinois and neighboring states.

To assist students who transfer, John Wood Community College participates in the Illinois Articulation Initiative (IAI), a statewide agreement that allows students to transfer general education courses taken at JWCC to four-year public colleges and universities in Illinois. Completion of the IAI General Education Core Curriculum at John Wood Community College assures transferring students that lower-division general education requirements for a bachelor's degree have been satisfied. (Specific majors will have additional requirements.) This agreement is in effect for students entering JWCC and other Illinois Community Colleges. Details about the Illinois Articulation Initiative (IAI), highlighting the general education curriculum, are available at www.iTransfer.org.
Even though the Illinois Articulation Initiative (IAI) continues to be the primary statewide vehicle for encouraging transferability among postsecondary institutions in the state of Illinois, the Transferology web site is also available to enhance the availability and accuracy of transfer information for an effective and efficient degree completion. IAI focuses on articulation of general education and foundational coursework at the lower division level, and Transferology provides information on all courses and degree completion requirements available to students. Transferology is a free service and may be accessed at www.iTransfer.org or directly at Transferology.com.

Transfer degrees are available in the following programs. For details see an advisor.

|  | Areas of Concentration |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Program | Associate in Arts | Associate in Science | Associate in Fine Arts | Associate in Engineering Science |
| Accounting | X |  |  |  |
| Agriculture |  | X |  |  |
| Art | X |  |  |  |
| Biology |  | X |  |  |
| Business <br> (Mkt/Mgmt Emphasis) | X |  |  |  |
| Chemistry |  | X |  |  |
| Communications | X |  |  |  |
| Computer Science | X |  |  |  |
| Economics | X |  |  |  |
| Education | X |  |  |  |
| Engineering |  |  |  | X |
| English | X |  |  |  |
| Fine Arts: <br> Music Performance |  |  | X |  |
| Health/Physical Education/ Recreation |  | X |  |  |
| History | X |  |  |  |
| Law Enforcement | X |  |  |  |
| Liberal Arts | X |  |  |  |
| Mathematics |  | X |  |  |
| Physics |  | X |  |  |
| Political Science/Pre-law | X |  |  |  |
| Psychology | X |  |  |  |
| Sociology | X |  |  |  |
| Supply Chain Management | X |  |  |  |
| Undecided/Transfer | X | X |  |  |

## Career, Technical, and Health Education Programs

JWCC offers several career, technical, and health education programs. These courses and programs are intended to prepare students for immediate employment; however, specific courses or programs may successfully transfer to a four-year college or university. The chart below has been prepared as a general reference to types of courses and programs available. For details on the latest offerings, see an advisor.

| Program | AA Degree | AS Degree | AAS Degree | Certificate | Certification Preparation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Accounting | Accounting |  | Accounting | Accounting |  |
| Agriculture |  | Agriculture | Ag Business Mgmt. Animal Science | Ag Applications Beef Specialist Swine Specialist |  |
| Business | Business (Mkt/ <br> Mgmt. Emphasis) <br> Supply Chain <br> Mgmt. |  | Computer Info Systems Option Info. Mgmt. Option Management Option | Business Mgmt. Information Mgmt. |  |
| Computer-Aided Design |  |  | Computer-Aided Design | Engineering DesignSolidWorks |  |
| Computer Science | Computer Science |  | Graphic Design | Computer Network <br> Support <br> Desktop Publishing <br> Web Design |  |
| Education |  |  | Early Childhood Education |  |  |
| Electrical Tech. |  |  | Electrical Tech. | Electrician |  |
| Emergency Services | Law Enforcement |  | Law Enforcement <br> Fire Science <br> Paramedicine | Paramedicine | EMT |
| Health Sciences |  |  | Assoc. Degree Nursing Medical Lab. Tech. Radiologic Tech. Surgical Tech. | Health Care Assistant <br> Nursing Assistant Practical Nursing Professional Nursing Asst. | RN/LPN CNA <br> CST |
| Industrial Maintenance |  |  | Industrial Tech. | Industrial Tech.- <br> Electrical Industrial Tech.Mechanical |  |
| Logistics |  |  | Logistics \& Operations Mgmt. | Truck Driver Training Logistics | CDL |
| Manufacturing |  |  | Manufacturing Tech. | Certified Prod. Tech. Precision Machining <br> Machinist |  |
| Office Technology |  |  | Office Technology Medical Option | Office Technology Medical Office | MOS |
| Welding |  |  |  | Basic Welding Industrial Welding |  |

Depending on the program and the student's needs, a student may earn a career/ technical certificate in three to 18 months or an AAS degree in two years. Specific information on each program is given in the program section of this catalog.

## General Studies Program

Offered primarily for students who desire an associate degree but who do not seek to transfer to a four-year institution, the general students program allows a student to select a variety of courses according to his or her preference. A student must receive preapproval to complete this program.

## Adult Education/GED

The Adult Education/GED preparation program provides free services to eligible adult district residents who lack basic reading, writing, or math skills and/or do not have high school diplomas. The program also provides English as a Second Language (ESL) classes to assist non-native English speakers with learning to read, write, and speak English.

Students enrolled in JWCC's individualized Adult Education/GED program have proven to be highly successful. Participants are assessed for placement and then work at an individualized pace with instructor assistance. Students proceed through various levels until their goals are met. JWCC staff also provides students with services to assist with securing employment or entrance into post-secondary education.

Adult Education/GED classes are offered throughout the district including Pittsfield, Mt. Sterling, and several locations in Quincy. Instructional materials are loaned without charge to students enrolled in the Adult Education program.

## Literacy

Literacy Services matches trained volunteer tutors with nonreading or low-level reading adults and with adults who need to learn English as a Second Language (ESL). Tutors are matched with a student on a one-on-one basis. Direct literacy services are provided to Illinois adult students over the age of 16 who read below the ninth grade level. The program is free to both tutors and students. Times and locations for tutoring are flexible. Privacy and confidentiality are assured as students proceed through lessons designed to help them meet their personal goals.

The goal of Literacy Services is to reduce adult illiteracy within the District by providing effective, nonthreatening, and easily accessible literacy instruction and by building public awareness of the issue of adult illiteracy. Students or tutors may enroll in the program anytime during the year.

## Community-Based Outreach

Consistent with the mission of the comprehensive community college as stated in the Illinois Community College Act, the College offers Community-Based Outreach (noncredit) courses designed to meet the personal, physical, civic and social needs of the District's residents. Topics offered deal with community, family and individual improvement; health and safety; cultural enrichment; and creative use of leisure time. Community-Based Outreach courses and programs are not funded with tax dollars and are self-supporting from fees charged to participants. Community-Based Outreach courses are listed on the John Wood Community College website at www.jwcc.edu/communityed.

The college also provides programs that provide working adults with a variety of ways to keep up to date in their occupations. Seminars, conferences and workshops are designed to provide ample and varied opportunities for training and acquiring new information that will meet the special needs of community interest groups.

JDub Academy, offered each summer, is designed to be a hands-on educational enrichment program for area children who have completed Kindergarten through 8th grade. The classes provide children with unique and enjoyable educational activities different in form and content from regular classroom activities. In the past, classes have included art, science, mathematics, karate, dance, theater, scrapbooking, crafts, animals, computers, and many special topics.

Health Professionals' Programs: These programs are responsive to the educational needs of health professionals and other professionals involved in the delivery of health care. Newly emerging concepts of health care and research findings which will enhance the professionals' knowledge base and enable practice at increasingly higher levels of excellence are presented. Many health professionals are now required to meet mandatory continuing education requirements for relicensure or recertification; Continuing Education Units (CEU's) are granted on a contact-hour basis for all JWCC programs and have approval from appropriate authorizing agencies. Noncredit online healthcare certificate programs' content and materials are provided by Gatlin Education Services, the leader in online certification programs. These programs prepare students for developing expertise in their desired career fields and/or for industry certification exams. Each program has specific learning outcomes related to industry standards.

Noncredit Online Programs: JWCC offers noncredit online programs in cooperation with Education to Go, a national provider of personal interest online classes. Students read lessons, complete assignments, and interact with the instructor and other students through any computer that has access to the Internet, any time of the day or night that is convenient for them. Some classes may count as a Continuing Professional Development Unit for teacher recertification.

Para-Education: The State Board of Education has endorsed four assessment options for establishing a candidate's qualifications as a paraprofessional educator under the No Child Left Behind Act of 2001 (NCLB). One of the options includes the ACT WorkKeys test of Applied Mathematics, Reading for Information and Writing, and the ACT Instructional Support Inventory. In order to assist paraprofessionals in fulfilling these requirements, JWCC hosts the ACT WorkKeys exam. The exam is administered and timed by a JWCC official. For more information, visit the ACT Web site at www.act.org/workkeys.

## Workforce and Customized Training

JWCC can provide customized training programs designed to meet the unique training needs of area companies. Programs can last from a few hours to several weeks, be offered on the company's site or at JWCC, and use company equipment or the College's. To create a customized training program with JWCC, call the Workforce Development Center at 217.641.4971.

## Experiential Learning

At John Wood Community College, experiential learning opportunities are available to help students decide if an occupation is a good fit, as well as to begin the important networking process for a successful career. At JWCC, experiential learning opportunities are available to students as either internships or practicums. Students can complete approved experiential learning credit hours either during the regular academic year or in the summer. Credit hours earned may vary from 1-5 hours and is based on the actual hours of work experience being completed.

## Types of Experiential Learning Opportunities at JWCC

- Internships are experiences where students undergo supervised practical, on-thejob training. Internships can be paid or unpaid and are supervised by a JWCC faculty or staff advisor. There are two types of internships available to students at JWCC:
o Exploratory Internship opportunities are primarily for first-year students. These internships are specifically designed to give students the chance to explore off-campus business and technical options to determine if a particular career field is right for them.
o Program-based Internships are typically taken for credit to meet either certificate or degree requirements. Expectations and outcomes for students enrolled in these internships are higher than those associated with Exploratory Internships.
- Practicums are typically JWCC courses that are focused on a specialized field of study. They are designed to give students an opportunity for the supervised practical application of previously studied theories and practices. Practicums are typically unpaid and can be required in certain programs for degree completion.

Students should first contact an academic advisor or someone in Career Services to develop an academically appropriate plan for an experiential learning opportunity prior to registering.

## JWCC'S Learning Environments

## Traditional Classroom

JWCC offers a variety of courses in the traditional (lecture/discussion) learning environment. Courses are offered during day and evening hours and students attend classes at regularly scheduled time periods throughout the semester. The average size of structured (traditional) JWCC classes is 16 . This smaller class size allows the College to provide an optimum learning experience for the student, with ample opportunities for personal attention from the instructor and for small-group discussion.

John Wood is dedicated to providing area residents with a classroom environment for the courses and programs they need within easy driving distance from their homes. Transfer and career/technical courses are available in Quincy, Perry, Pittsfield and Mt. Sterling.

## Online Learning

John Wood Community College has received approval to grant Associate of Arts, Associate of Science, and Associate of General Studies degrees earned through online coursework. JWCC partners with Moberly Area Community College to offer online courses. JWCC also offers course sharing through Illinois Community Colleges Online (ILCCO). Online learning uses the anytime, anywhere power of the Internet to deliver classes in many disciplines. The online learning environment functions much like a classroom setting but without the travel to campus at a specific time. Class materials and resources are available online 24 hours a day, seven days a week. Access to lecture and course materials, interaction with instructors and classmates, and submission of assignments are accomplished through online class work. Classes run on the same semester schedule as on-campus classes and are very structured and generally are not self-paced. Instructors require regular participation throughout the course.

For more information on JWCC online course offerings, students may check the course schedules on the JWCC web site www.jwcc.edu or email the Instructional Support and Distance Learning Department at connected@jwcc.edu.

Online learning opportunities also exist in hundreds of noncredit and workforce training topics through our partner, www.ed2go.com/jwcc. For additional information, contact the Community-Based Outreach Office at 217.641.4905.

## Open Learning

Open learning courses allow students to create a flexible course schedule while being able to work on their own and still receive individualized assistance from instructors. All open learning courses take place during the regular fall, spring, and summer terms and have the same start and end dates that follow those terms. Courses offered are tailored for the open learning environment while maintaining the same standards as the courses offered in all other learning environments.

JWCC offers a limited number of open learning courses at the Quincy campus as well as the Southeast and Mt. Sterling Education Centers. Courses are offered during the week at varying times. Course offerings and schedules vary by location and may include career-technical courses, general education courses, and developmental education courses.

## Hybrid

The College also offers hybrid or blended courses, which combine face-to-face meetings between the instructor and students with online instruction. The course is typically delivered on campus using a lecture or seminar format and supplemented by online components.

## Smart Start (Concurrent Enrollment) Program

JWCC Smart Start program allows qualified high school students the opportunity to earn both high school and college credit during the student's high school years. The program assists students by preparing for the transition to college and shortens the path to a degree or career. Smart Start (concurrent enrollment) coursework is part of a student's academic record at the College and potentially, at the high school level. Course work attempted/completed will appear on college transcripts and will impact academic standing. High school records may also be impacted when a student is receiving high school credit.
Courses are delivered in one of the following ways:

- At the high school and taught by a college level credentialed high school teacher;
- At the high school with instruction delivered in an online/hybrid/Zoom format;
- At the high school but with a JWCC instructor;
- At one of the JWCC campus locations by a JWCC instructor.

JWCC credits transfer readily to other colleges. When taking Smart Start (concurrent enrollment) courses, students are encouraged to meet with a JWCC academic advisor to discuss transferability of course work. Please refer to Transferring to Other Colleges section. The Smart Start enrollment process begins with the area high school. The high school student must meet all JWCC prerequisites and will pay appropriate tuition costs.

## Cooperative Education Agreements

All community colleges in Illinois have agreed to waive out-of-district fees for students who enroll in certificate/associate in applied science programs not offered at their home district. The purpose of this agreement is to enhance the curricular offerings to the residents of these districts. Each college does reserve the right to deny eligibility for programs with enrollment limits or for selective admission programs. For more information, contact the Dean of Students office.


# ADMISSIONS AND REGISTRATION INFORMATION 

## Admissions Policy

JWCC maintains an "open enrollment" admission policy; that classes and programs should be available to all members of our community. Student may seek general admission to the College and be considered degree seeking at the College. Degree seeking students may apply for federal and state financial aid if in an approved program of study. Non-degree seeking students are not financial aid eligible but may seek to complete courses for self-enrichment or limited coursework for transfer. With this in mind, we welcome and encourage eligible individuals to enroll in credit classes as a full-time or part-time student. Upon admittance, a student should work with their academic advisor to register for classes. It is highly recommended that new students attend an orientation session.

## Degree Seeking Students

General admission to the College will be granted to any person 16 years of age or older who possesses either a high school diploma or high school equivalency and wish to seek a credential from the College. International students should see "International Admissions" section for additional requirements and procedures.
Applicants who are less than 16 years of age and possess a high school diploma or equivalent may be granted general admission upon completing the admissions steps and the Enrollment Appeal form and procedures.

Admission to the College does not ensure entrance into a particular program of study. Should it become necessary to limit enrollment in any program, the College reserves the right to establish selective admissions procedures and to give preference to residents of the JWCC District.

All decisions made by the Director of Admissions or Registrar are final. Students should self-identify any previous disciplinary records from other post-secondary institutions or criminal history. A review of those records may be required in addition to meeting with the Dean of Students or designee. The College reserves the right to grant or not grant admittance after a thorough review takes place. The Dean of Students office will provide a final decision in writing to the student.

## Admissions Procedure - Degree Seeking

STEP 1 - Complete a JWCC Admissions Form. You are encouraged to complete this as far in advance of the term in which you wish to enroll as possible. Admissions forms are available to complete online at www.jwcc.edu/apply. There are no costs in applying for admission or in being admitted with the exception of international students.
STEP 2 - Have official records of any prior high school or college-level education sent to the JWCC Admissions Office. These records may include any one or a combination of the following:

High school transcript - Contact the high school from which you graduated or will graduate and request a final transcript. This transcript should show final grades and graduation date.
Home school transcript - The home school administrator must provide a notarized copy of the coursework completed, preferably in transcript format and with date of graduation.

High school equivalency exam scores - Contact the Regional Superintendent of Schools from your school district.
College transcripts - Have an official copy of your academic transcripts sent directly to the Registrar at JWCC from each college you have attended.
Military service or training - Provide a copy of your DD-214 - Copy 4 (separation document), Joint Services transcript, or Community College of the Air Force transcript.
John Wood Community College reserves the right to review the validity of each high school or college transcript. If the college feels that the validity of a transcript is questionable, they have the right to request additional information, or to require additional steps to gain admission.
STEP 3 - Placement testing is required for admittance to the College. New students who have not successfully completed college-level math and English courses are required to take a placement test. This test is an untimed, computerbased assessment of reading, writing, and math skills. Students should expect to spend three to four hours for a combined testing session.
The first placement test for all new students is free. Students who wish to re-test in an effort to raise their scores will be assessed a fee and should make an individual appointment through the Testing Center. Test scores are good for two years. If registration does not occur within the two year period following testing, a student must re-test or requalify based on one of the following conditions.
Certain conditions allow for placement testing to be waived; one, by the student having completed college-level math and/or English (approval based on transcript review by JWCC Records and Registration) or two, by completing certain sub-scores on the ACT or SAT test. Students who completed the ACT or SAT test within three years of their enrollment and scored at particular levels are exempt from placement testing. Call 217.641.4355 with questions about ACT or SAT exemptions.

## International Degree Seeking Students

John Wood Community College welcomes qualified students from other countries.
Each international student admitted to the college must meet the minimum requirements set forth herein. In addition, residents of a foreign country who wish to study in the United States on a student visa (F, M) must provide the following information before their Certificate of Eligibility (I-20) can be processed for them.
Each applicant must:

1. Have attained the age of eighteen.
2. Provide official transcripts which document completion of schooling through the equivalent of high school, as well as official transcripts of any colleges or universities previously attended. If original transcripts are not available in English, an official English translation must accompany the original document.
3. Provide evidence of proficiency in the English language by submitting one of the following:
a. An equivalent score of 520 or better on the Test of English as a Foreign Language (TOEFL);
b. Successful completion of the American Consular Office examination of English Proficiency (administered abroad through the U.S. State Department);
c. Transcript from an accredited high school in the United States showing satisfactory completion of courses in the English language equivalent to three years;
d. Official transcripts from an accredited American college or university showing satisfactory completion of a course in English language, with standards which are equal to or exceed those set forth in first two items.
4. Obtain F-1 Student Visa if not already in the country, otherwise must present proper documentation of current visa, legal residency alien or refugee.
a. International applicants must provide evidence of financial support. An affidavit of support must be filled out and returned to admissions with original bank statements showing adequate funds to cover the estimated costs of attendance and living expenses for one academic year. The funding must be displayed in U.S. dollars.
b. John Wood Community College's affidavit of support is found at www.jwcc.edu/admissions/international.
5. If the student is already in the United States on a B, F, H, J, or other nonimmigrant visa, he/she must provide photocopies of valid passport, most recent visa, I-94 card, I-20 document (if on an I-20 visa), or DS-2019 document (if on a J-1 visa), and INS Notice of Action approving extension or change of status application. Legal resident alien or refugee must present proper documentation to be admitted to the college.

## Admissions Procedure - International Degree Seeking Students

STEP 1 - Complete a JWCC International Admissions Form. Admissions forms are available to complete online at www.jwcc.edu/apply. Due to processing time international students are encouraged to complete this as far in advance of the term in which you wish to enroll as possible.
STEP 2 - Arrange payment of the one-time, non-refundable admissions application fee for international students.
STEP 3 - Submit all required documentation - high school transcript, official college transcripts, affidavit of support, visa, etc., see required documents in requirements section.

All international students, to the extent required by law, must be accepted for the course of study determined by their Visa type. International students may not be accepted on a part-time basis.

An international student seeking to transfer to the College from another post-secondary institution must meet the requirements stated above in addition to the general criteria for transfer students established by the Board of Trustees. F-1 Transfer students must submit a Transfer Verification for Non-Immigrant Visa Status Student form.

The admission of international students and the participation of international students in College programs shall also be subject to all other applicable laws, rules and regulations.

## Non-Degree Seeking

Students with a high school diploma or equivalent that do not wish to seek a credential may be allowed to take coursework under the College's "Quick Admit" category. Generally, students in this category are looking to enroll half time or less. Students seeking registration as a "Quick Admit" must provide all biographical, demographic, and contact information in order to become a student. However, official transcripts, both secondary and post-secondary, are not required to be on file in order to register.

The College's assessment testing may still be required depending on coursework taken and transcripts may be required for the purpose of placement. International non-degree seeking students will require additional documentation and should work directly with Admissions.
Students who do not have a high school diploma or equivalent may enroll for a maximum of five (5) credit hours. The applicant must demonstrate through assessment testing that he or she has skills substantially equivalent to others enrolling in the program. Students admitted without a high school diploma or high school equivalency are not eligible for financial aid. Students admitted on this basis may not receive a degree or certificate from John Wood, even if they complete all the required course work, until proof of high school equivalency is on file with the JWCC Admissions Office.
Students who are still in high school (Smart Start/Concurrent Enrollment) may enroll in course work up to nine credit hours per academic semester. For students wishing to exceed this limit, a request should be made in writing to the Registrar prior to registration. Any pre-requisites for courses must be completed. This can be accomplished through previous coursework taken or through placement testing. Students and their families work with appropriate high school and JWCC personnel to determine final course schedules.

## Limited-Enrollment Programs

Certain programs and courses at John Wood Community College are limited in the number of students that can be accepted. These limitations are based on academic background and program/course capacity. Because of these limits, admission is not open to all applicants but is based instead on one or more of the following criteria: program specific criteria sheets or applications, test results from standardized examinations, interviews with program personnel, academic performance in high school or college courses, or other objective criteria as deemed necessary by the College.

JWCC students who were first admitted to a non-restricted enrollment program but later decide to change to a limited-enrollment program are required to notify the Advising and Retention Office and also must meet the same requirements as any other applicant.
ASSOCIATE IN APPLIED SCIENCE (AAS) DEGREE OR CERTIFICATE PROGRAMS with selected admission processes include associate degree nursing (ADN), healthcare assistant, medical laboratory technician, nursing assistant, paramedicine, practical nursing (LPN), professional CNA, radiologic technology, and surgical technology. This list may change without notice. For equally qualified applicants, preference will be given to in-district residents.

## Policy on Accepting Credit in Transfer Or Credit for Previous Education

1. Official transcripts are required from each school attended. The institution(s) previously attended must be accredited or be a candidate for accreditation by The Higher Learning Commission of the North Central Association or a comparable regional accrediting association.
2. Students who have attended career/technical programs not accredited by The Higher Learning Commission, North Central Association, or a comparable regional accrediting association must successfully complete a proficiency examination for each course for which the student is seeking credit.
3. No developmental (remedial) credits will be accepted in transfer.
4. Courses in which the student has earned a grade of "D" will be accepted in transfer if the student's cumulative grade point average from the transferring institution at the time of transfer is 2.00 or higher on a 4.00 scale. If the grade point average from the transferring institution at the time of transfer is below 2.00 , courses which carry a grade of "D" will not be accepted in transfer. A grade of "C" or better in ENG 101 and ENG 102 is required in all cases.
5. Only credit hours are transferable. Grades associated with the credit are not transferable, nor are they included in the computation of the cumulative grade point average.
6. Upper-division credits are accepted in transfer only if a comparable course is offered by John Wood Community College at the lower-division level.
7. JWCC may waive a student's general education requirements if the student has earned a bachelor's degree or beyond at another accredited institution. This is subject to review by the Registrar's office on a case by case basis and is dependent on the type of credential earned and the package of general education studied. Students may still be required to complete specific course requirements within a degree program as stated in the Programs of Study section of this catalog. Transferred associate degrees are subject to review by the College for fulfillment of general education requirements.
8. Lower-division credits from colleges or universities accredited by The Higher Learning Commission, North Central Association, or a comparable regional accrediting association will be accepted in transfer, regardless of whether a similar class is offered by John Wood Community College.
9. Only credit applying to the student's declared credential will be evaluated and awarded in transfer. An additional evaluation of a student's transcript(s) may be requested by the student if he or she chooses to pursue a different academic program of study.
The following policies govern the admission of a transfer applicant whose grade point average is below 2.00 on a four-point scale:
10. A student on academic probation at the most recently attended college is admitted on academic probation and is subject to the same academic policies at John Wood Community College as other students.
11. Except as noted below, a student who has been suspended at the most recently attended college for academic reasons may not register at John Wood for one semester following such suspension.*
12. A student may be required to complete specified course placement assessments in the event additional academic information is required.
*Exceptions to the above are made only with approval of the JWCC Student Issues Committee or through the Dean of Students. Applicants must state their reasons for believing that their academic progress will improve if accepted at John Wood. Evidence of probable student success may be required in individual cases. After consideration of all materials, the committee may deny acceptance for one semester or more, accept the student on probation with restrictions, or accept the student on probation without restrictions.

## Proficiency Examinations

JWCC recognizes that college-level academic competence may be achieved through many means. Four sources of credit by examination are the Proficiency Examination Program (PEP); the College Level Examination Program (CLEP), which may be taken at JWCC; the Defense Activity for Non traditional Education Support (DANTES); and the Advanced Placement (AP) tests. Other proficiency examinations and credit for prior learning are available in some fields. A per credit hour fee will be charged for each unit of credit awarded.

JWCC is an official computer-based CLEP testing center. Students may choose from 35 different CLEP exams. Students taking the CLEP must pay the CLEP testing fee to the College Board and an administration fee to JWCC.* Students should expect to spend approximately two hours at JWCC for registration and the exam. Arrangements for CLEP testing may be made through the JWCC Admissions Office. For additional information, contact the JWCC Admissions Office or The College Board at www.collegeboard.com.

Credit by examination is not permitted for a course when a student already has acceptable college credit for a more advanced course in the same area.

Any credit earned through proficiency examinations will be designated as proficiency credit on the student's transcript and no letter grade assigned. Hours earned are not included in calculating grade point averages. They are counted toward college degree requirements as evaluated by the College. Credit earned by proficiency examination does not satisfy residency requirements.

## Credit for Veterans

JWCC will grant credit for military service, both active and reserve, based on recommendations of the American Council on Education, when the granting of that credit is appropriate to the student's current educational goals. To receive credit for these courses, the student must present a copy of his or her DD 214 (Separation from Military Service), CCAF transcript or Joint Services transcript or other proof deemed to be acceptable by the Registrar. For additional information, go to www.jwcc.edu/military.

## Maximum Credit Allowed for Previous Experience

No more than one half of the total number of credit hours required within the credential being sought will be applied. Students with military credit for previous experience may exceed the policy.

## SOLAR (Student On Line Access to Records)

Web access to student records is available through the student portal, BlazerNet, at www.jwcc.edu. The site allows students immediate access to their information, including mid-term and final grades, unofficial transcripts, financial aid awards and document requirements, and financial accounts. By using a computer's print screen function, any of these reports may be printed. Information provided to students on the SOLAR system is confidential. Currently enrolled students with an approved academic plan are encouraged to register for classes using SOLAR. Students may contact the Registrar's Office or Information Services for assistance.

## Student E-Mail Accounts

JWCC students who have completed the admissions process are eligible for a student email account. Activating the email account gives students online access to their records. To activate an email account, contact the Help Desk in the Information Services Office (B024). Be prepared to show a photo ID. A student's email account becomes inactive 365 days after the last day of enrollment. A student's JWCC email account serves as the primary contact and should be monitored by the student regularly. To contact the Help Desk, call 217.641.4325.

## Student Identification Cards

Student identification cards are issued through Enrollment Services. The ID card allows students to access JWCC computer labs, athletic events and student activities and serves as a library card. There is no charge for obtaining an initial ID card as a new student. Students who lose their ID cards may obtain a replacement card at a cost*. ID cards may be obtained during regular business hours. Students attending a center outside Quincy may contact personnel at that location for more information.
*Fees are subject to change at any time; please visit www.jwcc.edu for the most up-to-date information.

## Residency Status

Information from the Admissions Form is used to determine an applicant's residency status at JWCC. Every student admitted to JWCC will be classified as an in-district, out-of-district or out-of-state resident. A student's residency classification determines the tuition rate he or she will pay.

- In-district: Residing in one of the following high school districts: Bluffs, Brown County, Central, Griggsville-Perry, Liberty, Meredosia-Chambersburg, Payson, Pikeland, Pleasant Hill, Quincy, Southeastern*, Unity or Western.
*Students who attend Southeastern High School but live in the former Plymouth School District are residents of the Carl Sandburg College District and should contact Carl Sandburg's Admissions Office.
- Out-of-District: Students with residency outside the District but within the state of Illinois
- Out-of-State: Students with residency outside the state of Illinois and students from foreign countries.
"Residence" is defined as the place where a student lives and which he or she intends to be the true permanent home. A student who temporarily moves into the District for the purpose of attending the College at a reduced tuition rate will not be considered as having established a true residence within the District. To be eligible for in-district tuition, a student must have lived at a residence located inside the JWCC District (see the map on page 7) at least thirty days prior to the beginning of that term. Students who change their address during the term or applicants who moved into the JWCC District may be required to complete a Residency Questionnaire. Residency Questionnaires and further information are available from the Admissions Office.

Out-of-district or out-of-state students, excluding students from foreign countries, may qualify for the in-district tuition rate by meeting one of the following applicable scenarios:
(A) Via Cooperative Education Agreement with other Illinois community colleges. You must complete a one-time application at the community college that serves your district. More information may be sought in this catalog or in the Dean of Students office.
(B) Employed 35 or more hours per week by a business within the JWCC District. Complete an Employment Verification form that is available from the Admissions Office. A new Employment Verification form must be completed and on file with Admissions each semester you enroll in JWCC classes.
(C) Attending another educational institution within the JWCC District. Students who wish to reduce their tuition in this manner must provide proof of registration at an eligible institution each semester and documentation of your permanent home address.
(D) Utilize Federal Post 9-11 Benefits under the Veteran's Educational Assistance Act of 2008 in accordance with House Bill 2353.


## STUDENT SERVICES

JWCC Student Services provide a supportive and friendly environment outside of the classroom for academic success and individual development of students. We offer a range of support services to help students meet some of the challenges they may experience as a college student.

## Advising and Retention

Prior to initial registration at JWCC, each student should meet with an academic advisor for assistance in developing an academic plan to meet his or her educational goals. An advisor will continue to work with the student during the remainder of the student's career at JWCC, meeting with the student to plan an educational program and to assist with Web or in-person registration.

Advisors work closely with a designated student population and can help students find academic support while seeking to promote student success, communication, campus and community resources, and programs to support success. Advisors also work thoroughly to maintain open communication with faculty, staff, and students about issues and resources pertaining to student retention. Advising also serves as the central point for retention initiatives on campus and works with other college personnel to help students. Students may contact the Advising \& Retention office at 217.641.4355.

## Career Services

The JWCC Career Services team is committed to helping students achieve success. The Career Services mission is to provide guidance and support in all areas of career development. This free service is not just for students and alumni, but for anyone at any stage of their career. Available services include assistance with researching career options, completing or refreshing a resume, completing job applications, practicing interview skills, searching for employment and dressing for success.

Please contact the Career Services Office at 217.641.4152 to explore any of the available services or to schedule an appointment with a Career Counselor.

## Support Services

The Support Services Department includes three U.S. Department of Education TRiO grant-funded programs: Student Support Services (for JWCC college students), Educational Talent Search (pre-college students) and Upward Bound (pre-college students). In addition, Support Services houses the JWCC Office of Disability Services. For more information, visit Support Services during regular hours (Monday through Friday from 8:00 a.m. to 5:00 p.m.) in Room C122 of the Quincy campus or call 217.641.4343.

TRiO-SSS is an educational support program funded by a grant from the U.S. Department of Education. It provides FREE help to 170 qualifying JWCC students who are the first in their families to attend college, who meet income guidelines, or who have a documentable disability according to the Americans with Disabilities Act (ADA), and who have an academic need for support. All participants must be pursuing the completion of an associate's degree or certificate with the goal of transferring to a
college or university for the completion of a baccalaureate degree. The purposes of TRiO-SSS are (1) to improve the academic grade point averages and increase the number of participants in good standing at JWCC, leading to academic success and completion both here and from their chosen transfer college or university; (2) to increase the retention, graduation, and transfer rates of all TRiO-SSS participants; and (3) to foster an institutional climate supporting the success of individuals in this targeted group.

Involvement in TRiO-SSS can improve your academic performance. Many participants were named to the Dean's List, held offices in student government and student organizations, and were scholarship recipients. Professional staff members assess each student's situation and find the best combination of resources from various grant programs, to help participants achieve their academic goals.

Services may include:

- Thorough assessment of academic and personal strengths and weaknesses upon acceptance.
- One-on-one assignment of a TRiO-SSS Retention Advisor for personal and academic support.
- Easy access to advising, career assessments, step-by-step transfer planning, college visits, financial planning, assistance with the FAFSA application and understanding of financial aid and/or loans.
- Accessible walk-in tutoring labs staffed by professionals in the areas of math, English, writing and science, to assist with both individual and group tutoring. Tutoring in other subjects is offered as needed.
- Cultural opportunities both on and off-campus.
- Close coordination with the Office of Disability Services.
- Updates on college events and news designed to support campus involvement.
- Referrals to community resources and service agencies if needed

Disability Services: Students with disabilities who may require special assistance should contact Disability Services in Support Services. Disability Services' mission is to provide appropriate resources and support services which will ensure students with disabilities the opportunity to competitively pursue a college education. In addition, Disability Services assists other college departments in providing access to services and programs in the most integrated setting possible. Appointments should be made well in advance of the start of an academic term to allow for the arrangement of services. Student responsibility at the postsecondary level involves disclosing the disability, providing recent documentation for review, and requesting appropriate academic accommodations/adjustment/auxiliary aids which are adequately supported by the documentation.

Support and assistance are individualized according to the needs of the student. Accommodations and/or adjustments may include, but not be limited to, advocacy, training, facility access, adaptive equipment and/or materials, interpreters, instructional and test-taking academic adjustments, and coordination with involved area agencies.

Should a request for disability accommodation, adjustment, or auxiliary aid be denied, the student may appeal by following the established grievance procedure:

1. Discuss the situation with the Coordinator of Disability Services and faculty member to try to reach a resolution;
2. If not resolved, appeals may be submitted in writing to the Director of Support Services/ADA Compliance Officer;

Two Pre-college Programs (Educational Talent Search and Upward BoundMorgan/Pike) are sponsored by JWCC to promote postsecondary education opportunities throughout the district. Staff of these programs inform individuals of the benefits of higher education and assist them in gaining the information and skills necessary to be successful in that pursuit.

Educational Talent Search (ETS) is a Department of Education TRiO program. This academic outreach program serves 670 individuals ages 11-27 throughout the JWCC District, two-thirds of whom must meet income and first-generation guidelines. Its mission is to help young people complete their high school education, make appropriate career choices, and pursue further education or training at the post-secondary institution of their choice. ETS advisors work with participants individually or in groups providing many services, including ACT preparation, career advising, job shadowing, help with college selection and campus visits, scholarship searches, help with college applications and financial aid forms, cultural enrichment events, and activities to improve study skills.

Upward Bound (UB), also a Department of Education TRIO program, is designed to assist students with developing the skills and motivation necessary for success in education beyond secondary school. Upward Bound-Morgan/Pike serves students in Griggsville/Perry, Meredosia/Chambersburg, Pittsfield High Schools, and Quincy Junior and Senior High Schools. The academic year component of the program offers tutoring, mentoring, academic advising, career advising and exploration, study skills assistance, college planning and cultural programs throughout the school year. The summer program is an intensive, six-week experience that allows students to continue with academics while enhancing their social skills and self-confidence. It consists of a wilderness experience, a mock college experience (including instruction in math, science, English, foreign languages, and computers), and a college tour trip.

## Counseling Services

John Wood offers a variety of mental health counseling services for currently enrolled students, including those in all outlying centers. Those services include individual and group counseling, consultations, case management, assistance with referrals and testing services. All counseling services are completely confidential and free. Typically, counseling is available for students facing personal issues (anxiety, loneliness, depression, self-harm, identity issues, alcohol/drug issues, etc.), relationship issues, academic issues or family issues. Never assume your problems are insignificant.

## Tutor Services

Tutoring is available at JWCC from several different sources including TRiO-SSS (if qualified by program requirements), the Writing Center, and individual tutoring services. All services feature tutoring by walk-in and by appointment. An online tutoring service, Smarthinking, is also available to all students through the JWCC's web portal, BlazerNet.

Support Services: Please see the Support Services section in this catalog.

The Writing Center is staffed by Language and Literature department faculty. The Writing Center's purpose is to assist students who are writing research papers in all areas of study (e.g., psychology, biology, history). A schedule of hours is available online.

Individual Tutoring Services provides peer or professional tutors in a wide variety of subjects and courses ranging from math to biology to political science. Tutors are knowledgeable in their subject areas. Individual tutoring services are available in the Academic Support Center rooms B118 and B120. A schedule of hours is available online.

## Transferring to Other Colleges

JWCC credits transfer readily to other colleges. Students are highly encouraged to meet with an advisor to develop an academic plan. Questions a student should consider when planning a transfer course of study at JWCC include:

1. What will I major in after I transfer?
2. Where do I want to transfer?
3. Do I want to attend college on a full time basis?
4. Do I have any limitations which will determine when I can take classes? (i.e., a student may work mornings and be able to attend college only in afternoons and evenings.)
5. What other concerns do I have about transferring?

A student who intends to transfer to a senior institution in Illinois should use guidelines toward his or her program established by the Illinois Articulation Initiative (IAI), www.iTransfer.org or www.transferology.com.

Students who are undecided about a major field or a transfer college should work with a John Wood advisor to develop a program which will transfer to a variety of majors and/or colleges.

If students know where they plan to earn a four-year degree, they should contact that school informing them of what they plan to take during their first two years and requesting a reaction to that plan. John Wood advisors will assist students with these contacts. Advisors will also update students on the latest developments concerning the colleges they have chosen and courses required for successful transfer.

## Veterans' Programs

Certification for U.S. Department of Veterans' Affairs programs is provided by the Registrar's Office. The certifying official works with veterans to assist them with the paperwork necessary for federal veterans' benefits as well as the Illinois Veterans Grant (IVG). JWCC is approved as an eligible institution for the instruction of veterans, reservists, and dependents under Title 38, United States Code programs. State IVG applications are available in the Registrar's Office. (See the Financial Aid section of the catalog for more information regarding the IVG; for additional information on veterans' programs, go to www.jwcc.edu/military.)

## Student Records and Transcripts

John Wood Community College maintains official student records and files in the Registrar's Office. Students are entitled to inspect and review their files through a written request submitted to the Registrar. The College maintains academic records in an electronic format. Grades are posted to the student's permanent record at the end of each term.

The transcript of a JWCC student includes the following:

1. The JWCC name and logo
2. Identification of the student, including name, address, and last four digits of the Social Security number (or assigned number upon request)
3. Current academic standing
4. Degree and major
5. Academic honors
6. The extent and quality of all work attempted, including dates attended
7. A key or explanation of policies and terms reflected by the record and pertinent definitions

Transcripts of the student's permanent record may be sent to third parties only upon WRITTEN REQUEST by the student. Forms for these requests are available in Admissions \& Advising, through SOLAR, or may be requested in writing. This request must be personally signed by the student and should include identifying information as well as the name and address where the transcript is to be sent. An exception may be made when the transcript is being forwarded to another accredited college or university and it has been confirmed that the person making the request is the student. These may be requested by phone, over the Internet, in writing or in person.
Unofficial student copies of transcripts are available through Admissions \& Advising or they may be printed directly from the SOLAR system.
Official transcript requests will be processed and mailed by the next business day when the request has been received in Admissions \& Advising by noon, Monday through Friday, except for during certain peak periods (typically at the end of each academic term). In-person requests for an immediate copy of the official transcript may be accommodated for a "rush" fee (see "Tuition \& Fees" section of this catalog). When transcripts need to be received immediately by a third party, students may request overnight service for a cost equivalent to the "rush" processing fee plus the charge to send the document by overnight courier. No transcripts will be provided via fax or email.

Transcripts requested to be mailed outside the continental United States will incur the "rush" transcript fee as well as the applicable postage to send the document(s). All applicable transcript fees must be paid in full before transcripts will be released.

## Statement of Confidentiality and Privacy Rights Of Students in Education Records

Student records at JWCC are considered to be confidential information and the release of any information about a student is governed by The Family Educational Rights and Privacy Act (FERPA) of 1974 (Public Law 93 380, known as the Buckley Amendment). The Act and subsequent amendments outline which student records shall be accessible, who can see the records, and procedures for release of confidential information.

The College will not release recorded information about a student, except for directory information as outlined below, without the express written consent of the student.
Federal law directs that colleges must provide students with access to their own records and an opportunity for scheduling a hearing to challenge such records on the grounds that they are inaccurate, misleading or otherwise inappropriate. These laws do not include any right to challenge the appropriateness of a grade as determined by an instructor. The law generally requires that written consent be received before releasing personally identifiable data about a student other than a specified list of exceptions. The campus is authorized to release directory information unless the student has specified in writing information that should not be released.
Directory information includes the student's name, address, telephone number, e-mail address, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received (including scholarships) and the most recent previous educational agency or institution attended by the student. Any item considered to be directory information will be released to any party upon request.
Currently enrolled students may request that the College withhold disclosure of any category of information under the Family Educational Rights and Privacy Act of 1974. To withhold disclosure, written notification must be received in the Registrar's Office at John Wood Community College, 1301 South 48th Street, Quincy, IL 62305, within 30 days after the beginning of each term. JWCC assumes that failure on the part of any student to specifically request the withholding of categories of directory information indicates individual approval for disclosure. Further information, including institutional policy, may be obtained from the Registrar's Office.

## Records from Other Institutions

No transcript received from other institutions will be sent to a third party or another institution. The official transcript of John Wood Community College will reflect only the name and number of credits accepted from transfer institutions.

## Summary of Civil and Criminal Penalties for Violation of Federal Copyright Laws

Copyright infringement is the act of exercising, without permission or legal authority, one or more of the exclusive rights granted to the copyright owner under section 106 of the Copyright Act (Title 17 of the United States Code). These rights include the right to reproduce or distribute a copyrighted work. In the file-sharing context, downloading or uploading substantial parts of a copyrighted work without authority constitutes an infringement.

Penalties for copyright infringement include civil and criminal penalties. In general, anyone found liable for civil copyright infringement may be ordered to pay either actual damages or statutory damages affixed at not less than $\$ 750$ and not more than $\$ 30,000$ per work infringed. For "willful" infringement, a court may award up to $\$ 150,000$ per work infringed. A court can, in its discretion, also assess costs and attorneys' fees. For details, see Title 17, United States Code, Sections 504, 505.

Willful copyright infringement can also result in criminal penalties, including imprisonment of up to five years and fines of up to $\$ 250,000$ per offense.

## Student Life

Consistent with the mission and goals developed by the JWCC Board of Trustees, the college offers opportunities for students to develop leadership skills and experience real-world education through co-curricular activities on campus as well as in the community. A wide variety of student activities are available to students; including clubs, organizations, student government, campus activity programming, interest groups, volunteer opportunities, community service and intramurals.

## Student Government Association

The Student Government Association (SGA) is the over-arching umbrella of all student organizations on campus. This student-driven group represents the voice of the entire JWCC student body. All students are welcome and encouraged to become SGA members and attend the monthly meetings. Students in SGA will be assigned a Blazer Activity Team (BAT). BATs are sub-groups within SGA that are responsible for planning and promoting student activities. All students are welcome to join the initiative to bring diverse programming to our JWCC community. The four teams that make up BAT are: Green and Gold Club, John Wood Way, Trail Blazers Live!, and the Wood Pile.

## Executive Officer Team

The Executive Officer Team is composed of student officers (president, student trustee, vice president, secretary and treasurer) and overseen by the Coordinator of Student Life. These positions are elected by the student body during the spring semester and meet regularly to develop the SGA budget, establish agendas and discuss studentrelated issues. They are empowered to act on behalf of the SGA when in adjournment.

## Student Organizations

John Wood Community College recognizes student organizations that complement the mission of the college and enhance the quality of education and social affairs at JWCC. Although a student organization is recognized by the Student Government Association, the SGA does not necessarily endorse all of the organizations' activities, nor are the activities held by the student organization always supported by the college. Being an approved and active student organization is a privilege that may be withdrawn for a violation of college rules, policies, or of the code of student conduct. Many personal interest and academic organizations are currently in existence on campus. For more questions or to join an organization, visit the Student Life office.

## Intercollegiate Athletics

JWCC's intercollegiate athletic program is consistent with the College's overall philosophy and objectives. Focusing on the College's core values, the individual programs work toward teaching team members the importance of learning in a competitive environment, striving to reach the highest standards of student-athlete excellence, being part of a team that excels on accountable behavior, and maintaining integrity and respect for the academic and athletic opportunities provided. The college currently offers seven competitive intercollegiate sports, including men's basketball, men's baseball, men's soccer, women's basketball, women's softball, women's soccer and women's volleyball. Each student-athlete is required to have their own primary insurance plan before using the secondary plan that is offered by the college. There is a nominal, mandated fee for the secondary insurance policy.

## Student Housing and Insurance

John Wood Community College does not offer on-campus housing or primary insurance programs for students. Student life activities are not covered by College insurance; however, a secondary insurance plan is accessible for student-athletes to cover injuries sustained while participating in intercollegiate athletics. The College can help to answer questions and facilitate with community resources to resolve these needs.

## Student Conduct

## Student Conduct Regulations

Individual students and student organizations are required to observe the policies of the District and the laws of the city, state and federal governments and to conduct their affairs in a manner compatible with the educational objectives of the College except as specified otherwise. Misconduct for which students are subject to discipline falls into the following categories:

1. Students are not to use or provide false information to the College or to the officials of the College in any form, written or verbal. Students are not to misuse, misrepresent or falsify any College record, form, or procedure.
2. Students are to refrain from the unauthorized use, possession or removal from a designated area of property belonging to the College, its community members, guests, or vendors. Services provided to or by the College, community members or guests may not be used or obtained unless authorized in advance by the appropriate College official.
3. Possession of or the keeping of any firearm, ammunition, explosive device, or other weapon on College-owned or -controlled property is strictly prohibited by state law and the college, with limited exceptions outlined in the Illinois Firearm concealed Carry Act.
4. A student shall take no action which damages or tends to damage public or private property, not his or her own without the consent of the owner or person legally responsible.
5. The intentional false report of a bomb, a fire, or other emergency in any College facility or on property controlled by the College in any form (e.g., pull alarm, verbal, written, or otherwise) is strictly prohibited.
6. Students are not to engage in behavior which is so sufficiently severe and pervasive that it threatens, harms, or causes to place in harm any person. Nor may students exhibit behavior which is lewd, indecent, obscene, or disorderly. The type of conduct which this regulation is designed to cover includes, but is not limited to, the following examples:
a. Intentionally inflicting bodily harm upon any person; taking any action for the purpose of inflicting harm upon any person; taking reckless action which results in harm to another person; taking any action that creates a substantial risk or harm to another person; or threatening by any means of transmission, the use of force to harm or injure another person.
b. Tampering with or otherwise rendering useless College equipment or property intended for use in preserving or protecting the safety of members of the College community such as exit signs, fire equipment and fixtures, first aid equipment, AED's or emergency telephones.
c. Obstructing fire escape routes such as hallways or stairwells.
d. Physically abusing another person.
e. Verbally abusing another person, when such abuse is severe, pervasive and objectively offensive.
f. Committing acts of indecent exposure.
g. Misusing social media.
7. Students are subject to discipline for conduct in violation of any JWCC Board Policies.
8. Conduct which, by itself or in conjunction with the conduct of others, disrupts or impairs the carrying on of normal College functions is prohibited. Students shall not bring persons who are not enrolled into the classroom, lab, or other courserelated area, without prior authorization from the appropriate college official. Employees and students shall not leave minors unattended anywhere on campus.
9. The College is committed to the principle that all students may use and enjoy its educational and social activities and facilities free from harassment or intimidation on the basis of their sex, race, religion or national origin when that harassment or intimidation is so severe, pervasive, and objectively offensive, and so undermines and detracts from the victims' educational experience, that the victim-students are effectively denied equal access to an institution's resources and opportunities. Students may be directed to desist from behavior which, in the opinion of a College official, is intended to or has the effect of subjecting a fellow student to this type of harassment or intimidation. If they persist in this behavior after being so directed, they also may be charged with failure to follow the reasonable directive of a College official.
10. Forcible or unauthorized entry into any building, structure, facility, or room therein on the premises of College-owned or -controlled property is prohibited. Improper use of designated College exits is also prohibited.
11. Use of, being under the influence of, possession of, sale or distribution of, any alcoholic liquor, drug (including but not limited to, any controlled substance, or any counterfeit or look-alike substance) or intoxicating substance at premises owned, leased or used by the Board of Trustees, District or College,
at College-sponsored or supervised activities, except the lawful consumption of alcoholic liquor at an event and location where such consumption is authorized by the Board of Trustees or President, or except for the lawful use of prescription drugs, in any College-owned, leased or used vehicle, while engaged in or going to or from College activities or business; or at any time when the same endangers the health or safety of any employee, student or others.
12. Any student who violates any state, federal, or municipal law, whether specifically covered in this document or not, while on property owned or controlled by the College shall be subject to College disciplinary action for said offense. The adjudication of such violations may proceed independently of state, federal, or municipal agencies.
13. Students are not to disregard the reasonable directive, verbal or written, of a College official. Students are not to obstruct a College official in the carrying out of his or her assigned duties.
14. Students are not, while on property owned or controlled by the College, to engage in the following: gambling; unlawful or unauthorized use of College telephones and computers; unauthorized canvassing or solicitation; using, possessing, or making or causing to be made, any key(s) for any College building, room, or facility - except as authorized; or production of sound through amplification or other means that unreasonably disputes or disrupts the peace of others.
15. Students are not to post, affix or otherwise attach writing or printed materials (i.e., posters, signs, handouts, brochures, handbills, pamphlets, etc.) on College property or premises, including but not limited to trees, shrubbery, land, buildings, vehicles. These materials, except where such is a non-approved solicitation for sale in a commercial venture, may be posted on any bulletin board in or outside of College buildings, as designated for such use by a College official.
16. Students are not to engage in any form of academic dishonesty with respect to examinations, course assignments, plagiarism, alteration of records, or illegal possession of examinations. These shall be considered academic dishonesty. Any student who knowingly assists another student to engage in academic dishonesty is also guilty of academic dishonesty. Plagiarism is the knowing use, without appropriate attribution, of the published ideas, expressions, or work of another, with intent to pass such materials off as one's own.
17. Students are required to identify themselves and provide identification when requested by a College official.
18. College-owned or -operated computing resources are provided for use by students to support their academic pursuits. As such, students are expected to use these resources appropriately. Actual or attempted theft or other abuse of computer resources include, but is not limited to:
a. Unauthorized entry into a file to use, read, or change the contents or for any other purposes.
b. Unauthorized transfer of a file.
c. Unauthorized use of another individual's identification and password.
d. Use of computing facilities to interfere with the work of another student, faculty member or college official.
e. Use of computing facilities to interfere with normal operation of the college computing system.
f. Knowingly causing a computer virus to become installed in a computer system or file.
g. Accessing inappropriate sites as defined in the John Wood Community College Computer Usage Guidelines.

College students are also expected to abide by all reasonable rules and regulations pertaining to student conduct on any campus or premises owned, leased, or used by the Board of Trustees, District or College at College-sponsored or supervised activities. Students who do not comply with these conduct standards are subject to disciplinary action as is determined by the Dean of Students/Registrar in conjunction with other College officials when necessary.

## Campus Police Department

Reporting Crimes and Emergencies: To ensure a safe and secure campus environment, all JWCC students and employees are encouraged and expected to report any and all suspected criminal activity or emergencies by calling Campus Police at ext. 4949 or 217.641.4949. If the report requires emergency services (i.e., local police, fire, EMS), also call 911. Emergency phones are placed in several locations around the Quincy campus exterior. A campus police officer will respond promptly to any and all reports of criminal activity and emergencies.

Web Site: For more information on Campus Police services and programs, log onto the website at www.jwcc.edu/campus-police or call 217.641.4290.

## Behavioral Intervention Team

The Behavioral Intervention Team (BIT) is a multidisciplinary team that serves five major functions for the college:

1. Provide consultation and support to employees in assisting students who display concerning or disruptive behavior.
2. Gather information to assess situations involving students who display concerning or disruptive behavior.
3. Recommend appropriate intervention strategies or disiplinary sanctions.
4. Connect students with needed campus and community resources.
5. Monitor ongoing behavior of students who have displayed disruptive or concerning behavior.
6. Provide training and education for the campus community related to BIT functions.

The overall goal of the BIT is to promote a safe college environment for all students and employees focused on student learning and student success. By encouraging all members of the campus community to report behaviors that are concerning, the BIT will be able to reach out to students to intervene, provide support, and connect them with available resources. As such, the BIT asks that the campus community report concerning, "red flag" behaviors. A "red flag" behavior is a questionable, suspicious, or inappropriate behavior that may be presented through a student's appearance, spoken or written words, or specific actions.

## Parking

The east and south parking lots at the 1301 South 48th Street campus are employee parking only areas Monday through Friday, 7 a.m. to 5 p.m. Visitor parking spaces are reserved for JWCC visitors only and should not be used by current JWCC students.

## Smoking

In accordance with Board of Trustees policy and the Illinois Smoke Free Campus Act, smoking and the use of tobacco products is prohibited on all college property, with the exception that smoking is permitted in non-college, privately owned vehicles that are travelling through or parked on campus property.

## Student Grievances

The College encourages students to bring legitimate grievances or problems to the attention of the administration in order to promote efficiency and contribute to the productive and wholesome educational atmosphere. More information may be found on our website at www.jwcc.edu or by contacting the Dean of Students office.

## Title IX

The College supports all State and Federal regulatory acts. The following are the leaders in their respective areas: Cody Baggett, Title VI Coordinator and Title IX Coordinator, 217.641.4300; Rob Hodgson, ADA/504 Compliance Officer, 217.641.4110; or Dana Keppner, Affirmative Action Officer/Deputy Coordinator, 217.641.4241.

The college has an approved Equal Opportunity, Harrassment, and Nondiscrimination Policy and Procedure for Equity Resolution. In doin so, we have an established group of faculty and staff that are trained in Title IX policy and procedure. In the event of an incident, the steps listed below will be followed; however, more detailed steps and more information can be found in the Dean of Students office.

1. Once a complain is filed, the Title IX Coordinator will begin a preliminary inquire to determine if a violation has occurred.
2. Interim remedies may be provided if necessary.
3. An investigation will commence.
4. Resolution will be sought through one of the following avenues: Conflict Resolution, Informal Resolution, Formal Resolution.


## FINANCIAL INFORMATION AND FINANCIAL AID

## Tuition and Fees*

Tuition for in-district students for 2017-2018 was $\$ 160$ per semester credit hour, which includes a universally assessed fee of $\$ 13 /$ credit hour for institutional services and a universally assessed $\$ 5 /$ credit hour technology fee. This rate is subject to review and change annually by the JWCC Board of Trustees. In-district tuition and fees for a fulltime student for nine months usually range from $\$ 3,840$ to $\$ 4,800$ depending on how many semester hours a student takes. Additional course fees and program fees may apply.
A student is in the John Wood Community College District if he or she resides in one of the following high school districts: Bluffs, Brown County, Central, GriggsvillePerry, Liberty, Meredosia-Chambersburg, Payson, Pikeland, Pleasant Hill, Quincy, Southeastern+, Unity or Western.
Residents of Illinois who live outside the John Wood Community College District who want to enroll in a program offered by JWCC may be eligible to apply for a chargeback from their local community college district. (See section on "Chargeback Requests.")
Out-of-District Residents: The John Wood Community College Board of Trustees has established a tuition rate for out-of-district residents. Tuition for 2017-2018 was $\$ 270$ per semester credit hour, which includes a universally assessed fee of $\$ 13 /$ credit hour for institutional services and a universally assessed \$5/credit hour technology fee. This rate is subject to review and change annually by the JWCC Board of Trustees. A complete residency policy may be obtained from the Admissions Office.
Special Rates for Out-of-District Students: Individuals who are employed at least 35 hours per week by an entity located in the District or who are attending another educational institution within the District will be charged in-district tuition with the approval of the Admissions Office.
Senior Citizens: The College has a special tuition rate for residents of the JWCC District 60 years of age or older enrolling in credit courses. The rate for 2017-2018 was $\$ 65$ per semester credit hour, which includes a universally assessed fee of $\$ 13 /$ credit hour for institutional services and a universally assessed $\$ 5 /$ credit hour technology fee. Additional course fees may apply. This per-credit-hour tuition for any regularly scheduled course is further waived for those persons 60 years of age or older whose annual household income is less than the threshold amount provided in Section 4 of the "Senior Citizens and Disabled Persons Property Tax Relief and Pharmaceutical Assistance Act" provided that available classroom space exists and tuition-paying students constitute the minimum number required for the course. Until it has been determined by the Registrar, or such other person or persons designated by the President, that available classroom space exists and tuition-paying students constitute the minimum number required for the course, the tuition shall be charged, but shall be refunded on application to the Dean of Business Services thereafter made at any time during the academic session when the course is taken. If an application is not made in a timely manner, this waiver shall not apply. Applications for any course shall be processed by the Dean of Business Services in the order filed. No waiver shall be granted or refund made which reduce the number of tuition-paying students below the
minimum required for the course. For purposes of the above waivers, age shall be determined as of the date of the first day of scheduled classes for the courses.

Blended Courses: The fee for internet/face-to-face courses (50\% of course delivered through lecture/seminar format, supplemented by online components) is $\$ 10$ per credit hour.

## Internet Courses: An additional fee for Internet (online) courses for 2017-2018 was $\$ 30$ per credit hour. <br> + Residents of the former Plymouth School District reside in the Carl Sandburg College District. <br> *NOTE: TUITION RATES AND FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE. FOR A CURRENT LIST OF TUITION AND FEES, PLEASE REFER TO THE JWCC WEB PAGE OR CURRENT CLASS SCHEDULE.

## Institutional and Administrative Fees (2017-2018)

CLEP Test ...........................................................CLEP fee plus $\$ 30$ admin. fee
CNA \& HCA Program Fee.................................... $\$ 105$
Credit for Prior Learning Fee................................ $\$ 35$ per credit hour
Placement Testing Fee .......................................... $\$ 15$
Graduation Fee...................................................... $\$ 35$
ID Card Replacement Fee .................................... $\$ 10$
Institutional Services Fee ....................................... $\$ 13$ per credit hour
International Admission Processing Fee .............. $\$ 150$
Late Payment Fee.................................................. $\$ 75$
Late Registration Fee ............................................established by term
Library Fines .......................................................Varies; posted in Library
Nursing Program Fee ............................................Fee assessed each term, ranges from \$1,215-\$1,663 by term
Nursing Program Admission Assessment Exams:
HESI A2 Exam............................................................................................................. plus $\$ 10$ admin. fee
NACE 10 admin. fee
Online Delivery Fee .............................................. $\$ 30$ per credit hour
Open Learning Course Fee ................................... $\$ 10$ per credit hour
Parking, Traffic and Smoking Fines......................Varies; posted in Campus Police Department
Proficiency Exam Fee .......................................... $\$ 35$ per credit hour
Returned Check Fee............................................... $\$ 25$
Surgical Technology Program Fee ........................ $\$ 290$ per semester
Technology Fee .................................................... $\$ 5$ per credit hour
Transcript Rush Fee (Rush Process or when
mailed outside continental U.S.) .......................... $\$ 10$ plus courier cost
Truck Driving Program Fee .................................. $\$ 2,530$

## Other Costs

In addition to the previous listed costs, students should allow additional funds for books and supplies as well as transportation and housing expenses. Some career/technical programs require additional purchases, such as uniforms, special tools or equipment.

## When Are Fees Due?

Fees are payable on or before the date specified as the fee payment date for each term. Students may pay with cash, check, money order, or credit card (VISA, MasterCard or Discover), or they may inquire about the interest-free monthly payment option available. Failure to pay registration fees on time may result in AUTOMATIC WITHDRAWAL and will result in a late fee assessment. All fees are subject to change without notice; for a current list of tuition and fees, please refer to the college website or current class schedule.

## Students in Debt to the College

Students who are in debt to the College will not be permitted to register for additional classes at the College until the debt is cleared. They are not entitled to receive diplomas, official statements, or transcripts of credits until the indebtedness has been paid.

## Refund Policy

## Credit Courses:

Total refunds of tuition and fees will be made to students dropping a course within the parameters set forth in the "Students Wishing to Drop A Course" section. In the event that a course is cancelled, a $100 \%$ refund of tuition and fees pertaining to that course will be made to the student. It normally takes three weeks to process refunds. Any questions regarding refunds may be addressed to the Business Office by calling 217.641.4202.

## Students Wishing to Drop A Course

The following outlines the parameters for students wishing to drop a course. It is the student's responsibility to ensure the drop of a class within these parameters. The student should drop courses through their Academic Advisor. It is important to note that a schedule change may affect awarded financial aid, resulting in a balance owed to the College. Students should check with Financial Aid before dropping classes. Once a drop is executed, the decision is final.

For course lasting:

|  | Greater than 8 weeks | 8 weeks or less, but <br> greater than 2 days | 2 days or less |
| :---: | :---: | :---: | :---: |
| Refund* | 2 weeks | 1 week | 5 business days <br> prior to start |
| Withdrawal (W or WI)^ | by $75 \%$ of course | by $75 \%$ of course | N/A |

## Financial Aid

In order to qualify for student financial assistance a student must be officially enrolled. Additionally, a student must be a high school graduate seeking an aid-eligible certificate or associate degree or be enrolled in a baccalaureate transfer program.
Degree seeking students should complete and submit an annual Free Application for Federal Student Aid (FAFSA). John Wood Community College will receive the results of the student's application if the student indicated JWCC's code of 012813 in the filing process. In response to this application the student will receive a Student Aid Report (SAR). The SAR should be reviewed for accuracy and retained for the student's records. Students are encouraged to complete the FAFSA as soon as the application is available.

| FAFSA Application | Attending | Application Open Date | Tax Information |
| :---: | :---: | :---: | :---: |
| 2018-2019 | fall 2018 <br> spring 2019 <br> summer 2019 | October 1, 2017 | 2016 Tax Information |
| 2019-2020 | fall 2019 <br> spring 2020 <br> summer 2020 | October 1, 2018 | 2017 Tax Information |

The application is available online at www.fafsa.gov. The priority filing date for JWCC students to submit the FAFSA is as soon as the application opens each year but at a minimum eight weeks in advance of the term of enrollment. By checking the student SOLAR account, students will be aware of all outstanding documents needed to complete the FAFSA process. Students and their families are encouraged to contact the Financial Aid Office for assistance.
Payment arrangements for student accounts must be made a week prior to the start of classes. If financial aid is not filed and resolved, the student must make payment arrangements. Students should contact the Business Office at 217.641.4207 for payment options.

## Student Online Access to Records - Financial Aid

Students with an active SOLAR account can view awards, outstanding document requirements, and Satisfactory Academic Progress standing and accept Terms and Conditions. Each year, students seeking to use financial aid must accept the "Terms and Conditions" and complete any outstanding requirements to receive Title IV or state awards.

## Limitations to Eligibility

The following limitations apply to all federal Title IV financial aid programs.

1. Federal aid may be paid only for courses required for the JWCC degree or certificate. Once degree requirements are met, the student is no longer aid eligible.
2. A student may receive federal aid for a maximum of 30 semester credit hours of developmental coursework.
3. Repeated Courses: Financial aid may pay for the repeat of coursework to improve an earned grade of "F". Students repeating a course with an earned grade of "D" will qualify for financial aid to repeat the course one time only.
4. Max Hours: The maximum hours for which a student may be aid eligible is $150 \%$ of the credits required for his/her program. Please review the Satisfactory Academic Progress (SAP) section of the catalog for more details.

## Financial Aid Programs

I. Federal Government
A. Federal Pell Grant (PELL)

The Federal Pell Grant is the foundation program of federal student assistance. It is awarded to students on the basis of financial need and does not have to be repaid. Funds received from the Federal Pell Grant may be used for all legitimate educational expenses, including tuition, fees, books and related living costs. Lifetime PELL limit exists of $600 \%$.
B. Federal Supplemental Educational Opportunity Grant (SEOG)

The SEOG is awarded to students with exceptional need and the amounts will vary by enrollment status.
C. Federal Work-Study Program (CWS)

Part-time jobs are available to JWCC students. These include a limited number of clerical, secretarial and maintenance positions. CWS students typically work eight to ten hours per week.
D. Federal Stafford Loans (Subsidized and Unsubsidized)

This is a loan program whereby students may borrow money for educational expenses. The interest rate will change on July 1 of each year. Repayment of principal begins six months after the student either graduates or ceases to be enrolled at least half time (minimum of six credits per term).
To apply for a Federal Stafford Loan, students should follow our online loan process at the financial aid section of the College's Web site. Applicants must have FAFSA results on file in the Financial Aid Office to apply for a Stafford Loan.

The combined amount that dependent students may borrow from both the subsidized and unsubsidized loan programs is $\$ 5,500 /$ year $(\$ 2,750 /$ semester $)$ for freshmen (0-27 earned hours) and \$6,500/year (\$3,250/semester) for sophomores ( $28+$ earned hours). These amounts may vary based on the amount of other financial aid and the amount of credit hours the student is taking.
The combined amount that independent students may borrow from both the subsidized and unsubsidized loan programs is $\$ 9,500 /$ year ( $\$ 4,750 /$ semester) for freshmen ( $0-27$ earned hours) and $\$ 10,500 /$ year ( $\$ 5,250 /$ semester) for sophomores ( $28+$ earned hours). These amounts may vary based on the amounts of other financial aid and the amount of credit hours the student is taking.
The maximum for subsidized loans cannot exceed \$3,500/year ( $\$ 1,750 /$ semester) for freshman and $\$ 4,500 /$ year ( $\$ 2,250 /$ semester) for sophomores.
As of July 1, 2013, first-time borrowers will have a time limitation on Direct Subsidized Loan eligibility. In general, a student may not receive Direct Subsidized Loans for more than $150 \%$ of the published length of his or her program. Example: For a two-year associate degree program, the maximum period for which a student can receive a Direct Subsidized Loan is three years ( $150 \%$ of 2 years $=3$ years).

Since all loans must be repaid, students are urged to approach borrowing with extreme caution. The Federal Stafford Loan program provides an excellent means of obtaining needed funds for educational expenses, but these funds become a debt which must be included in the borrower's future financial planning.

## E. Iraq and Afghanistan Service Grant

For students who are not Pell-eligible due only to having less financial need than is required to receive Pell funds; whose parent or guardian died as a result of military service in Iraq or Afghanistan after the events of $9 / 11$; and who, at the time of the parent's or guardian's death, were less than 24 years old or were enrolled at least part-time at an institution of higher education. Eligibility is determined by the Department of Education and the school is notified.

## Return of Title IV Financial Aid Funds

JWCC is required to determine the earned and unearned portions of Title IV aid awarded to students as of the date the student ceased attendance within a period of enrollment (per term). Funds will need to be paid back if the student fails to complete $60 \%$ or more of the original enrollment period.

Withdraws may be initiated by a student's instructor. JWCC defines last date of attendance as one of the following:

1. The date that the student began the College's withdrawal process or officially notified the College of his/her intention to withdraw;
2. JWCC will, as a general rule, use the standard $50 \%$ of the term as the last date of attendance for unofficial withdrawals (including zero earned credits) unless a later date of withdrawal can be documented by the institution.

The length of term for each calculation is determined by the student's original enrollment. Even if a shorter module (ie: 8-week course) is completed but the original enrollment included a 16-week course, the calculation is based on a 16 -week period. JWCC must complete Title IV reviews of unearned funds as soon as possible but no later than 45 days from the determination of a student's withdrawal.

Federal student financial assistance is earned on a per diem basis up to the $60 \%$ point in the semester. Title IV funds that are required to be returned are done in the following order: Unsubsidized Direct Loans, Subsidized Direct Loans, Direct Plus Loans, Pell, Supplemental Educational Opportunity Grants (SEOG), and Iraq and Afghanistan Service Grant.

The student is responsible for returning any unearned funds that we disbursed directly to him/her. A copy of the worksheet used to calculate the return of funds to Title IV programs may be obtained from the Financial Aid Office.

If a student did not receive all of the funds earned, the student may be due a postwithdraw disbursement. If the post- withdraw disbursement included loan funds, a student may choose to decline the loan funds so that the student does not incur additional debt. JWCC may automatically use all or a portion of the postwithdraw disbursement (including loan funds, the student accepted for tuition,
fees, and books). For all other school charges, JWCC needs the student's permission to use the post-withdraw disbursement to reduce your debt at the school (JWCC asks for this permission from the student during the enrollment process). Any additional funds after cost are covered is released to the student if requested.

A student who remains enrolled beyond the $60 \%$ point earns $100 \%$ of Title IV aid for that semester. A student who owes an overpayment to Title IV is ineligible for additional funding until the overpayment is fully repaid.

## II. State Government

## A. Monetary Award Program (MAP)

The Monetary Award Program makes awards to students on the basis of financial need. Applicants must be Illinois residents attending Illinois schools. The awards apply to tuition only, and the funds are paid to the College on the student's behalf. Both full and partial awards are made, depending on need. Application for the MAP is made when completing the FAFSA form by the applicable deadline. It is recommended a student file the FAFSA as soon as the application opens. To learn more about MAP, visit www.isac.org where a student can view Rights and Responsibilities of accepting funds.

## B. Silas Purnell Illinois Incentive for Access (IIA) Grant

Pending State of Illinois funding renewal, the Silas Purnell Illinois Incentive for Access program offers a one-time grant to first-year students who are Illinois residents with limited ability to pay for college. This grant was established by the Illinois Student Assistance Commission (ISAC) to improve access to higher education.

## III. Awards for Veterans

## Federal Veterans' Benefits

JWCC is approved as an eligible institution for the instruction of veterans, reservists and dependents under Title 38, United States Code programs by the Illinois State Approving Agency. Anyone who thinks he or she may be eligible for benefits may obtain information and application forms through Records and Registration. To be eligible for benefits, students must be enrolled in an eligible program, attend classes regularly and make satisfactory progress toward their educational goal. This means that a satisfactory GPA must be maintained and that the courses in which the student is enrolled will "reduce the number of credits needed to graduate or complete the program." Veterans must see Records and Registration each semester prior to the start of classes to complete application and other forms.

## A. Illinois Veterans' Grant

This award will pay the full in-district tuition for Illinois veterans attending JWCC part time or full time. Any veteran who entered the armed forces as an Illinois resident and who served at least 12 months and returned to the State of Illinois within six months of separation may qualify for the Illinois Veterans' Grant. A copy of the discharge papers, DD-214, and proof of state residency must accompany the application for the award. Full information and application forms may be obtained from Records \& Registration.

## B. Illinois National Guard Grant

This award applies to tuition charged for attending JWCC part time or full time. Eligibility requires that the recipient must be a member of the Illinois National Guard for at least one year and must continue to be a member for the duration of the grant. Veterans must go online to complete an application at www.isac.org.
C. VS Post-9/11 Bill (P911)

The Post-9/11 Bill provides financial support for education and housing to veterans with at least 90 days of aggregate service after September 10, 2001, or individuals discharged with a service-connected disability after 30 days. You must have received an honorable discharge to be eligible for the Post-9/11 Bill. Contact Records and Registration for information and application process.

Beginning with the 2013-2014 academic year, students who live outside of the JWCC district (in- or out-of-state) and utilize Federal Post 9-11 benefits under the Veteran's Education Assistance Act of 2008 will be charged in-district tuition in accordance with Illinois House Bill 2353.
D. VA Workstudy

A limited number of part-time positions is available on campus to students who are using VA programs. This program is not affiliated with campus or Federal Work Study programs.

## IV. Local Financial Aid

## A. Institutional Scholarships

There are five institutional scholarships available: Trail Blazer (merit based and leadership involvement, application required), Non-Traditional (adult students showing need and special circumstances), Fine Arts - Music (based on audition and selected by fine arts faculty), Fine Arts - Visual (based on portfolio review and selected by fine arts faculty), and Athletics (based on athletic performance and coach selection.) Trail Blazer and Non-Traditional Scholarships are administered by the Admissions and Student Life Offices.

These scholarships pay full or partial cost of in-district tuition and universally assessed fees for selected students. Students may enroll in up to 32 credit hours in an academic year ( 16 credit hours per academic semester). Scholarships are for one year and renewal is based on performance outcomes (i.e. grade point average and participation in specific campus activities and events). Each scholarship has requirements outlined at the time of scholarship offer and acceptance.

Students receiving a JWCC scholarship are required to complete a FAFSA (Free Application for Federal Student Aid) as soon after the opening of the application (October 1). Scholarships are not based on FAFSA results.

The College also awards a limited number of Presidential Scholarships each year based on competition participation. Recommended by area high school counselors, these students show outstanding promise for success at the college level as well as high academic achievement and outstanding leadership qualities to represent JWCC.

## B. General Scholarships and Awards

JWCC provides a number of opportunities for students interested in obtaining scholarships for specific program areas. Some of these awards, which are contingent upon various criteria, include assistance in agriculture, computer science, and health sciences. Other scholarships are also available but may vary from year to year in terms of level of awards, academic achievement, and area of residency. For more information, contact the JWCC Foundation Office.

## C. Area Scholarships, Grants and Loans

Several business, professional and service organizations award scholarships to qualifying students. These awards are need and non-need based and/or merit based. Examples are the Quincy Service League and Altrusa International. Some scholarships exist with local employers of students or their parents. Amounts vary by scholarships, as do the application processes.

## Statement of Satisfactory Academic Progress

The federal government requires that the Financial Aid Office of John Wood Community College (JWCC) monitor the academic progress of all applicants for student financial aid. This regulation requires that the College establish a Satisfactory Academic Progress policy that includes both a pace (quantitative) and a qualitative measure of progress. In compliance with these regulations, the College has adopted the following policy in regard to all state and federal financial aid eligibility. Satisfactory academic progress is evaluated at the end of each structured semester.

## Pace (Quantitative) Measures

Consistent progress toward the degree or certificate shall require that no less than $67 \%$ of all attempted coursework be successfully completed. This is a cumulative requirement and will be checked at the end of every term of enrollment. Students failing to meet this $67 \%$ cumulative threshold will be placed on financial aid warning. If student is already on warning then they will be placed on suspension.

EXAMPLE: To meet the minimum completion rate of $67 \%$, a student who has attempted 28 cumulative credit hours at JWCC must have successfully completed (earned) a minimum of 19 of those 28 hours (all calculations are rounded up).

## Qualitative Measure

All students are required to meet a minimum cumulative grade point average as determined by the following chart:
A. Up to 19.5 hours of coursework attempted ..................................1.51
B. $20.0-29.5$ hours of coursework attempted...................................1.60
C. $30.0-39.5$ hours of coursework attempted...................................1.75
D. $40.0-49.5$ hours of coursework attempted ................................1.85
E. 50.0 or more hours of coursework attempted ..............................2.00

The maximum attempted hours for which a student may be aid eligible is $150 \%$ of the credits required in his/her program. In determining credit hour limits, it is important to note the following:

Credit hours transferred from other schools that are accepted toward completion of your JWCC program count as hours attempted and hours completed. However, transfer credit hours are not included in the calculation of your grade point average; If you change majors, the credit hours taken under all majors will be included in the calculation of the attempted credit hours total, the GPA calculation and the maximum timeframe for degree completion.

## Pace and Qualitative Considerations

Attempted credit hours include the following whether or not paid for with financial aid: Earned Hours (Grades of A-D), Withdrawal (W, WI, WA, WB), Failure (not a passing grade)(F), Incomplete (I, RD), and Pass/Fail (P/F).
Withdrawal from Courses - If you withdraw ("W/WI" "WA/WB") from a course during the semester, after the census date, the course credit hours will be added to your attempted credit hours total.
Incomplete Courses - Credit hours for incomplete courses ("I" (incomplete), "RD" (in progress)) are included in the calculation of your attempted credit hours total, but not in the calculation of your GPA. Until updated with grade change they count as 0 points in GPA. When a grade change is submitted through the Registrar's Office the GPA calculation is updated.
Pass/Fail Courses - Credit hours for pass/fail courses are included in the calculation of your attempted credit hours total, but not in the calculation of your GPA.
Remedial Coursework - Credit hours for remedial classes are counted as attempted hours in determining pace. Remedial courses are included in the calculation of GPA. Non-credit remedial courses are considered transferred in and are counted in attempted hours.
Repeat Coursework - A student who has received a grade of less than a "C" in a course and is repeating that course will have those hours added to the attempted credit hours total. However, for GPA purposes if the second grade is higher than first then the first is excluded in GPA calculation and the second replaces. Additional repeats are counted in attempted hours and GPA calculations.
If a student fails to earn any credit for the term, he or she will be placed on financial aid warning. When the student next enrolls, if he or she once again fails to earn any credits for the term, he or she will be placed on financial aid suspension.

## Evaluation of Academic Records

Evaluation of academic records will take place at the end of each structured semester. Any student not meeting the minimum satisfactory academic progress standards at that time will be placed on financial aid warning. A student is eligible for qualified funding while on warning. If minimum standards of satisfactory progress are not met by the end of the warning term, the student will be placed on financial aid suspension and no further federal or state student assistance will be available.

A student placed on financial aid suspension is expected to provide for their own educational expenses. Any student placed on financial aid suspension may appeal to the Director of Financial Aid if any of the following apply: death of a relative, an injury or illness of the student, or other special circumstances. All appeals must be put in writing on the Satisfactory Academic Progress (SAP) Appeal form. These forms are available in the Financial Aid Office or online at http://www.jwcc.edu/students/ financial_aid/.

Suspension appeals approved in which a student may potentially meet SAP standard the following term of attendance will result in the student being placed on financial aid probation for the subsequent semester. Probation is for one term only and the student is eligible for qualified financial aid. At the end of the probationary term the student must meet SAP requirements or go back to suspension status.
Suspension appeals approved in which a student will not meet SAP standard the following term of attendance will have an individual academic plan developed. An academic plan will require the student to fulfill certain terms and conditions. $\mathrm{He} /$ she will be eligible for qualified funding for that term/semester. $\mathrm{He} /$ she will retain eligibility for funding as long as the academic plan is followed. Specific academic advising for all students is provided by the Advising Office. Any changes to the academic plan must be approved in advance by the Director of Financial Aid.

If an exception is not granted under the appeal process, a student may request reconsideration of financial aid eligibility after the student has taken (at his or her own expense) no less than six credit hours and passed all attempted credit hours with a grade of "C" or better. If the student attempts more than six hours, the student will be evaluated on all attempted credit hours within that term. All coursework involved in the reconsideration request must be taken at John Wood Community College.
Exceptions to the SAP policy will be considered by the Director of Financial Aid on an as-needed basis. The decision of the Director is final.


## ACADEMIC INFORMATION

## Unit of Credit

A semester hour is the amount of credit usually earned by attending a non-laboratory class for fifty minutes a week for 15 weeks. In laboratory courses, one semester hour of credit is granted for every two or three hours of laboratory work. Classes which meet for fewer than 15 weeks will meet more minutes per week for the same amount of credit.

## Classification of Students as Freshmen or Sophomores

Students are classified according to the number of semester credit hours or equivalent they have earned. Developmental coursework and on-level coursework taken for credit is included.

$$
\begin{array}{ll}
\text { Freshman } & \text { A student who has earned fewer than } 28 \text { semester hours of credit } \\
\text { Sophomore } & \begin{array}{l}
\text { A student who has earned } 28 \text { or more semester hours of credit but } \\
\text { who has not received an associate degree }
\end{array} \\
\text { Special } & \begin{array}{l}
\text { A student who has earned } 70 \text { semester hours or more of college credit } \\
\text { or has already received a degree }
\end{array}
\end{array}
$$

## Classification of Students as Full-time or Part-time

For classification purposes, a student will be designated as a full-time student for a given semester if he or she is enrolled for 12 or more semester hours in the semester.

A student is designated as full-time for the summer term if he or she is enrolled for 6 or more semester hours in the summer term. A student who is not full-time is considered part-time.

NOTE: Regardless of the term, Financial Aid calculations are based on the number of approved financial aid hours for the term. Awards are pro-rated based on the enrolled hours. Federal financial aid credit hour classifications are as follows for each term: full-time (12+), three-quarter (9-11), half (6-8), and less than (5 or $<$ ).

## Grading System

A grade represents an instructor's evaluation of a student's academic performance in a course and is determined by examinations and other criteria as established by the instructor. Some courses are based on the student's acquiring certain skills or proficiencies. These courses, in which the mastery of the material is paramount, are compe-tency-based and may use a grading scale of A through C, or they, like the College's other courses, may use the grading system below. In either case, each instructor's course syllabus clarifies his/her grading process and student requirements.

| Grade | Explanation | Grade Points Awarded <br> Per Credit Hour |
| :--- | :--- | :---: |
| A | Excellent | 4 |
| B | Above Average | 3 |
| C | Average | 2 |
| D | Below Average | 1 |
| F | Fail | 0 |
| P | Pass | 0 |
| W | Withdraw | 0 |
| WI | Withdraw after midterm | 0 |
| WV | Course waived | 0 |
| AU | Audit | 0 |
| I | Incomplete | 0 |

No grade points are given for W or WB (used only up to midterm), WI or WA (used after midterm), F, P, AU, and I. A student's grade point average is not lowered for grades of W, WI, AU, I, or P.

## Pass/Fail Grading Option

A student may take a course "pass/fail" by receiving permission in advance from the instructor and notifying the Registrar. This option means that, rather than being assigned A, B, C, or D, the student will receive either a "P" (Pass) or "F" (Fail). A course taken on a pass/fail option will not affect the student's grade point average if the student receives a "P"; however, an "F" will affect the student's grade point average the same as an " F " received for a course taken on a non-pass/fail option. The decision to take a course pass/fail must be made at registration and cannot be changed after the drop-add period. NOTE: No more than 10 percent of program requirements in degree or certificate programs should be taken on pass/fail basis.

## Determining the Grade Point Average

To determine the grade point average (GPA), multiply the number of grade points for each grade received by the number of semester hours for that course. Then divide the total number of points by the total number of semester hours attempted, excluding courses with W, WI, P, I, and AU grades.

## Academic Honors

JWCC issues a Dean's List after each fall, spring, and summer term. The list indicates (1) those students who were enrolled for nine or more hours who earned a grade point average of 3.5 or higher and (2) part-time students who have accumulated at least fifteen semester hours but have taken less than nine semester hours the present term and have a cumulative grade point average of 3.5 , as well as a term GPA of 3.5 or higher.

Associate degrees will be granted with the distinction of Honors, High Honors or Highest Honors to candidates of superior academic achievement. A student with a cumulative grade point average of at least 3.85 in all his or her college courses will be graduated with Highest Honors; a student with an average of at least 3.50 but less than 3.85 will be graduated with High Honors; a student with an average of at least 3.25 but less than 3.50 will be graduated with Honors. In certificate programs all students with at least a 3.50 grade point average will be graduated with Excellence.

## Academic Honor Societies

PTK, an international honors organization with more than 900 chapters, recognizes academic achievement at community college campuses. The Alpha Tau Gamma chapter of John Wood was chartered in 1991. At JWCC, PTK has the following membership requirements: A student must have completed twelve semester hours of associate degree work, maintain a minimum cumulative GPA of 3.5 , and be currently enrolled in classes at JWCC. Students are inducted at ceremonies held semi-annually. These students are specially recognized at graduation and are eligible to wear approved academic regalia. For more information, contact the advisor at PTK@jwcc.edu.

Other departmental societies may exist on campus.

## Auditing Courses

With approval of the instructor and the Registrar, a person may audit a course. The decision to audit a course must be made at registration and cannot be changed after the drop/add period. No credit is recorded for an audited class. A student auditing a course is subject to availability in that course. Students taking the course for a grade will be given preference in terms of availability.

## Release of Transcripts

Transcripts will be withheld for any student who has not fulfilled his or her financial commitments to the College.

## Appeal of Final Grade

1. A student who wishes to appeal a final grade must do so within 30 days after the grade is posted. The student is encouraged to first meet with the faculty member. Every attempt should be made to resolve the grade concern with the faculty member.
2. If the student is not satisfied after consulting with the faculty member, he or she may next appeal to the appropriate academic dean. The dean will meet with the faculty member and the department chair to review the appeal. The dean will notify the student in writing of the dean's decision.
3. If the student still is not satisfied with the grade assigned, he or she may appeal the decision to the Vice President for Instruction for further review. The Vice President for Instruction will review the appeal and communicate the decision to the student in writing. The action of the Vice President for Instruction is final.
4. This process will be accomplished in a timely manner and within one semester of the posting of the grade.
5. Final decisions as outlined above will be communicated to the Registrar to be included on the student's permanent academic record.

## Student Withdrawal from Courses

In general, a student who enrolls for, pays for and attends a course remains officially enrolled for that course and is entitled to a final grade unless the student withdraws from the course. At this time, total withdrawals using the SOLAR system are not available. Withdrawal from a credit course is allowed until seventy-five percent of the course is completed. Students who wish to withdraw should first visit with their academic advisor.
Withdrawal from a credit course can be processed with the Advising Office or through a student's SOLAR account. It is appropriate to confirm your withdrawal with the Advising Office and Financial Aid Office prior to the last day to withdraw if you have any question about your withdrawal. Students who fail to withdraw officially from a course may receive the final grade they have earned, perhaps an "F".
If students withdraw from a course during the first 10 days of the semester, for courses lasting longer than eight weeks, that course does not appear on their permanent academic record. For terms eight weeks or less, this drop period is only five days. (NOTE: The College issues tuition and fee refunds per the refund policy outlined in the Financial Information section.) Students who withdraw after the tenth day of the semester but before the midterm will receive a W (withdrawn) recorded on their permanent records for that course. Those who withdraw after the midterm date for the course but before the last day to withdraw (see Last Day to Withdraw, below), receive a WI designation (withdrawn after midterm) on their record. The W and WI designations are not figured into the student's grade point average.

## Last Day to Withdraw

Students may withdraw from a class any time before seventy-five percent of the term has been completed. The specific days to withdraw are available through the Advising and Registrar's offices. The student is responsible for knowing his or her last day to withdraw for each course. After the last day to withdraw, students are not permitted to drop the course and will receive the final grade they earn.

## Administrative Withdrawal

The College itself may withdraw students from a course for which they have enrolled:

1. The College will withdraw students who have enrolled but have failed to pay their tuition and fees by the payment due date. In this event, the course does not appear on the permanent record after withdrawal.
2. The College may withdraw students who have enrolled for a course but who have not attended during the first 10 days of the term, or the first two class meetings for classes that meet once a week, as notified by the instructor. The College issues tuition and fee refunds if appropriate. Again, the course does not appear on the permanent record.
3. For purposes of certifying actual course attendance as required by the Illinois Community College Board and in accordance with JWCC Board Policy, instructors may recommend that the College withdraw students for lack of engagement.
4. The Dean of Students office retains the right to withdraw a student from a course for emergencies or for the purpose of discipline under established rules of procedure. The Dean of Students will deem the type of withdrawal necessary in each case.

The Records and Registration Office notifies students of their administrative withdrawal from a course and also notifies the Financial Aid Office. (NOTE: In some cases, a student's withdrawal from a course may result in a significant decrease or loss of the student's financial aid or in that student being placed on Financial Aid Warning or Suspension.)
Students who have been administratively withdrawn but who wish to continue with the course may be reinstated at the discretion of the instructor in consultation with the Registrar. Students may appeal denials of reinstatement following the normal appeal process. Depending on circumstances, reinstatement requires an additional $\$ 75$ fee. (Please visit www.jwcc.edu for the most up-to-date information.)

## Incomplete (I) Grades

A grade of "I" (incomplete) may be given by an instructor if, in his or her judgment, in conjunction with the Registrar, circumstances well beyond the student's control for an extended period of time preventing the student's completion of required course work during the semester. When an instructor grants an "I" grade, the instructor will complete a contract (Incomplete Report Form) with the student, specifying the date by which the student will complete the course and indicating the course material that needs to be completed. No such contract may be written with a completion day beyond the end of the immediately following term or 16 weeks after the end of the term in which the "I" was granted, whichever comes later. If the student does not complete the course by the contract completion date, the "I" will be changed to the grade the student would earn without having all the course work completed. Pending incomplete grades could affect enrollment for future semesters for classes requiring the completion of the incomplete course.

## Repeating of Courses

A student who has received a grade of less than a " $C$ " in a course may repeat the course one time without being penalized by having the course counted as additional hours attempted. The student will be given the grade earned in the course when it is repeated, as long as that grade is an $\mathrm{A}, \mathrm{B}, \mathrm{C}, \mathrm{D}$, or F (W, WI, AU, or I will not count as repeats under this policy).
Repeating a course will affect the student's transcript as follows: The course and the grade received for that initial course remain on the transcript, with a notation that the course is excluded from counting toward the GPA. The repeated course and grade are also listed. Only the repeated grade is counted when the GPA is determined.
For students repeating a course that was used as part of a previously awarded credential, the credit hours for the repeated course will not be counted in the student's GPA or GPA hours.
Financial aid eligibility for course repeats may be limited. Specific information is given in the Financial Information-Statement of Satisfactory Academic Progress section of this catalog.

## Academic Probation, Suspension and Readmission

A student whose progress falls below minimum requirements is placed on academic probation. If the student has not removed the probation at the end of the following semester, he or she will be suspended for one semester. The student has the privilege of appealing to the Chair of the Student Issues Committee for immediate reinstatement. The petition should include descriptions of any extenuating circumstances and a statement of reasons for expecting immediate improvement in the quality of academic achievement. The petition will then be reviewed by the Student Issues Committee. The
student will be expected to appear before the committee to ask for reinstatement. The committee, after considering all of the information presented, will then reach a decision as to whether the student will be allowed to continue. If the committee decides the student may not continue, the student may appeal to the Dean of Students.

A student on academic suspension who wishes to apply for readmission after the lapse of one or more semesters must then follow the procedure described above; however, the petition will not be forwarded to the Student Issues Committee but will be acted upon by the Dean of Students. The petition for reinstatement must be submitted to the Dean of Students at least two weeks before the late registration period for the semester in which the student wishes to be readmitted. The Dean of Students may readmit a student on such terms and conditions as the Dean of Students requires; however, petitions may also be denied.

## Minimum Requirements

Each student is expected to make reasonable progress toward his or her academic goal. A student is considered to be making minimum progress if he or she has grade point averages as follows:

After 9 hours of course work have been attempted 1.51
After 20 hours of course work have been attempted 1.60
After 30 hours of course work have been attempted 1.75
After 40 hours of course work have been attempted 1.85
After 50 hours of course work have been attempted 2.00

## Course Load

The maximum credit hour load for which a student may enroll is 18 in a given semester, exclusive of physical education activity, music activity, and guidance courses. Any course repeated for the purpose of an improved grade must count as part of the course load. Individuals considering course loads containing courses scheduled for less than a full semester (e.g., 8-weeks courses, etc.) should consider the expanded weekly time commitment before registering and may be restricted to fewer credit hours. Exceptions to the above must be approved by the Registrar.

A student claiming USDVA benefits must be enrolled in 12 credits per semester or its equivalent in an accelerated term to be considered full time. The VA will pay for enrollment of half-time or greater under Chapters 30, 31, 32 and 35; one-fourth time or greater under Chapter 1106. Veterans eligible for Chapter 33 benefits should contact the College's Veterans Coordinator. Students receiving federal financial aid must be enrolled in 12 credit hours to be eligible for a full-time award.

## Attendance Policy

Students are expected to attend all meetings of classes in which they are enrolled. Tardies may be considered as absences by the instructor. A student should report any absence to the instructor, who will decide whether the work missed should be made up and determine what credit, if any, should be allowed for work submitted late. Verified absences due to college business, illness of student, or death in the family will be recorded as absences by an instructor; however, the instructor may or may not count such absences toward excessive absence totals.

Pursuant to the Volunteer Emergency Worker Higher Education Protection Act (public Act 94-957), the College will reasonably accommodate the absence of a student who is a volunteer emergency worker when that absence is caused by the performance of his or her duties as a volunteer emergency worker. An absence generally will be treated as an excused absence. Students entitled to this accommodation are required to notify the Dean of Students that he or she is a volunteer emergency worker as defined by the Volunteer Emergency Worker Protection Act (50 ILCS 748/3) and also the specific emergency agency with which he or she is associated.

Excessive absence may be sufficient cause for dismissal from class by the instructor. The final decision as to what constitutes excessive absence from a class is left to the instructor and JWCC personnel.

JWCC also makes reasonable accommodations for students who are members of the active military. Students who are deployed during the middle of a term or who need JWCC assistance in order to fulfill their military obligations should contact the veteran's coordinator at 217.641.4330. Students are highly encouraged to inform the appropriate college personnel of their need for assistance as early as possible so that appropriate accommodations can be made. All notifications of deployment or training are the responsibility of the student to appropriate college personnel as outlined. Because trainings are known in advance, students should take these into account when registering. Trainings may or may not receive accommodations.

The University Religious Observances Act (110 ILCS 110) prohibits public institutions of higher education from discriminating against students for observing religious holidays in regard to admissions, class attendance, scheduling of examinations and work. Absence from classes or examinations for religious observance does not relieve students from responsibility of any part of the course work required during the period of absence. To request accommodation, students who expect to miss classes, examinations or other assignments as a consequence of their religious observance shall provide instructors with reasonable notice of the date or dates they will be absent. Students who believe that they may not have been reasonably accommodated should contact the instructor of the class or the department chair. If the issue is not resolved at the department level, students may petition through the Academic Appeal procedure.

## DEGREES/CERTIFICATES AND REQUIREMENTS FOR GRADUATION

Degree requirements are listed in this section of the catalog. Up-to-date information is available at www.jwcc.edu. Suggested and required courses for each degree are listed in the program description section of the catalog. Since graduation requirements at universities and colleges vary, the courses of study listed in the catalog are suggested guidelines only. To avoid difficulty in transferring credits to the institution at which the student plans to complete studies, the student should work closely with a JWCC advisor as well as the department at the college or university to which the student plans to transfer.

This section of the catalog has a two-fold purpose: to provide limited information about careers that can begin at JWCC and to outline requirements for JWCC degrees and certificates. The description may include opportunities in the field along with a suggested set of courses which will prepare a person for a position of further study in that field. Course descriptions of all JWCC courses are contained in the last section of the catalog.

> The career information included in this catalog is based on the "Occupational Outlook Handbook" published by the U.S. Department of Labor, Bureau of Labor Statistics; the information provided in the handbook reflects a national picture concerning the nature of the work, places of employment, employment outlook, and working conditions of each occupation. Supplemental data was taken from the Coordinated Occupational Information Network (COIN). While the staff feels comfortable with the materials used concerning JWCC programs, students should be aware that employment profiles vary from community to community.

If a student is interested in a major field which does not appear to be offered at JWCC, that does not mean that the first two years of a four-year degree program cannot be taken at JWCC. For information on other major fields, contact the Director of Advising and Retention.

## Planning the Degree Proposal

Each student should complete a degree plan with his or her advisor prior to the first semester at John Wood Community College. This should outline an academic plan which will meet all of the requirements for the degree toward which the student is working. Also, this academic plan should include the first two years of work in an area of concentration required by a specific four-year institution to which the student plans to transfer (associate in arts, associate in science, associate in fine arts, or associate in engineering science degree) or should include all the courses required for a major in a technical field of study (associate in applied science degree).

## Program Requirements

Although academic program requirements may change with each edition of the college catalog, a student may graduate under the current program requirements or any program requirements in effect since the student's first enrollment so long as it is continuous. However, no student may graduate under program requirements more than five years old without special permission from the program coordinator/director and the Vice President for Instruction. The College automatically exempts from this "five-year" rule only those students who have been continuously enrolled in their programs. (In this context, a student is defined as continuously enrolled in a program when that student successfully completes at least six (6) semester hours applicable to that program per calendar year.)
A student whose enrollment has been interrupted for one year or more must follow the program requirements in effect at the time of re-enrollment or those of any catalog published after re-enrollment.

## Currency of Technical Courses

Students who completed technical courses more than four years in the past may find the information and skills from such courses to be obsolete. In order for technical program graduates to possess current knowledge and skills applicable to the job market, students are required to repeat any technical course for certificate/degree completion which was completed more than four years prior to the current term. Exceptions to this standard can be requested by the student to the appropriate instructional department chair. Approval of exceptions can be granted only by the respective department chair based on documented evidence provided by the student. The department chair shall formally notify the Registrar of approved exceptions.

## Earning More than One Associate Degree

Students desiring to receive more than one associate degree must complete a minimum of an additional 12 credit hours for each successive degree and fulfill all degree requirements of each credential. Students should remember that areas of concentration do not constitute a different degree. This primarily affects the degrees of associate of arts and associate of science.

## Graduation Application

Students who are nearing the completion of their program are required to file a Graduation Application form prior to or during registration for their final term. This will ensure an early evaluation and reduce the possibility of a deficiency in graduation requirements. The deadline to submit the form and be eligible to participate in the May graduation exercise is February 15.
Meeting graduation requirements is ultimately the responsibility of the student. Students are encouraged to be familiar with the catalog and program requirements and to work with their academic advisor in selecting courses.

## Graduation Ceremonies

Graduation ceremonies are the celebration of a student completing a field of study. Each spring JWCC conducts a graduation ceremony in which faculty, staff, family, friends, and students come together to recognize and honor academic achievements. All eligible degree and certificate recipients are encouraged to participate in graduation ceremonies.

Everyone who has filed a Graduation Application form and who has successfully planned or completed the program during the year will be invited to participate in ceremonies. A fee is assessed to cover student related expenses associated with graduation. This fee is payable in the Business Office. (See Tuition and Fees section.)
Participation in ceremonies is allowed prior to verification of completion of final courses. The actual degree or certificate is posted to the official transcript and the certificate or diploma is released when all requirements have been met and verified by the Registrar.

## Diplomas, Certificates, Degrees

Information regarding completion of degrees and certificates is posted to the official academic transcript. Verification of a degree or certificate can be made by ordering a transcript. A diploma or certificate may be ordered through the Dean of Students Office. You may pick up an order form in the Dean of Students Office. (Fees are subject to change at any time; please visit www.jwcc.edu for the most up-to-date information.)

## Degrees and Certificates Available

John Wood Community College offers a number of degree and certificate options to meet the diverse needs of the residents of its district. The associate in arts (AA), the associate in engineering science (AES), the associate in fine arts (AFA) and the associate in science (AS) degrees are designed to serve students desiring to transfer to fouryear colleges and universities. The associate in applied science (AAS) degree is offered for students interested in specialized career/technical training and preparation for fulltime employment. The College also offers the associate in general studies (AGS) degree for students who wish to design a course of study to meet their individual needs. John Wood Community College has received approval to grant associate of arts, associate of science, and associate of general studies degrees earned through online coursework.

Certificates, which require fewer credit hours than the degree and are generally highly specialized and structured courses of study, are available in most of the College's career/technical program areas. Students desiring less structured and more flexible programs of study may pursue a certificate in general studies.

## Associate Degrees (AA, AES, AFA, AS, AAS)

The associate in arts (AA), the associate in engineering science (AES), the associate in fine arts (AFA) and associate in science (AS) degrees are designed for students planning to transfer to a four-year college or university for a baccalaureate degree. The AA degree provides emphasis in the social sciences, humanities, communications, and the arts. Students who wish to major in math, engineering, agriculture, the natural sciences, and similar fields that require heavy undergraduate requirements in mathematics and science should pursue the AS degree. The AES degree is available for those students seeking a degree in engineering science. The AFA degree is available to those students seeking a degree in music performance. For the AA, AES, AFA or AS degree, the candidate must complete at least 64 credit hours ( 65 credit hours for AES and AFA) in courses numbered 100 or above, including courses in the following three areas: general education, the area of concentration (if declared for the AA/AS), and electives.

The associate in applied science (AAS) degree is available to students seeking the advantage of specialized training in preparation for full-time employment. Students who complete prescribed requirements of a specific career program will receive the AAS degree. Students pursuing the AAS degree should understand that career/technical programs are designed to make a student job-ready and not all such programs can be assured of college transfer. The College encourages these students to consult a JWCC advisor.

## General Education Goals Associate Degree

JWCC believes general education is a vital and basic part of a student's education. General education is defined as education which promotes a common base of knowledge intended to provide students with the skills necessary to participate in a wide range of activities which enhance the overall quality of life in the community. Specific goals have been devised which reflect essential areas of general education competence. In addition to learning the skills and mastering the knowledge of their specific program(s), students will be able to:

| General Education Goal 1: <br> Communication | This area of study will help the student <br> become proficient in developing, <br> evaluating, and analyzing written, oral, <br> and visual messages appropriate to the <br> situation, purpose, and audience. |
| :--- | :--- |
| General Education Goal 2: <br> Humanities and Fine Arts | This area of study will help the student <br> develop an understanding of the human <br> condition through investigation, <br> appreciation, and evaluation of the <br> humanities. |
| General Education Goal 3: <br> Social and Behavioral Science <br> (Includes Psychology, Sociology, <br> History, Economics, and Political <br> Science) | This area of study will help the student to <br> develop an understanding of the self, <br> others and the world in which he or she <br> lives through investigation of social, <br> cultural, economic, political, and historic <br> influences on human thought, values, and <br> behaviors. |
| General Education Goal 4: <br> Mathematics | This area of study will help the student to <br> use abstract and deductive reasoning to <br> interpret and critically evaluate data and to <br> effectively solve problems. |
| General Education Goal 5: <br> Physical and Life Sciences | This area of study will train the student to <br> comprehend and apply the basic principles <br> of science and methods of scientific <br> inquiry. |
| General Education Goal 6: <br> Information Literacy | This area of study will help the student to <br> develop the skills and knowledge <br> necessary to use information effectively <br> through appropriate technology and media. |

## Graduation Requirements

## A. General Education Course Requirements

The specific requirements needed to fulfill the general education component of the degrees are outlined as follows: AA AFA AS AAS AES

1. Communication Skills:

| a. Written |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| b. Oral | 6 | 6 | 6 | 3 | 6 |
| Humanities \& Fine Arts | 3 | 3 | 3 | 3 | -- |

2. Humanities \& Fine Arts $\quad 9 \quad 6 \quad 6 \quad 3$
$\begin{array}{lllllll}\text { 3. } & \text { Social \& Behavioral Sciences } & 9 & 3 & 6 & 3 & 6\end{array}$
3. Mathematics \& Natural Science

| a. Mathematics | 3 | 3 | 6 | 3 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

b. Life Science 3-4 3-4 3-4 -- --
c. Physical Science $\quad 3-4 \quad 3-4 \quad 3-4 \quad$-- 4
d. Life/Physical Science
5. First Year Experience $\quad 1 \quad 1 \quad 10$
6. General Education Course -- -- -- $3-4$--
(from approved list of communications, natural science, mathematics, humanities, social \& behavioral science)

| TOTAL HRS. | 38 | 29 | 38 | $16-17$ | 32 |
| :--- | :--- | :--- | :--- | :--- | :--- |

The required general education hours for associate degrees must be selected from the following courses grouped by general education category. Additional courses which meet general education requirements may be added from time to time. NOTE: Illinois Articulation Initiative (IAI) course code follows course title where applicable.

1. Communication Skills

All associate degree-seeking students must have hours in both written and oral communication with the exception of AES degree-seeking students who are only required to have hours in written communication.

|  | AA | AFA | AS | AAS | AES |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Hrs. | Hrs. | Hrs. | Hrs. | Hrs. |
| Written ${ }^{3}$ | 6 | 6 | 6 | 3 | 6 |
| Oral | 3 | 3 | 3 | 3 | -- |

a. Written Communication

ENG 101 Rhetoric and Composition I ${ }^{3}$; C1 900
ENG 102 Rhetoric and Composition II ${ }^{13}$; C1 901R
ENG 191 Business Communication ${ }^{2} 4$
b. Oral Communication

CMN 101 Introduction to Speech I; C2 900
CMN 104 Interpersonal Communication ${ }^{2} 4$
(NOTE: may be chosen by AAS degree-seeking students who do not plan on receiving a bachelor's degree from a four-year institution.)

[^0]2. Humanities and Fine Arts

AA degree-seeking students choose 9 credits (three courses) with at least one course from each list. AFA degree-seeking students must select at least one course from the humanities area. AS degree-seeking students choose 6 credits (two courses) with at least one course from each list. AAS degreeseeking students desiring a humanities or fine arts course may choose any course from either list.

|  | AA | AFA | AS | AAS | AES |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hrs. | Hrs. | Hrs. | Hrs. | Hrs. |
| Humanities | 9 | 6 | 6 | $3 *$ | 3 |

a. Humanities:

CHN 101 Elementary Chinese I ${ }^{25}$
CHN 102 Elementary Chinese II ${ }^{125}$
ENG 114 Fiction ${ }^{1}$; H3 901
ENG 130 Introduction to Film²
ENG 231 American Literature I ${ }^{1}$; H3 914
ENG 232 American Literature II ${ }^{1}$; H3 915
ENG 241 English Literature I ${ }^{15}$; H3 912
ENG 242 English Literature II ${ }^{15}$; H3 913
ENG 251 World Literature ${ }^{1}$ 5; H3 906
GER 101 German I ${ }^{2}$
GER 102 German II $^{12}$
HUM 101 Introduction to Humanities; HF 900
HUM 200 The Art of Being Human5; HF 901
PHL 101 Introduction to Philosophy; H4 900
PHL 111 Introduction to Logic/Critical Thinking; H4 906
PHL 121 Ethics; H4 904
PHL 201 Major World Religions ${ }^{5}$; H5 904N
PHL 211 Philosophy of Religion; H4 905
RST 101 Introduction to the Bible; H5 901
RST 111 Introduction to the Old Testament; H5 901
RST 112 Introduction to the New Testament; H5 901
RST 175 Foundational Religious Texts; H5 901
SPN 101 Elementary Spanish I ${ }^{2}$
SPN 102 Elementary Spanish II ${ }^{12}$
b. Fine Arts

ART 115 Art Appreciation; F2 900
ART 120 Art Survey and Appreciation II $^{2}$
DRA 103 Introduction to Drama; F1 907
DRA 125 Acting I: Movement and Voice ${ }^{2}$
ENG 130 Introduction to Film ${ }^{2}$
HUM 101 Introduction to Humanities; HF 900
HUM 200 The Art of Being Human5; HF 901
MUS 102 Music Appreciation; F1 900
MUS 121 Introduction to Music Literature; F1 901

[^1]3. Social and Behavioral Sciences

AA degree-seeking students choose 9 credits (three courses) from at least two different subject areas. AS degree-seeking students choose 6 credits (two courses) from two different subject areas. AAS degree-seeking students desiring a social and behavioral science course may choose any course from this list. AFA degree-seeking students in music performance select from the general education core list.

|  | AA | AFA | AS | AAS | AES |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Hrs. | Hrs. | Hrs. | Hrs. | Hrs. |
| Social \& Behavioral Sciences | 9 | 3 | 6 | $3^{*}$ | 6 |

a. Psychology/Sociology

PSY 101 Introduction to Psychology; S6 900
PSY 145 Human Relations in the Workplace ${ }^{2} 4$
PSY 221 Social Psychology¹; S8 900
PSY 202 Child Psychology ${ }^{16}$; S6 903
PSY 203 Adolescent Psychology ${ }^{16}$; S6 904
Only one of these
three may be used
PSY 233 Developmental Psychology ${ }^{16}$; S6 902
PSY 250 Psychology of Personality ${ }^{12}$
SOC 101 Introduction to Sociology; S7 900
SOC 111 Social Problems ${ }^{1}$; S7 901
SOC 221 Social Psychology¹; S8 900
SOC 222 Sociology of Diversity ${ }^{5}$; S7 903D
SOC 224 Marriage and the Family ${ }^{1}$; S7 902
b. History

HIS 101 Western Civilization I5; S2 902
HIS 102 Western Civilization II5; S2 903
HIS 111 World History I5; S2 912N
HIS 112 World History II5; S2 913N
HIS 121 U.S. History I; S2 900
HIS 122 U.S. History II; S2 901
HIS 222 U.S. History Since $1945^{10}$
c. Economics/Political Science

AGR 203 Agriculture Economics for Consumers ${ }^{2}$
ECO 101 Principles of Economics I; S3 901
ECO 102 Principles of Economics II; S3 902
PSC 101 American Government; S5 900
PSC 110 Introduction to Political Science; S5 903
PSC 131 State and Local Government; S5 902
*Or 3 hrs. Humanities \& Fine Arts
${ }^{1}$ Prerequisite required
${ }^{2}$ Does not meet IAI GECC
${ }^{4}$ AAS degree only
${ }^{5}$ Meets international awareness requirement
${ }^{6}$ Only one of these courses may be used to meet general education requirements
${ }^{10}$ Pending IAI GECC Approval
4. Mathematics

|  | AA | AFA | AS | AAS | AES |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hrs. | Hrs. | Hrs. | Hrs. | Hrs. |
| Mathematics | 3 | 3 | 6 | 3 | 12 |

a. AA and AS degree-seeking students must select at least one course (for the AA) or two courses (for the AS) from the following list. AFA degreeseeking students select one course from the general education core below. MAT 105 Finite Mathematics ${ }^{12}$
MAT 109 Elementary Statistics ${ }^{1}$; M1 902
MAT 111 Math for Elementary Teachers II ${ }^{\mathbf{1 8}}$; M1 903
MAT 113 College Algebra ${ }^{129}$
MAT 220 Analytic Geometry \& Calculus I¹; M1 900-1
MAT 221 Analytic Geometry \& Calculus II¹; M1 900-2
MAT 222 Analytic Geometry \& Calculus III ${ }^{1}$; M1 900-3
MAT 234 Calculus for Social Scientists ${ }^{\text {; }}$; M1 900
b. AAS degree-seeking students must select at least one course from the following list:
MAT 100 Technical Mathematics ${ }^{2}$
MAT 103 Business Computations I ${ }^{2}$
MAT 104 Business Computations II ${ }^{12}$
MAT 105 Finite Mathematics ${ }^{12}$
MAT 109 Elementary Statistics ${ }^{1}$; M1 902
MAT 113 College Algebra ${ }^{12}$
MAT 114 Trigonometry ${ }^{12}$
MAT 220 Analytic Geometry \& Calculus I¹; M1 900-1
MAT 234 Calculus for Social Scientists ${ }^{1}$; M1 900

## Natural Science

AA, AS, and AFA degree-seeking students must choose one course from the list below of courses in the life sciences and one course from the list of courses in the physical sciences; at least one course must include a laboratory. AS degree-seeking students must take one additional life/physical science course. AAS students desiring a natural science course may choose any course on either list as an elective.

[^2]

## 5. First Year Experience

FYE 101, Blazing Your Trail, is a required one-credit hour general education course which is typically delivered in the first half of the semester. It is designed to help students build stronger relationships within their college experience, to learn how to learn at the college level, to improve both their soft skills and academic skills, and to establish a stronger foundation upon which to complete their college education.

## B. The Area of Concentration Requirements

For students seeking the AA or AS degree, JWCC does not offer a "major" as typically found at a four-year institution. However, the College does provide Area of Concentration courses which must be completed in the appropriate program of study.
For students seeking the AES degree, there is a list of required courses on the Engineering page later in this catalog.
For students seeking the AFA degree, there is a list of required courses totaling 36 semester hours that students must complete. See Fine Arts later in this catalog.

Students who wish to declare an Area of Concentration must complete a minimum of 12 semester hours within that Area of Concentration. Students should be aware that other courses may be required for the completion of their "area of concentration" at four-year institutions. Not all Areas of Concentration are listed. If a specific area which is not listed is desired, contact an advisor for assistance in determining courses to meet the Area of Concentration requirement. In special situations, students may have legitimate reasons for deviating from the Area of Concentration courses listed in the catalog. Before deciding upon an Area of Concentration, each student planning to transfer to a baccalaureate program should meet with an advisor and seek to learn what the two-year requirements are for the four-year major discipline.
For students seeking the AAS degree, the required curriculum directly supports learning in the technical field. The number of hours required in a given career/technical field varies by program. Each student planning to acquire the AAS degree must complete the specific courses required. A minimum of 35 semester credit hours is needed to satisfy the requirements.

## C. Elective Requirements

Some programs require elective semester hours that bring the total program hours to 64 .

## D. Other Requirements

1. A minimum of 64 semester hours is required for graduation. Not more than four of the 64 credit hours may be taken through activity programs (band, choir, physical education, etc.).
2. At least 15 semester hours of the last 30 semester hours of a degree must be earned through JWCC.
3. A cumulative grade point average of 2.0 on a 4.0 scale. Exceptions to the GPA requirement for graduation must be made by the Dean of Students.
4. Up to 30 semester hours of credit will be accepted through proficiency examinations or prior learning credits.
5. Credit for pre-college developmental course work will not be accepted toward graduation.
6. A working knowledge and understanding of computer literacy (AA, AS, AES, AFA) or of computers and their application (AAS) is required. This requirement may be fulfilled by one of the following:
a. passing any computer science or selected career/technical or noncareer/technical course in which computer literacy (AA, AS, AES, AFA) or computer application (AAS) has been determined by the Faculty Senate Committee on Curriculum to be one of the primary objectives of the course.
b. demonstrating competency or proficiency by successfully passing the CSC 100 proficiency examination (AA, AS, AES, AFA, AAS).
7. For students seeking the AA and AS degrees, 3 credit hours of course work are required to further the student's knowledge of international awareness. Students may choose from the following list of courses: CHN 101, CHN 102, ENG 241, ENG 242, ENG 251, HIS 101, HIS 102, HIS 111, HIS 112, HUM 200, PHL 201, SOC 222. Some of these courses may also be used to meet appropriate humanities and social and behavioral science requirements.
8. A limit of four (4) hours from activities in art, physical education, music, and theater production may be applied toward graduation.
9. Students who completed technical courses more than four years in the past may find the information and skills from such courses to be obsolete. In order for technical program graduates to possess current knowledge and skills applicable to the job market, students are required to repeat any technical course for certificate/degree completion which was completed more than four years prior to the current term. Exceptions to this standard can be requested by the student to the appropriate instructional department chair. Approval of exceptions can only granted by the respective department chair based on documented evidence provided by the student. The department chair shall formally notify the Registrar of approved exceptions.
10. There can be no exceptions to the above academic requirements unless approved by the Vice President for Instruction.

## TOTAL CREDIT HOURS REQUIRED FOR ALL DEGREES (minimum) 64 HRS.

## Associate Degree Requirements (AGS)

The associate in general studies degree (AGS) is a flexible and personalized degree intended for students whose interests and educational objectives do not fall within either a traditional transfer or career/technical program. This degree is NOT recommended for students who wish to continue their formal education at a four-year institution, nor is it recommended for the student in a regular career/technical program. Transfer students are advised to pursue either the associate in arts or associate in science degree, while regular career/technical students should pursue the associate in applied science degree. Degree requirements for the AGS include:

1. A written plan of study submitted to and approved by the Dean of Arts and Sciences or the Dean of Careers and Technology prior to completing the last 12 hours of coursework.
2. A minimum of a 2.0 grade point average on a 4.0 scale. Exceptions to the GPA requirement for graduation must be made by the Dean of Students.
3. At least 12 hours in one area of concentration.
4. General education: A total of 20 hours is required, with at least 3 hours in each of the following areas: humanities, social and behavioral science, natural science, math, written communication, and oral communication.
5. At least 15 semester hours of the last 30 semester hours of a degree must be earned through JWCC.
6. No more than 6 hours of developmental course credit.
7. A minimum of 64 semester hours of passing coursework.
8. A working knowledge and understanding of computers. This requirement may be fulfilled by one of the following:
a. Passing any computer science course or selected career/technical or noncareer/technical course in which computer literacy has been determined by the Faculty Senate Committee on Curriculum to be one of the primary objectives of the course;
b. Demonstrating competency or proficiency by successfully passing the CSC 100 proficiency examination.
9. Three credit hours of course work are required to further the student's knowledge of international awareness. Students may choose from the following list of courses: CHN 101, CHN 102, ENG 241, ENG 242, ENG 251, HIS 101, HIS 102, HIS 111, HIS 112, HUM 200, PHL 201, SOC 222. Some of these courses may also be used to meet appropriate humanities and social and behavioral science requirements.

Any exceptions to the above must be approved by the Vice President for Instruction.

## Certificates -- Career/Technical Programs

The certificate program at JWCC is available in most of the career/technical program areas. The majority of the programs are highly specialized and structured with an employment objective. Depending on the employer and labor needs, the certificate will provide sufficient preparation for direct entry into many skilled jobs. If the student should decide to obtain an associate degree at some future date, some of the courses taken as part of the certificate program may be applied toward the appropriate AAS degree. A grade point average of 2.0 or higher on a 4.0 scale in coursework applicable to the certificate or degree must be achieved. In the catalog, certificate course requirements are individually listed under the appropriate area of study.

Students who completed technical courses more than four years in the past may find the information and skills from such courses to be obsolete. In order for technical program graduates to possess current knowledge and skills applicable to the job market, students are required to repeat any technical course for certificate/degree completion which was completed more than four years prior to the current term. Exceptions to this standard can be requested by the student to the appropriate instructional department chair. Approval of exceptions can be granted only by the respective department chair based on documented evidence provided by the student. The department chair shall formally notify the Registrar of approved exceptions.

Information in this publication was accurate at the time of printing and is subject to change at any time; visit www.jwce.edu for the most up-to-date information.


## PROGRAMS OF STUDY

## Associate in Arts and Associate in Science Degrees--Model

Students pursuing an associate in arts (AA) or an associate in science (AS) degree are encouraged to follow the general education sequence model outlined below:

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete. Students majoring in the hard sciences or engineering or preparing for medicine or pharmacy will be unable to graduate in two years taking 16 credit hours per semester. These students will most likely take a minimum of 18 credit hours per semester or graduate in three years.

| SUGGESTED AA DEGREE PLAN |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| FIRST SEMESTER |  | SECOND SEMESTER |  |  |
| ENG 101 Rhet \& Comp I | 3 | CSC 100 | Computer Literacy | 1 |
| FYE 101 Blazing Your Trail | 1 | ENG 102 | Rhet \& Comp II | 3 |
| Humanities 3 |  | Humanities |  | 3 |
| Math 3 |  | Life or Phys | cal Science | 4 |
| Social/Behavioral Science 3 |  | Social/Beha | ioral Science | 3 |
| Area of Concentration or Elective | 3 | Area of Concentration or Elective |  | 3 |
|  | 16 |  |  | 17 |
| THIRD SEMESTER |  | FOURTH SEMESTER |  |  |
| CMN 101 Intro to Speech I | 3 | Social/Beha | ioral Science | 3 |
| Humanities | 3 | Area of Con | entration or Elective | 6 |
| Life or Physical Science | 4 | Electives |  | 6 |
| Area of Concentration or Elective | $\underline{6}$ |  |  | 15 |
|  | 16 |  |  |  |
| SUGGESTED AS DEGREE PLAN |  |  |  |  |
| FIRST SEMESTER |  | SECOND SEMESTER |  |  |
| ENG 101 Rhet \& Comp I | 3 | CSC 100 | Computer Literacy | 1 |
| FYE 101 Blazing Your Trail | 1 | ENG 102 | Rhet \& Comp II | 3 |
| Humanities | 3 | Math |  | 3 |
| Math | 3 | Life or Phys | cal Science | 4 |
| Social/Behavioral Science | 3 | Social/Beha | ioral Science | 3 |
| Area of Concentration or Elective | 3 | Area of Concentration or Elective |  | 3 |
|  | 16 |  |  | 17 |
| THIRD SEMESTER |  | FOURTH SEMESTER |  |  |
| CMN 101 Intro to Speech I | 3 | Life or Phys | cal Science | 3 |
| Humanities | 3 | Area of Con | entration or Elective | 6 |
| Life or Physical Science | 4 | Electives |  | 6 |
| Area of Concentration or Elective | $\underline{6}$ |  |  | 15 |
|  | 16 |  |  |  |

Students who declare an Area of Concentration must complete at least 12 semester hours in the area. Undeclared students may take elective courses.

A list of approved courses that qualify as social/behavioral sciences, humanities, natural sciences, and mathematics appears under General Education Requirements: Associate in Arts and Associate in Science Degrees, pages 70-74. Please visit www.jwcc.edu for the most up-to-date catalog and information.

Since graduation requirements vary at four-year colleges and universities, the above courses are suggested guidelines. For further information, contact a JWCC advisor.

## Associate in Engineering Science Degree

Students pursuing an associate in engineering science degree (AES) are encouraged to follow the general education sequence model outlined below:

| FIRST SEMESTER |  |  |  |
| :--- | :--- | :--- | ---: |
| CHM | 103 | Princ of Chem I | 4 |
| ENG | 101 | Rhet \& Comp I | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| MAT | 220 | Analytic Geometry/Calc I | 4 |
| PHL | 111 | Logic/Critical Thinking | $\underline{3}$ |
|  |  | 15 |  |
| THIRD SEMESTER |  |  |  |
| CAD | 114 | Intro to Parametric Modeling | 3 |
| ECO | 101 | Princ of Economics I | 3 |
| EGR | 203 | Egr Mechanics: Statics | 3 |
| MAT | 222 | Analytic Geometry/Calc III | 4 |
| PHY | 228 | Princ of Physics II | $\underline{5}$ |
|  |  |  | 18 |


| SECOND SEMESTER |  |  |  |
| :--- | :--- | :--- | :--- |
| CHM | 104 | Princ of Chem II | 4 |
| ENG | 102 | Rhet \& Comp II | 3 |
| MAT | 221 | Analytic Geometry/Calc II | 4 |
| PHY | 227 | Princ of Physics I | $\underline{5}$ |

## FOURTH SEMESTER

CSC 119 Programming I 3
ECO 102 Princ of Economics II 3
EGR 204 Egr Mechanics: Dynamics 3
EGR 221 Elect Circ Analysis I 4
MAT 251 Differential Equations $\quad \frac{3}{16}$

## Associate in Fine Arts Degree (Music Performance)

Students pursuing an associate in fine arts degree (AFA) in music performance are encouraged to follow the general education sequence model outlined below:

| FIRST SEMESTER |  |
| :---: | :---: |
| CSC 100 Computer Literacy | 1 |
| ENG 101 Rhet \& Comp I | 3 |
| FYE 101 Blazing Your Trail | 1 |
| MUS 131 Music Theory/Ear Train I | 4 |
| MUS 151-168 Music Ensemble Act | 1 |
| MUS 170-180 Applied Lessons | 2 |
| MUS 188 Class Piano I | 1 |
| Social/Behavioral Science | 3 |
| THIRD SEMESTER |  |
| CMN 101 Intro to Speech | 3 |
| MUS 151-168 Music Ensemble Act | 1 |
| MUS 213 Music Theory/Ear Train III | 4 |
| MUS 270-280 Applied Lessons | 2 |
| MUS 288 Class Piano III | 1 |
| Physical or Life Science | 3-4 |
|  | 4-15 |

SECOND SEMESTER

| ENG | 102 | Rhet \& Comp II | 3 |
| :--- | :--- | :--- | :--- |
| HUM |  | Gen Ed Requirement | 3 |
| MUS | 121 | Intro to Music Lit | 3 |
| MUS | 132 | Music Theory/Ear Train II | 4 |
| MUS | $151-168$ | Music Ensemble Act | 1 |
| MUS | 170-180 | Applied Lessons | 2 |
| MUS | 189 | Class Piano II | $\underline{1}$ |

## FOURTH SEMESTER

HUM Gen Ed Requirement 3

MAT Gen Ed Requirement 3
MUS 151-168 Music Ensemble Act 1
MUS 214 Music Theory/Ear Train IV 4
MUS 270-280 Applied Lessons 2
MUS 289 Class Piano IV 1
Physical or Life Science _3-4

## Associate in Applied Science Degree

John Wood Community College has prepared a two-year plan of courses leading to the associate in applied science degree (AAS) for each program. The various program plans are listed throughout this section of the catalog. In developing these plans JWCC has assumed that students will attend full time, they will begin in the fall, and the semester they begin at JWCC will be the first semester of their college experience. However, because students progress at different rates, begin at different times, and may transfer existing credits to JWCC, students are required to meet with an academic advisor during their first semester at JWCC and are highly encouraged to meet with an advisor each semester to create a customized course plan to fit their individual needs. Students are encouraged to take their "major" courses in the sequence in which they are listed.

## Accounting

Accounting is the process of collecting, measuring, interpreting, and communicating financial information to enable others to make decisions inside and outside the organization. There are three major fields in accounting. Public accountants have their own businesses or work for independent accounting firms, assisting in the preparation and analysis of financial statements. Management accountants, also called industrial or private accountants, are responsible for the preparation of the financial records of the company. Government accountants prepare and examine the financial statements of government agencies; they also may audit private businesses and individuals whose dealings are subject to government regulations.

Because of the wide range of job opportunities existing in the field of accounting, John Wood offers both transfer and career/technical programs in the accounting program. The accounting certificate program is a highly specialized program which provides sufficient preparation for direct entry into a clerical accounting position. Should a student decide to obtain an associate degree at some future date, this program may be used as a stepping stone to the associate in applied science degree in accounting. The associate in applied science degree in accounting is designed for the student interested in entry-level bookkeeping and paraprofessional accounting work. The associate in arts degree in accounting is designed for students interested in completing the first two years of a four-year degree and/or certified public accountant licensure. For assistance in determining which program is appropriate for you, contact a JWCC advisor.

## Accounting <br> Associate in Arts Degree (Transfer)

## 64 Semester Hours

Students completing the transfer program in accounting at John Wood Community College typically choose to attend a four-year college or university to complete their bachelor's degree in accounting. Some students later choose to pursue advanced degrees and licensure, such as the MBA degree or the CPA license. For more information, contact a JWCC advisor.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take a minimum of 12 credit hours from the list below.
ACC 101 Principles of Accounting I ..... 3 hrs .
ACC 102 Principles of Accounting II ..... 3 hrs .
ACC 200 Managerial Accounting ..... 3 hrs.
ECO 101 Principles of Economics I ..... 3 hrs .
ECO 102 Principles of Economics II ..... 3 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Accounting <br> Associate in Applied Science

## 64 Semester Hours

The AAS in Accounting program is intended to prepare students for immediate entry-level positions in bookkeeping, where employees record and classify incoming transactions, and more advanced positions in public, managerial, and governmental accounting. For more information, contact a JWCC advisor.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED CURRICULUM

FIRST SEMESTER

| ACC | 101 | Prin of Accounting I | 3 |
| :--- | :--- | :--- | :--- |
| CSC | 104 | Spreadsheets-Core Level | 2 |
| CSC | 106 | Intro to Computers | 3 |
| ECO | 101 | Prin of Economics I | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| MAT | 109 | Elementary Statistics | $\underline{3}$ |
|  |  |  | 15 |

## THIRD SEMESTER

| ACC | 114 | Payroll Accounting | 2 |
| :--- | :--- | :--- | :--- |
| ACC | 125 | Computerized Accounting | 3 |
| ACC | 221 | Inter Accounting I | 3 |
| BUS | 101 | Intro to Business | 3 |
| BUS | $199 \quad$ Business Internship OR |  |  |
| BUS | Elective | 3 |  |
| CSC | 107 | Word Processing-Core Level | $\underline{2}$ |

## SECOND SEMESTER

| ACC | 102 | Prin of Accounting II | 3 |
| :--- | :--- | :--- | :--- |
| ACC | 200 | Managerial Accounting | 3 |
| CMN | 101 | Intro to Speech | 3 |
| CSC | 143 | Intro to Desktop Infor Mgmt | 1 |
| ECO | 102 | Prin of Economics II | 3 |
| Written Communication Requirement | $\underline{3}$ |  |  |

## FOURTH SEMESTER

ACC 222 Inter Accounting II 3
ACC 240 Tax Accounting 3

BUS 121 Prin of Org \& Mgmt 3
BUS 161 Business Law 3
CSC 116 Database-Core Level 2
PSY 101 Intro to Psychology $\frac{3}{17}$

## Accounting Certificate

## 29 Semester Hours

The Accounting Certificate is intended for persons seeking immediate employment in a clerical accounting position or wishing to upgrade from an existing position to a higher one. This certificate includes courses that deal directly with the skill areas of accounting, as well as a limited number of general education support courses.
NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED CURRICULUM <br> FIRST SEMESTER

ACC 101 Prin of Accounting I 3
BUS 101 Intro to Business 3
CSC 104 Spreadsheet-Core Level 2
CSC 106 Intro to Computers 3
FYE 101 Blazing Your Trail 1
MAT 109 Elementary Statistics $\frac{3}{15}$

## SECOND SEMESTER

ACC 102 Prin of Accounting II 3
ACC 114 Payroll Accounting 2
ACC 125 Computerized Accounting 3
ACC 200 Managerial Accounting 3
CSC 107 Word Processing-Core Level 2
CSC 143 Intro to Desktop Infor Mgmt $\frac{1}{14}$

## Requirements for the Illinois CPA Exam

Educational requirements for the CPA exam are outlined on the Illinois Board of Examiners web page (www.ilboe.org).
John Wood Community College offers a number of accounting courses that may help a candidate meet the required semester hours of accounting for the CPA examination. These include:
ACC 101 Principles of Accounting I ..... 3 hrs .
ACC 102 Principles of Accounting II ..... 3 hrs .
ACC 200 Managerial Accounting ..... 3 hrs.
ACC 221 Intermediate Accounting I ..... 3 hrs.
ACC 222 Intermediate Accounting II ..... 3 hrs.
ACC 223 Intermediate Accounting III ..... 3 hrs.
ACC 240 Tax Accounting ..... 3 hrs.
ACC 270 Principles of Auditing ..... 3 hrs .
TOTAL ..... 24 HRS.

Additional information may be obtained from the Illinois Board of Examiners web site (www.ilboa.org).

## Agricultural Sciences

Today's agriculture provides promise for a growing and environmentally challenged world. Those involved in agriculture are decision makers who possess extensive knowledge of production technology and marketing effectiveness. United States and world agriculture will become even more competitive. Agricultural products, throughout the food chain, continue to be the foundation for providing a low-cost, safe and wholesome food supply. The balance of trade, in terms of our ability to profitably export to overseas markets, continually encourages expansion for U.S. agriculture. Today's emphasis on expanding uses of renewable fuels from crops, plus a growing livestock industry, will continue to create expanding employment opportunities for individuals interested in agriculture and related occupations.

Careers in agriculture business, plus crop and livestock production, include opportunities in sales, finance, marketing, production, communications, and management. These careers will require more skills and education than ever before. As the economy and society become more of a global community, employment opportunities in agriculture on a world-wide basis will continue to expand.

## Agriculture Emphasis Associate in Science Degree (Transfer)

## 64 Semester Hours

The Agriculture transfer program provides an opportunity for students to complete the first two years of study leading to a baccalaureate degree. The third and fourth years of study will be completed at a four-year college or university to which the student transfers after completion of the program at John Wood Community College.

Area of Concentration Courses
Any student declaring an Area of Concentration must take a minimum of 12 credit hours from the list below.
AGR 150 Agriculture and Consumer Related Occupations .................. 1 hr .
AGR 200 Introduction to Soil Science ................................................... 4 hrs.
AGR 202 Introduction to Animal Science ............................................. 4 hrs.
AGR 203 Agriculture Economics for Consumers ................................ 3 hrs.
AGR 204 Principles of Crop Science .................................................... 4 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Agriculture Business Management Associate in Applied Science

## 64 Semester Hours

Good management is the key to success in modern agribusiness. Employees today need a much higher level of knowledge, skill and management ability than did their predecessors. Scientific, business, and technical skills and knowledge are needed in agronomy, economics, marketing, accounting, livestock management and the use and application of the computer. Each skill is a necessary tool for the successful owner or employee in an agribusiness. Employment opportunities in agribusiness professions are expanding rapidly.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete. General Education courses (up to 10 credit hours) are acceptable, and encouraged, as electives for students intending to transfer their credit hours to a four-year university.

## REQUIRED CURRICULUM



| AGR | 150 | Ag/Consumer Related Occup I | 1 |
| :--- | ---: | :--- | ---: |
| AGR | 202 | Intro to Animal Science | 4 |
| AGR | 204 | Princ of Crop Science | 4 |
| ENG | 101 | Rhet \& Comp I | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| MAT | 100 | Technical Math OR |  |
|  |  | any general education |  |
|  | math course | 3 |  |
| Approved Elective* | $\frac{2}{16-18}$ |  |  |

## SPRING

AGR 175 Computer Appl in Agribus 3
AGR 189 Ag Finance \& Records 3
AGR 200 Intro to Soil Science 4

Approved Elective* 2-4
10-14

## SPRING/SUMMER

AGR 199 Occupational Internship I 4

| SECOND YEAR - FALL |  |  |  |
| :--- | :--- | :--- | ---: |
| AGR | 193 | $\mathrm{Ag} /$ Consumer Rel occup II | 1 |
| AGR | 203 | Ag Econ for Consumers | 3 |
| ENG | 102 | Rhet \& Comp II | 3 |
| HIS | 122 | US History II | 3 |
| Approved Elective* | $\underline{2-4}$ |  |  |

## SPRING/SUMMER

AGR 299 Occupational Internship II 4

## SPRING

| AGR | 171 | Intro to Electricity OR |  |
| :--- | :--- | :--- | ---: |
| AGR | 172 | Intro to Welding OR |  |
| AGR | 173 | Advanced Welding | 2 |
| AGR | 186 | Ag Business Mgmt | 3 |
| AGR | 188 | Ag Sales \& Marketing | 3 |
| CMN | 101 | Intro to Speech | 3 |
| Approved Electives* | $\underline{2-4}$ |  |  |

*Any courses with the AGR or VET prefix are recommended for degree completion.

## Agriculture Applications Certificate

## 28 Semester Hours

The Agriculture Applications certificate is designed to provide a basic, broad based technical knowledge of agriculture and the many hands-on skills desired by individuals employed in the agriculture labor force. Students are able to select their particular area(s) of interest and customize their curriculum based on skillsets in specialty area, such as animal production, crop production, agribusiness, or machinery and facility maintenance skills.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED CURRICULUM

| FALL |  |  |  |
| :--- | :--- | :--- | ---: |
| AGR | 150 | Ag/Consumer Related Occup I | 1 |
| AGR | 202 | Intro to Animal Science OR |  |
| AGR | 204 | Princ of Crop Science | 4 |
| AGR Mechanics Elective** | 2 |  |  |
| FYE 101 | Blazing Your Trail | 1 |  |
| Approved Elective* | $2-4$ |  |  |
| Approved Elective* | $2-4$ |  |  |
| Approved Elective* | $1-4$ |  |  |
|  | $13-18$ |  |  |

## SPRING/SUMMER

AGR 199 Occupational Internship I 4
*Any courses with AGR or VET prefix are recommended for certificate completion. Communication skills and math courses are acceptable and encouraged as electives for students intending to complete the certificate.
**AGR Mechanics Electives: AGR 171-Intro to Electricity, AGR 172-Intro to Welding, AGR 173-Advanced Welding

## Animal Science <br> Associate in Applied Science

64 Semester Hours
The Animal Science Degree is designed to prepare individuals for a career in the world of animal agriculture. The growing area of animal care requires a strong background in the sciences of behavior, genetics, breeding, reproduction, nutrition and health. This degree will provide the student with tools for success in the field of animal sciences.

[^3]
## REQUIRED CURRICULUM

## FIRST YEAR - FALL

AGR 150 Ag/Consumer Related Occup I 1
AGR 161 Animal Eval/Selection I 2
AGR 202 Intro to Animal Science 4
FYE 101 Blazing Your Trail 1
ENG 101 Rhet \& Comp I 3
MAT 100 Technical Math or any general education math course 3
Approved Elective* $\quad 2-3$

## SPRING

AGR 175 Comp Appl in Agribus 3
AGR 189 Ag Finance \& Records 3 Approved Elective* (Choose one 3 or 4 cr. hr. course) 3-4

Approved Elective* $\frac{2-4}{11-14}$

Approved Elective* 2-4
$\overline{13-18}$

## SPRING/SUMMER

AGR 199 Occupational Internship I 4

| SECOND YEAR - FALL |  |  |  |
| :--- | :--- | :--- | ---: |
| AGR | 174 | Artificial Insemination-Swine | 1 |
| AGR | 182 | Applied Pork Prod Skills | 2 |
| AGR | 193 | Ag/Consumer Related Occup I | 1 |
| ENG | 102 | Rhet \& Comp II | 3 |
| HIS | 122 | U.S. History II | 3 |
| Approved Elective* | $\frac{2}{10-12}$ |  |  |

## SPRING/SUMMER

AGR 299 Occupational Internship II 4

## SPRING

AGR 164 Animal Nutrition \& Health 3
AGR 186 Ag Business Mgmt 3
AGR Beef/Swine Mgmt Elective(s)** 2-4
CMN 101 Intro to Speech 3
Approved Elective* $\quad 2$
*Any courses with the AGR or VET prefix are recommended for degree completion.
**AGR Beef/Swine Management Electives (three of the four courses required): AGR 165-Beef Management - Breed to Wean, AGR 166-Beef Management - Wean to Finish, AGR 180-Swine Management - Breeding \& Genetics, AGR 181-Swine Management - Farrow to Market

## Beef Specialist Certificate

## 32 Semester Hours

The Beef Specialist Certificate is designed to provide students with the practical skills and knowledge needed to be successful in the beef industry. Emphasis is placed on technical knowledge and practical hands on training by working with the beef cattle at the University of Illinois Animal Science Beef Research Center, adjacent to the JWCC Agricultural Education Center.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES

## FALL

AGR 150 Ag/Consumer Related Occup I 1
AGR 161 Animal Eval \& Sel I 2
AGR 202 Intro to Animal Science 4
FYE 101 Blazing Your Trail 1
Approved Elective(s)* $\frac{4-6}{12-14}$

## SPRING

| AGR | 164 | Animal Nutrition \& Health | 3 |
| :--- | :--- | :--- | ---: |
| AGR | 165 | Beef Mgmt-Breed to Wean OR |  |
| AGR | 166 | Beef Mgmt-Wean to Finish** | 2 |
| AGR | 167 | Applied Beef Prod Skills | 2 |
| AGR | 175 | Computer App in Agribus | 3 |
| AGR | 186 | Ag Business Mgmt | 3 |
| Approved Elective(s)* | $3-5$ |  |  |

16-18

## SPRING/SUMMER

AGR 199 Occupational Internship I 4
*Approved Electives: AGR 152-Natural Resource Management, AGR 162-Animal Evaluation and Selection II, AGR 169-Artificial Insemination - Cattle, AGR 189-Agricultural Finance \& Records, VET 101-Veterinary Assistant I, VET 102-Veterinary Assistant II
**AGR 165 available during odd years; AGR 166 available during even years

## Swine Specialist <br> Certificate

## 30 Semester Hours

Swine management is a scientific and business-oriented field of animal care and husbandry requiring extensive knowledge of efficient swine production practices. Swine production is becoming a highly specialized field with outstanding career opportunities.
The student in this program will develop swine industry skills and management techniques relative to developing knowledge in all phases of swine production.

Even for those who do not have farm experience but like the idea of working with animals, the JWCC Swine Specialist Certificate provides the student opportunity to gain needed experience to be successful in the swine industry.
This certificate provides guided "real world" knowledge and skill development associated specifically with pork production.
NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES

| FALL |  | SPRING |  |  |  |  |
| :--- | :--- | ---: | :--- | :--- | :--- | ---: |
| AGR | 150 | Ag/Consumer Rel Occup I | 1 | AGR | 164 | Animal Nutrition \& Health |$\quad 3$

## SPRING/SUMMER

AGR 199 Occupational Internship I 4
*Approved Electives: AGR 152-Natural Resource Mgmt, AGR 162-Animal Evaluation \& Selection II, AGR 189-Agribusiness Finance \& Records, VET 101-Veterinary Assistant I, VET 102-Veterinary Assistant II
**AGR Mechanics Electives: AGR 171-Intro to Electricity, AGR 172-Intro to Welding, AGR 173-Advanced Welding
\#AGR 180 available during odd years; AGR 181 available during even years

## Art

Students planning to major in art may choose from two areas of study. Those pursuing a career in art education should follow the associate in arts degree curriculum. Those interested in pursuing professional/commercial art may major in studio art with courses completed for transfer credit into a professional art program or can complete the Graphic Design AAS degree as described on page 101 in the catalog. The program of study at JWCC provides a solid foundation that prepares a student for several opportunities. These areas range from fine arts to applied arts and include Art instruction, Communications, Graphic Design and other areas that require critical thinking, project management skills and an understanding of human nature. Fundamental artistic development includes the development of perception and the knowledge and application of design elements and principles, as well as specific marketable skills including the ability to give and take criticism and direction.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.

ART 100 Drawing I: Fundamentals ...................................................... 3 hrs.
ART 121 Drawing II ............................................................................ 3 hrs.
ART 126 2-D Design and Color .......................................................... 3 hrs.
ART 240 Painting I .............................................................................. 3 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Biological Sciences

Scientists study all aspects of living organisms, emphasizing the relationship of animals and plants to their environment. Many scientists enter the field of research and development, while others teach in college or university settings.

The curriculum for the associate in science degree with an emphasis in the biological sciences is designed to prepare the student with a broad background in biology.
Biology is the scientific study of all living organisms. Students transferring to a fouryear institution may specialize further in any one of the following areas: anatomical sciences, bioengineering, biology, biophysics, botany, ecology, ethology and evolution, genetics and developmental biology, microbiology, physiology or zoology.

## Area of Concentration Courses

Any student declaring an Area of Concentration in Biology must take a minimum of 12 credit hours of Biology/Chemistry/Physics electives.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Business

Skillful management and a customer-oriented approach are critical to the success of a business. Successful managers must understand what customers want, create products or services that meet those needs, and manage the people and processes involved.
The function of a manager is to plan for the future, provide leadership and motivation, organize work to promote efficiency, and operate a system of managerial control. Managers with education in these skill areas frequently start at higher levels in an organization and achieve promotions more rapidly.
Marketing revolves around the customer. Workers involved in marketing assist in identifying opportunities; selecting product or service features; developing pricing, promotion, and distribution strategies; selling the product or service; and following up to be sure the customer is satisfied. Marketers who understand the principles involved in successful marketing are more likely to be successful in the long run.

Managing information is an increasingly important function within businesses. Managers need accurate and timely information to make decisions. It is important that businesses store, organize, manipulate, and retrieve data efficiently and effectively.

## Marketing or Management Emphasis Associate in Arts Degree (Transfer)

## 64 Semester Hours

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.
ACC 101 Principles of Accounting I ..... 3 hrs.
ACC 102 Principles of Accounting II ..... 3 hrs .
ACC 200 Managerial Accounting ..... 3 hrs.
BUS 161 Business Law I ..... 3 hrs.

# Supply Chain Management Emphasis Associate in Arts Degree (Transfer) 

## 64 Semester Hours

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.
ACC 102 Principles of Accounting II ..... 3 hrs .
ACC 200 Managerial Accounting ..... 3 hrs.
BUS 101 Introduction to Business ..... 3 hrs.
MAT 234 Calculus for Social Scientists ..... 4 hrs.

The below courses are suggested program electives. Please work with your advisor to assure that these courses will transfer to the 4-year university of your choice.
ACC 101 Principles of Accounting I ..... 3 hrs.
MAT 113 College Algebra ..... 3 hrs .

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Business: Computer Information Systems Option Associate in Applied Science

## 64 Semester Hours

Computer information systems is concerned with education and training designed to reflect the leading edge of technology while being tempered by the practical demands of the business/industrial world. The CIS graduate will have a basic technical knowledge of computer hardware and software systems and will have an understanding of the information needs, procedures, and delivery systems required in small and medium-sized business organizations.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED CURRICULUM

## FIRST SEMESTER

BUS 101 Intro to Business 3

CSC 106 Intro to Computers 3
CSC 141 Intro to Internet 1
ENG 191 Business Writing 3
FYE 101 Blazing Your Trail 1
MAT Gen Ed Requirement 3
OFT 101 Beg Keyboarding $\underline{16}$

## THIRD SEMESTER

ACC 101 Prin of Accounting I 3

CSC 104 Spreadsheets-Core Level 2
CSC 125 Intro to Desktop Pub 1
CSC 146 Intro to Webpage Design 2
BUS/CSC/OFT Electives 5
General Education Requirement $\quad \frac{3}{16}$

## SECOND SEMESTER

| BUS | 121 | Prin of Org \& Mgmt | 3 |
| :--- | :--- | :--- | ---: |
| CMN | 101 | Intro to Speech I OR |  |
| CMN | 104 | Interpersonal Comm | 3 |
| CSC | 110 | Bus Appl of Micro I | 3 |
| ECO | 101 | Prin of Econ I | 3 |
| BUS/CSC/OFT Electives | $\underline{4}$ |  |  |

## FOURTH SEMESTER

| ACC | 102 | Prin of Accounting II | 3 |
| :--- | :--- | :--- | :--- |
| CSC | 116 | Database-Core Level | 2 |
| CSC | 143 | Intro to Desktop Info Mgmt | 1 |
| CSC | 186 | Desktop Pub with InDesign | 3 |
| CSC | 190 | Portable Document Format | 1 |
| BUS/CSC/OFT Electives | $\underline{6}$ |  |  |

CSC 116 Database-Core Level 2
CSC 143 Intro to Desktop Info Mgmt 1
CSC 186 Desktop Pub with InDesign 3
CSC 190 Portable Document Format 1
BUS/CSC/OFT Electives $\underline{16}$

## Business: Management Option <br> Associate in Applied Science

## 64 Semester Hours

The Management Option is intended for individuals seeking immediate employment into entry and some middle-level management positions in business and industry. The option is also intended for individuals presently employed who are seeking advancement.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES

FIRST SEMESTER

| BUS | 101 | Intro to Business | 3 |
| :--- | :--- | :--- | ---: |
| CSC | 106 | Intro to Computers | 3 |
| ECO | 101 | Prin of Econ I | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| MAT | 109 | Elementary Statistics | 3 |
| Approved Elective(s)* | $\underline{3}$ |  |  |
|  |  | 16 |  |
| THIRD SEMESTER |  |  |  |
| ACC | 102 | Prin of Accounting II | 3 |
| BUS | 121 | Prin of Org \& Mgmt | 3 |
| CSC | 143 | Intro to Desktop Infor Mgmt | 1 |
| PSY | 101 | Intro to Psychology | 3 |
| Written Communication Requirement | 3 |  |  |
| Approved Elective(s)* | 3 |  |  |
|  |  | 16 |  |

## SECOND SEMESTER

$\begin{array}{llll}\text { ACC } & 101 & \text { Prin of Accounting I } & 3\end{array}$
BUS 125 Supervisory Management 3
CSC 104 Spreadsheets-Core Level 2
CSC 107 Word Processing-Core Level 2
ECO 102 Prin of Econ II 3
Approved Elective(s)* $\underline{3}$
16
FOURTH SEMESTER
ACC 200 Managerial Accounting 3
BUS 161 Business Law 3
CMN 101 Intro to Speech I 3
CSC 116 Database-Core Level 2
Approved Elective(s)* $\quad \underline{16}$
*Approved Electives: BUS 110-Entrepreneurship, BUS 122-Principles of Sales I, BUS 131-Principles of Marketing, BUS 141-Principles of Finance, BUS 199-Business Internship, CSC 122-Presentation Software, PSY 145-Human Relations in the Workplace

## Business Management Certificate

## 30 Semester Hours

The Business Management Certificate is intended for persons seeking immediate entry-level employment in the field of management or seeking to upgrade from an existing position to a higher one. The Business Management Certificate includes only those courses that deal directly with the skill areas of management.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES

## FIRST SEMESTER

| BUS | 101 | Intro to Business | 3 |
| :--- | :--- | :--- | :--- |
| CSC | 106 | Intro to Computers | 3 |
| ECO | 102 | Prin of Econ II | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| MAT | 109 | Elementary Statistics | 3 |
| Written Communication Requirement | $\underline{3}$ |  |  |

## SECOND SEMESTER

| ACC | 101 | Prin of Accounting I | 3 |
| :--- | :--- | :--- | :--- |
| BUS | 121 | Prin of Org \& Mgmt | 3 |
| BUS | 125 | Supervisory Management | 3 |
| CSC | 104 | Spreadsheets-Core Level | 2 |
| CSC | 107 | Word Processing-Core Level | 2 |
| CSC | 143 | Intro to Desktop Infor Mgmt | $\frac{1}{14}$ |3

3

## Chemistry

Chemists investigate the properties and composition of matter and the laws that govern the combination of elements. Chemists often specialize in one of the subfields of the vocation, including analytical, organic, inorganic and physical chemistry. The program of study at JWCC provides sufficient courses for the preparation of those students planning to engage in any of the subfields. The courses that are offered in this area are intended to develop an appreciation and understanding of the scientific method of inquiry. Further, the program is designed to give the student basic training for advanced or specialized work. This experience will be enhanced through interactive computer technology in the laboratory.

## Area of Concentration Courses

Any student declaring an Area of Concentration in Chemistry must take a minimum of 12 credit hours of Chemistry/Mathematics/Physics electives.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Communications

Investigations into the theories of communication as related to a variety of contexts, with emphasis on developing skills and techniques to become more competent communicators within personal, public and professional realms. Attention is focused on verbal and nonverbal competencies, information gathering and reporting, and designing and delivering messages that effectively relate to specific purposes and audiences. The program of study is intended to introduce the student to the various principles of communication that lead to more advanced application skills, techniques and practices.

## Area of Concentration Courses

Any student declaring an Area of Concentration in Communications must take the courses prescribed below.

| CMN 101 | Introduction to Speech ................................................... 3 hrs. |
| :---: | :---: |
| CMN 104 | Interpersonal Communication ......................................... 3 hrs. |
| CMN 220 | Mass Media ................................................................. 3 hrs. |
| AND one of the following: |  |
| BUS 131 | Principles of Marketing .................................................. 3 hrs. |
| ENG 191 | Business Communication................................................ 3 hrs. |

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Computer-Aided Design (CAD)

Computer technology has revolutionized the processes used in drafting and design. Processes that were formerly performed by hand can now be done using computers and is referred to as CAD (computer-aided design). The advances in technology in this area allow CAD technicians to generate precise drawings with more efficiency than ever before. CAD technicians are able to harness computer technology to give engineers, architects, manufacturers, and others a different perspective and understanding of the design process. CAD is projected to be a profession with excellent job growth potential in the coming years.

CAD technicians need to be skilled in several areas. First they must understand the principles, techniques, and terminology associated with a traditional drafting and design process. CAD technicians must also be able to understand computer concepts and techniques. Finally, CAD technicians learn to apply drafting principles to a computer based drafting environment.

## Computer-Aided Design Associate in Applied Science

64 Semester Hours
The intention of the AAS -Computer-Aided Design program is to prepare students for immediate employment as CAD technicians. The program is also suited to individuals currently employed in the field of drafting who are seeking training in computer-aided design.
NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES

FIRST SEMESTER

| CAD | 101 | Intro to Dft \& Blueprint <br> Reading for CAD |  |
| :--- | :--- | :--- | :--- |
|  |  | 3 |  |
| CAD | 104 | Intro to CAD | 3 |
| CAD | 114 | Intro to Parametric Modeling | 3 |
| CSC | 106 | Intro to Computers | 3 |
| ENG | 101 | Rhet \& Comp I OR |  |
| ENG | 191 | Business Writing | 3 |
| FYE | 101 | Blazing Your Trail | $\underline{1}$ |

THIRD SEMESTER
CAD 200 CAD Applications II 3
CAD 214 Adv 3D Applications 3
CAD 230 Intro to Manufacturing 3
PSY 145 Human Rel/Workplace 3
Approved Technical Elective* - 3

## SECOND SEMESTER

| CAD | 102 | Drafting Term for CAD | 3 |
| :--- | :--- | :--- | ---: |
| CAD | 106 | CAD Applications I | 3 |
| CAD | 204 | 3D Applications | 3 |
| CMN | 101 | Intro to Speech I OR |  |
| CMN | 104 | Interpersonal Comm | 3 |
| MAT | 109 | Elementary Statistics | 3 |
| MFG | 104 | Quality/Continuous Improv | $\underline{3}$ |
|  |  |  | 18 |

FOURTH SEMESTER
CAD 202 CAD Applications III 3
CAD 231 Tool Design 3
MAT 114 Trigonometry 3
Approved Technical Elective* $\underline{6}$
*Approved Technical Electives: All courses with CAD, ELE, MFG, and WLD prefixes

## Engineering Design-SolidWorks Certificate

## 16 Semester Hours

The Engineering Design-SolidWorks certificate is designed to prepare students for immediate employment as CAD technicians or designers. The program is also suited to individuals currently employed in the field of drafting who are seeking training in computer-aided design. This certificate was also designed to serve as a path into an AAS degree in Computer-Aided Design or Manufacturing Technology.

## REQUIRED COURSES

$\begin{array}{lll}\text { CAD } & 101 & \text { Intro to Dft \& Blueprint } \\ \text { Reading for CAD }\end{array}$
CAD 104 Intro to CAD 3
CAD 114 Intro to Parametric Modeling 3
CAD 204 3D Applications 3
CAD 214 Adv 3D Applications 3
Approved Technical Elective* $\frac{1}{16}$
*Approved Technical Electives: All courses with CAD, ELE, MFG, and WLD prefixes

## Computer Science

Computer systems are an integral part of everyday life. Today these machines bill customers, pay employees, record airline and hotel reservations, and monitor factory production processes. Scientific and engineering research relies on computer systems to solve complex equations as well as to collect, store and sort vast amounts of data.
Workers in computer and related occupations design data processing systems, write instructions and translate data into machine-readable language, and operate computers and peripheral equipment.
Most computer careers require some type of specialized training. Although not a universal requirement, a college degree is increasingly important for systems analysts and programmers, especially for those who work in scientific and technical research operations. In addition to possessing technical knowledge and skills, computer personnel must be able to concentrate on their work and should enjoy working with details. Those who operate equipment must have manual dexterity and some mechanical aptitude. Programmers and systems analysts must be able to think logically and enjoy solving problems.
Because of the wide range of abilities and training needed for computer science careers in West Central Illinois, JWCC offers both transfer and career/technical programs in computer science. The program a student should pursue depends on the student's interests, abilities and extent of education preferred before obtaining a job.

## Computer Science <br> Associate in Arts Degree (Transfer)

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.
CSC 106 Introduction to Computers ..... 3 hrs .
CSC 112 Computer-Based Problem Solving ..... 3 hrs.
CSC 274 Language Survey ..... 3 hrs.
MAT 109 Elementary Statistics ..... 3 hrs .

The below courses are suggested program electives. Please work with your advisor to assure that these courses will transfer to the 4-year university of your choice.
MAT 113 College Algebra ..... 3 hrs.
MAT 114 Trigonometry ..... 3 hrs .
MAT 220 Analytic Geometry and Calculus I ..... 4 hrs.

## General Education AA/AS/AFA Degree

A general suggested model for the AA/AS/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA, AS or AFA degree is 64 .
NOTE: See the Computer Information Systems option listed under Business Programs. Computer Information Systems is concerned with the education and training of persons who will enter the information processing profession. The CIS graduate will have a basic technical knowledge of computer hardware and software systems and will have an understanding of the information needs, procedures, and delivery systems required in business.

## Computer Network Support Certificate

## 17 Semester Hours

The Computer Network Support certificate is intended for persons seeking immediate entry-level employment. The demand for information in the global economy requires consistent and robust network connectivity. Networking professionals provide this everincreasing need. Classes within the program will prepare the student for the widely recognized A+ certification, Linux+ certification, and C++ certification.

## REQUIRED COURSES

CSC 106 Intro to Computers 3
CSC 112 Computer-Based Prob Solving 3
CSC 119 Programming I 3
CSC 136 Linux Operating System 3
CSC 152 Computer Hardware Essentials 3
CSC 163 Fundamentals of Networking $\frac{2}{17}$

## Graphic Design <br> Associate in Applied Science

## 64 Semester Hours

Graphic design can be described as the art of visualizing ideas. Graphic design is a dynamic field that requires a mixture of creativity and technical expertise. It demands fresh thinking, creative problem solving, imaginative vision and a firm grasp of current design trends. This two-year program is an intensive course of study that teaches students to create effective designs that communicate visually in both print and multimedia environments. The combination of technical and general education courses in the program helps students develop skills in critical thinking, creative problem solving, and effective communication.

The primary components of the program include foundation in general education courses, training in basic design and composition, technical training in the highest standard of industry-based software and equipment, understanding of the design process from start to finish, and understanding of the role design plays in the business world.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES

## FIRST SEMESTER

| ART | 100 | Drawing I-Fundamentals | 3 |
| :--- | :--- | :--- | ---: |
| ART | 126 | 2D Design \& Color | 3 |
| CSC | 106 | Intro to Computers | 3 |
| CSC | 141 | Intro to Internet | 1 |
| CSC | 143 | Intro to Desktop Infor Mgmt | 1 |
| ENG | 101 | Rhet \& Comp I | 3 |
| FYE | 101 | Blazing Your Trail | $\underline{1}$ |
|  |  | 15 |  |
| THIRD SEMESTER |  |  |  |
| ART | 137 | Graphic Design II | 3 |
| BUS | 131 | Prin of Marketing | 3 |
| CSC | 146 | Intro to Web Page Design | 2 |
| CSC | 247 | Web Graphics \& Interactivity | 3 |
| CSC | 248 | Computerized Illustration | 3 |
| PSY | 101 | Intro to Psych OR |  |
| SOC | 101 | Intro to Sociology | $\underline{3}$ |
|  |  |  | 17 |

## SECOND SEMESTER

| ART | 136 | Graphic Design I | 3 |
| :--- | :--- | :--- | ---: |
| CMN | 101 | Intro to Speech I OR |  |
| CMN | 104 | Interpersonal Comm | 3 |
| CSC | 186 | Desktop Pub with InDesign | 3 |
| CSC | 190 | Portable Document Format | 1 |
| CSC | 220 | Graphic \& Photo Manip | 3 |
| MAT | 103 | Business Computations I | $\underline{3}$ |
|  |  | 16 |  |
| FOURTH SEMESTER |  |  |  |
| ART | 226 | Graphic Design III | 3 |
| CSC | 246 | Advanced Web Page Design | 3 |
| CSC | 249 | Adv Graphic Applications | 3 |
| ENG | 191 | Business Writing | 3 |
| Approved Electives* | $\underline{4}$ |  |  |

*Approved Electives: All courses with ART, BUS, CSC and OFT prefixes

## Desktop Publishing Certificate

## 27 Semester Hours

This certificate will provide students with skills to create professional documents for a variety of business needs. Students will obtain experience in industry-standard desktop publishing, graphic and photo manipulation, and illustration software. Students will become familiar with a variety of output formats, including print and portable document formats.

## REQUIRED COURSES

FIRST SEMESTER SECOND SEMESTER

| CSC | 106 | Intro to Computers | 3 | BUS | 131 | Prin of Marketing | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CSC | 220 | Graphic/Photo Manipulation | 3 | CSC | 110 | Bus App of Microcomputer | 3 |
| CSC | 248 | Computerized Illustration | 3 | CSC | 186 | Desktop Pub with InDesign | 3 |
| ENG | 101 | Rhet \& Comp I OR |  | CSC | 190 | Portable Document Format | 1 |
| ENG | 191 | Business Writing | 3 | CSC | 249 | Adv Graphic Applications | 3 |
| FYE | 101 | Blazing Your Trail | 1 |  | Approved Elective* | -1 |  |
|  |  |  | 13 |  |  | 14 |  |

*Approved Electives: All courses with ART, BUS, CSC and OFT prefixes

## Web Design <br> Certificate

## 29 Semester Hours

The Web Design Certificate will provide students with skills to create and maintain Web sites. Students will develop a basic understanding of the importance of computers and computer graphics in the Web design process. Students will be exposed to the Web design process from conception to building Web pages, using text and graphics effectively, creating links, and adding animation.

## REQUIRED COURSES <br> FIRST SEMESTER

| CSC | 106 | Intro to Computers | 3 |
| :--- | :--- | :--- | ---: |
| CSC | 141 | Intro to the Internet | 1 |
| CSC | 146 | Intro to Web Page Design | 2 |
| CSC | 220 | Graphic/Photo Manipulation | 3 |
| CSC | 247 | Web Graphics \& Interactivity | 3 |
| CSC | 248 | Computerized Illustration | 3 |
| FYE | 101 | Blazing Your Trail | $\frac{1}{16}$ |

## SECOND SEMESTER

| BUS | 131 | Princ of Marketing | 3 |
| :--- | :--- | :--- | :--- |
| CSC | 246 | Advanced Web Page Design | 3 |
| CSC | 249 | Adv Graphic Applications | 3 |
| ENG | 101 | Rhet \& Comp I OR |  |
| ENG | 191 | Business Writing | 3 |
| Approved Elective* | $\underline{1}$ |  |  |33

*Approved Electives: All courses with ART, BUS, CSC and OFT prefixes

## Developmental Education

Developmental education provides instruction and services to help students develop the basic academic skills necessary to become successful learners. Whether students are recent high school graduates or returning adults, developmental education can provide appropriate preparation for success.
First-time students take an assessment test to determine their skills in reading, writing, and mathematics. This assessment helps the College place students in courses best suited to their skills. Students enrolled in developmental math or writing courses may take them in a classroom section or through open learning.

## Developmental Education Courses

Credit for these courses does not count towards any certificates or degrees.
CMN 080 Understanding Written Communication................................ 3 hrs.
CMN 090 Interpreting Written Communications ................................... 3 hrs.
ENG 005 English for Developmental Education .................................. 3 hrs.
ENG 080 Basic Writing ........................................................................ 3 hrs.
ENG 099 Writing Skills ........................................................................ 3 hrs.
MAT 010 Basic Arithmetic and Prealgebra ........................................... 3 hrs.
MAT 020 Elementary and Intermediate Algebra .................................. 3 hrs.
MAT 095 Special Topics in Developmental Education........variable 1-4 hrs.

## Diesel Technology Certificate

## 35 Semester Hours

The Diesel Technology certificate is designed to offer students practical education and training in the field of diesel power technology. Emphasis is placed on technical knowledge in diagnostics, repair and maintenance of diesel powered transportation equipment. During the program, students will have the opportunity to earn nationally recognized credentials in Manufacturing Skill Standards Council Safety and OSHA. Diesel service technicians repair and maintain diesel engine systems that power trans portation equipment such as heavy equipment, personal vehicles, semi-trucks, farm equipment, buses, and locomotives. After completing the certificate, the graduate has the option of entering the workforce or continuing with the pursuit of an AAS degree.

## REQUIRED COURSES

| DET | 101 | Diesel Technology I | 8 | CMN | 101 | Intro to Speech I | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| ELE | 110 | Introduction to Electricity | 3 | DET | 102 | Diesel Technology II | 8 |
| MAT | 100 | Technical Mathematics | 3 | IMT | 150 | Fluid Power I (Hydraulics) | 3 |
| MFG | 113 | Intro to Mfg/Industrial Safety | 3 | IMT | 155 | Fluid Power II (Pneumatics) | $\underline{2}$ |
| WLD | 180 | Thermal Cutting | $\underline{2}$ |  |  |  | 16 |

## Early Childhood Education Associate in Applied Science

## 65 Semester Hours

The associate in applied science degree in early childhood education is designed to prepare students for employment as child care workers and teachers. The JWCC Early Childhood Education program is an Illinois Gateways Entitled program for Early Childhood Education and for Infants and Toddlers coursework. Through the JWCC program, students can earn credentials to meet statewide standards and improve their opportunities for employment by registering their succesful completion of the required classes in the Gateways Opportunity Network for Levels 2-4, which is administered through INCCRRA (Illinois Network of Child Care Resource and Referral Agencies). Entitlement also facilitates possible Gateways scholarship opportunities and transfer to Illinois four-year colleges.
Students learn the fundamentals of caring for children and organizing age appropriate integrated learning lessons and opportunities. Activities are designed to facilitate learning levels for children from birth-3, toddlers, preschool and school age. Students receive excellent training opportunities through experiential and active involvement with children on campus, in area childcare facilities and in local schools. Early Childhood stu
dents are encouraged to observe and assess children as they develop academically, socially, physically and mentally in their study of the whole child. Creating a warm, safe and nurturing environment which is supported by the family and the community is the goal of this unit of study. Best practices in Early Childhood education are stressed in all classes, education training and events.
Qualified applicants will be admitted into the program and placed into mathematics and English general education classes based upon assessment scores.
A practicum and field service opportunity will be arranged by the faculty advisor which sums up the theories learned in the classroom and provides real life experience working with children at an approved agency, center or school. Before placement in the practicum, students must pass an Illinois State Police background check and receive clearance before admission into public entities working with children. Students will be required to submit a current record of a physical examination, pass a TB test and show proof that they are physically and mentally in a state of good health before they can be considered for being placed in the practicum. As required by the Department of Children and Family Services, safety orientation tests and screenings may also be required before placement in a child focused agency or school.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES

## FIRST SEMESTER

| EDU | 102 | Intro to Early Childhood Educ* | 3 |
| :--- | :--- | :--- | :--- |
| EDU | 124 | Health \& Safety for |  |
|  |  | $\quad$ Young Children* | 3 |
| EDU | 150 | Caring for Infants \& Toddlers* | 3 |
| ENG | 101 | Rhet \& Comp I | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| PSY | 101 | Intro to Psychology | $\underline{3}$ |
|  |  |  | 16 |

## THIRD SEMESTER

| EDU | 215 | Assessment \& Evaluation* | 3 |
| :--- | :--- | :---: | :--- |
| EDU | 230 | Math for Young Children | 3 |
| EDU | 271 |  |  |
| the Community* |  |  |  |

Early Childhood Education Elective
(EDU 160 recommended)**
General Education Elective 3
Mathematics Requirement

## SECOND SEMESTER

| CMN | 101 | Intro to Speech | 3 |
| :--- | :--- | :--- | :--- |
| EDU | 202 | Child Growth \& Development* | 3 |
| EDU | 204 | Intro to Technology | 3 |
| EDU | 210 | Language \& Literature* | 3 |
| EDU | 240 | Science for Young Child | 3 |
| Early Childhood Education Elective |  |  |  |
| (EDU |  | 171 | recommended)** |

## FOURTH SEMESTER

EDU 205 Intro to Special Education* 3
EDU 220 Guidance for Young Child 3
EDU 260 Curriculum for Early Childhood Programs* 3
EDU 298 Early Childhood Practicum* 3
General Education Elective $\underline{3}$
*Gateway credentialed classes
**Early Childhood Education Electives: EDU 160-Art \& the Young Child, EDU 171-Play \& Motor Activities for Young Children, EDU 201-Educational Psychology, EDU 251-Child Care Administration, SOC 221-Social Psychology, SOC 224-Marriage and the Family

## Economics

Associate in Arts Degree (Transfer)

## 64 Semester Hours

Economists are concerned with how to utilize scarce resources such as land, raw materials and human resources to provide goods and services for society. Economists analyze the relationship between the supply of goods and services on the one hand and demand for them on the other. Economists also examine how goods and services are produced, distributed and consumed. Some economists are concerned with
specific fields such as farm, wage, tax, and tariff problems and policies. Others develop theories to explain the causes of employment and unemployment or inflation. Most economists analyze and interpret a wide variety of economic data in the course of their work.

Economists who work in colleges and universities teach the theories, principles, and methods of economics and conduct or direct research; they frequently write and act as consultants. Economists in government collect and analyze data and prepare studies to assess economic conditions and the need for changes in government policy. Economists who work for business firms provide management with information to make decisions on marketing and pricing of company products, the effect of government policies on business and international trade, or the advisability of business.
Students completing the transfer program in economics at John Wood Community College typically choose to attend a four-year college or university to complete their bachelor's degree and possibly pursue advanced degrees. For more information, contact a JWCC advisor.

## Associate in Science Degree (Transfer) Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.

BUS 161 Business Law I ....................................................................... 3 hrs.
ECO 101 Principles of Economics I .................................................... 3 hrs.
ECO 102 Principles of Economics II ..................................................... 3 hrs.
MAT 109 Elementary Statistics ............................................................ 3 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Education

Students planning to major in education should follow the associate in arts degree curriculum. This prepares the student to attain proficiency in several areas within the profession of education, including: elementary, middle school, secondary, and special education. The program provides a general orientation and introduction to areas including: child growth and development, foundations of education, integrating education technology, psychology, working with families and the community, and an introduction into the multifaceted world of teaching and promoting life-long learning. Observation in actual learning environments and schools is encouraged and promoted as a learning opportunity. Students interested in a career in education should consult with an advisor to develop their program of study.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.
EDU 100 Introduction to Education ..... 3 hrs.
EDU 201 Educational Psychology ..... 3 hrs.
EDU 205 Introduction to Special Education ..... 3 hrs.
EDU 290 Clinical Experience in Education ..... 1 hr .

The below courses are suggested program electives. Please work with your advisor to assure that these courses or alternative options will transfer to the 4 -year university of your choice.


## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Electrical Technology

Employment opportunities in the electrical fields continue to expand. Recent data projects significant increases in local vacancies through the creation of new jobs and the availability of replacement positions.

Employers in the JWCC service region have needs for electricians who possess a variety of electrical skills. These include skills in the use and care of measuring tools, the identification and use of materials of the trade, the analysis of $\mathrm{AC} / \mathrm{DC}$ circuits, blueprint reading, the application of codes and specifications, safety and the safe operation of equipment, residential wiring, wiring of 3-phase and high voltage circuits, and the programming and repair of programmable logic controllers. The electrical technology program addresses these skills and prepares students for such jobs as electrical and electronic technicians, electrical installers and repairers, and electricians.

## Electrical Technology <br> Associate in Applied Science

## 64 Semester Hours

The AAS in Electrical Technology prepares graduates to enter the job market as either residential, commercial, or industrial electricians. Employment opportunities are not limited to a particular type of business or industry as most all companies require electrical service maintenance. The program is extensively hands-on and provides opportunities for work-based training.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED CURRICULUM

## FIRST SEMESTER

| CSC | 100 | Computer Literacy | 1 |
| :--- | :--- | :--- | ---: |
| ELE | 100 | Survey of Electrical Trade | 2 |
| ELE | 110 | Intro to Electicity | 3 |
| ELE | 120 | Intro to National Elec Code | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| IMT | 120 | Industrial Motors \& Controls | 3 |
| Mathematics | Requirement | $\underline{3}$ |  |

## THIRD SEMESTER

CAD 230 Intro to Mfg Processes 3
ELE 135 Programmable Control 3
ELE 205 Commercial Electricity 3
ELE 220 Electrical Applications II 3
Oral Communication Requirement $\underline{3}$

## SECOND SEMESTER

| ELE | 101 | Blueprint Rdg for Electricians | 3 |
| :--- | :--- | :--- | ---: |
| ELE | 125 | Electrical Applications I | 3 |
| ELE | 130 | Residential Electricity | 3 |
| MFG | 113 | Intro to Manu/Indu Safety | 3 |
| Hum/Soc/Behav Science Requirement | 3 |  |  |
| Written Communication Requirement | $\underline{3}$ |  |  |
|  |  |  |  |
|  |  |  |  |
| FOURTH SEMESTER |  |  |  |
| ELE | 225 | Industrial Electricity |  |
| ELE | 230 | Specialized Electrical Circuits | 3 |
| ELE | 235 | Electrical Systems Analysis | 3 |
| MFG | 104 | Quality/Continuous Improv | 3 |
| General Education Requirement | $\underline{3}$ |  |  |

## Electrician <br> Certificate

## 30 Semester Hours

The Electrician Certificate program is designed for students who are interested in acquiring basic skills for immediate entry into the job market. Because of the scheduling of courses, it is possible for students to maintain employment while attending classes. Classes are also paced to allow the student to make a smooth transition into college-level study. The successful certificate graduate has the option of entering the workplace or continuing with the pursuit of the AAS degree in electrical technology.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

| REQUIRED COURSES |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRST SEMESTER |  |  |  | SECOND SEMESTER |  |  |  |
| ELE | 100 | Survey of Electrical Trade | 2 | ELE | 125 | Electrical Applications I | 3 |
| ELE | 110 | Intro to Electricity | 3 | ELE | 130 | Residential Electricity | 3 |
| ELE | 120 | Intro to National Elec Code | 3 | MFG | 113 | Intro to Manu/Indu Safety | 3 |
| FYE | 101 | Blazing Your Trail | 1 | Writte | Con | munication Requirement | 3 |
| IMT | 120 | Industrial Motors \& Controls | 3 | Electi |  |  | 3 |
| Any | neral | ducation MAT class | $\underline{3}$ |  |  |  | 15 |

## Emergency Medical Technician (See Paramedicine)

## Engineering

Associate in Engineering Science

## 65 Semester Hours

The Associate in Engineering Science (AES) degree provides students with the first two years of study toward a baccalaureate degree in engineering for transfer to a fouryear college or university. As part of the AES degree, students take fundamental courses common to most engineering disciplines and continue their studies in specialized areas (mechanical/civil or electrical) after transferring. To complete the AES in two years, the calculus sequence (starting with MAT 220) should begin in the first semester. Students should be aware that the AES may take more than two years to complete if they find themselves unprepared for MAT 220. AES students may need to complete their general education requirements after transferring to a four-year college or university.

Transfer admission is competitive. Completion does not guarantee admission to a baccalaureate program or to upper division or specialty engineering courses. In some colleges and universities, a baccalaureate degree may also require competency in a foreign language.

## Required General Education Courses

CHM 103 Principles of Chemistry I ...................................................... 4 hrs.
CHM 104 Principles of Chemistry II .................................................... 4 hrs.
ECO 101 Principles of Economics I .................................................... 3 hrs.
ECO 102 Principles of Economics II .................................................... 3 hrs.
ENG 101 Rhetoric \& Composition I .................................................... 3 hrs.
ENG 102 Rhetoric \& Composition II.................................................... 3 hrs.
FYE 101 Blazing Your Trail ..... 1 hr .
MAT 220 Analytic Geometry \& Calculus I ..... 4 hrs.
MAT 221 Analytic Geometry \& Calculus II ..... 4 hrs.
MAT 222 Analytic Geometry \& Calculus III ..... 4 hrs.
PHL 111 Intro to Logic/Critical Thinking ..... 3 hrs.
Required Major Courses
CAD 114 Introduction to Parametric Modeling ..... 3 hrs.
CSC 119 Programming I ..... 3 hrs.
EGR 203 Engineering Mechanics: Statics ..... 3 hrs .
EGR 204 Engineering Mechanics: Dynamics ..... 3 hrs .
EGR 221 Electronic Circuit Analysis I ..... 4 hrs.
MAT 251 Differential Equations ..... 3 hrs.
PHY 227 Principles of Physics I ..... 5 hrs .
PHY 228 Principles of Physics II ..... 5 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## English

A program of study in English prepares the student for a liberal arts major, entrance into the teaching profession, or a career in business, advertising, journalism, or public service where the ability to write effectively is important. The JWCC program is also designed to increase skills in written composition, offer specialized work for English majors, and provide study in literature and the English language as a part of the preparation for vocations.

## Area of Concentration Courses

Any student declaring an Area of Concentration in English must take a minimum of 12 credit hours of English/Literature electives, including at least 6 credit hours at the 200-level. ENG 101 and ENG 102 cannot be used for the Area of Concentration in English.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AES is 65 .

## Fine Arts

## Associate in Fine Arts (Music Performance)

Students planning to transfer as juniors to a four-year institution with a major in music performance are encouraged to complete the Associate in Fine Arts (AFA) degree. Students should meet with a music faculty advisor to plan their schedules. The degrees are designed to provide students a smooth transition to a four-year baccalaureate music degree program. AFA students may need to complete their general education requirements after transferring to a four-year college or university.

Transfer admission is competitive. Completion does not guarantee admission to a baccalaureate program or to upper division or specialty music courses. Students may be required to demonstrate skill level through audition and/or placement exams at the transfer institution. In some colleges and universities, a baccalaureate degree may also require competency in a foreign language. Students are required to complete the general education core courses and the required core music courses listed below.
Required Core Music Courses
MUS 121 Introduction to Music Literature ..... 3 hrs .
MUS 131 Music Theory and Ear Training I ..... 4 hrs.
MUS 132 Music Theory and Ear Training II ..... 4 hrs.
MUS 231 Music Theory and Ear Training III. ..... 4 hrs.
MUS 232 Music Theory and Ear Training IV ..... 4 hrs.
MUS 188 Class Piano Level I ..... 1 hr .
MUS 189 Class Piano Level II ..... 1 hr .
MUS 288 Class Piano Level III ..... 1 hr .
MUS 289 Class Piano Level IV ..... 1 hr .
MUS 170-181 Applied Music Lessons ..... 4 hrs.
MUS 270-281 Applied Music Lessons ..... 4 hrs.
MUS 151-168 Music Ensemble Activities ..... 4 hrs.
General Education AA/AS/AES/AFA DegreeA general suggested model for the AA/AS/AES/AFA degree for a full-time student isavailable on page 79. The minimum total number of credit hours required for the AFAis 65 .

## Fire Science

## Associate in Applied Science

## 64 Semester Hours

The AAS in Fire Science is intended to prepare students for entry-level employment in the fire service field. Students are trained in fire suppression, prevention, and protection techniques. Students are also prepared to react correctly to emergency situations. The Fire Science degree is also intended for individuals currently employed in the fire service field who are seeking additional training. Students already certified as Firefighter II will have courses FSC 132, 134, and 136 waived.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES

## FIRST SEMESTER

EMS 150 Emergency Med Tech* 6
FSC 132 Basic Firefighter-Module A 3
FSC 174 Hazardous Materials Oper 3
FYE 101 Blazing Your Trail 1
Written Communication Requirement $\quad \frac{3}{16}$

## SECOND SEMESTER

CSC 100 Computer Literacy 1
FSC 134 Basic Firefighter-Module B 3
FSC 270 Fire Fighting Tactics \& Strat I 3
Hum/Soc/Behav Science Requirement 3
Mathematics Requirement 3
Electives $\underline{12}$

## THIRD SEMESTER

| CMN | 101 | Intro to Speech I OR |  |
| :--- | :--- | :--- | :--- |
| CMN | 104 | Interpersonal Comm | 3 |

FSC 136 Basic Firefighter-Module C 3
FSC Electives 6
Electives

FOURTH SEMESTER
FSC 180 Fire Service \& the Law 3
FSC Electives 3
General Education Requirement 3
Electives
Technical Rescue Requirement
3
$\overline{15}$
*EMS 150 is taught by Blessing Hospital. Students will be responsible for enrolling in the course according to Blessing's schedule.

## Graphic Design (See Computer Science)

## Health, Physical Education \& Recreation Associate in Science Degree (Transfer)

Students planning to major in health, physical education and recreation should follow the associate in science degree curriculum. The curriculum prepares the student to attain proficiency in several areas, including the history, philosophy, and general principles of the profession. In addition, a student may acquire expertise in educational application and training and specific knowledge in a variety of sport areas. Various aspects of the coaching career such as motivation, strategy development, public relations and community relationships, are also explored.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take the courses listed below.

$$
\begin{array}{llll}
\text { BIO } & 275 & \text { Human Anatomy and Physiology I ...................................... } 4 \text { hrs. } \\
\text { BIO } & 276 & \text { Human Anatomy and Physiology II .................................................................. } 2 \mathrm{hrs} \\
\text { hrs. } \\
\text { HPR } & 100 & \text { Lifetime Fitness and Wellness ...................................................................... } 3 \text { hrs. } \\
\text { HPR } & 101 & \begin{array}{l}
\text { History \& Principles of Health, Physical Education } \\
\end{array} & \\
\text { \& Recreation ............................... }
\end{array}
$$

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## History

History is the record of past events, institutions, ideas, and people. Historians describe and analyze the past through recreating, writing, teaching, and research. They relate their knowledge of the past to current events in an effort to explain and understand the present. Program offerings are designed to give students an understanding of the development of civilization; an appreciation of its varied social, economic, political, and cultural components and their interaction; and a basic familiarity with historical methods and reasoning.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take 12 credit hours from two of the following three areas:
HIS 101 Western Civilization I ..... 3 hrs.
HIS 102 Western Civilization II ..... 3 hrs .
OR
HIS 111 World History I ..... 3 hrs .
HIS 112 World History II ..... 3 hrs .
OR
HIS 121 U.S. History I ..... 3 hrs .
HIS 122 U.S. History II or HiS 222 U.S. History Since 1945 ..... 3 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Industrial Maintenance Technology <br> Associate in Applied Science

## 64 Semester Hours

The Industrial Maintenance Technology AAS degree prepares students to service and repair industrial electrical and electronic machines and systems. Students will work with a wide variety of modern industrial machines and controls, learning to install and maintain this type of equipment. Students are prepared to work in various manufacturing and industrial facilities with modern electrical and electronic systems.

## REQUIRED COURSES

## FIRST SEMESTER

| ELE | 110 | Introduction to Electricity | 3 |
| :--- | :--- | :--- | :--- |
| ELE | 135 | Programmable Controls | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| IMT | 110 | Industrial Wiring | 2 |
| IMT | 120 | Industrial Motors \& Controls | 3 |
| MAT | 100 | Technical Mathematics | 3 |
| MFG | 113 | Intro to Mfg/Industrial Safety | $\frac{3}{18}$ |

THIRD SEMESTER
CMN 101 Introduction to Speech
ENG 101 Rhet \& Comp I 3
IMT 290 Rigging 2

WLD 125 Stick Welding OR
WLD 180 Thermal Cutting 2-3
Hum/Soc/Behav Science Requirement 3
Approved Technical Electives* 3 16-17

## SECOND SEMESTER

| IMT | 140 | Pumps/Piping | 2 |
| :--- | :--- | :--- | :--- |
| IMT | 150 | Fluid I (Hydraulics) | 3 |
| IMT | 155 | Fluid II (Pneumatics) | 2 |
| IMT | 200 | Mechanical Systems | 3 |
| MFG | 104 | Quality/Cont Improvement | 3 |
| General Education Requirement | $\underline{3}$ |  |  |

## FOURTH SEMESTER

ELE 230 Specialized Electrical Circuits OR
IMT 199 Ind Maint Tech Internship 3
IMT 235 Mechatronics 4
MFG 135 Precision Machining I 3
MFG 235 Precision Machining II $\frac{3}{13}$

## Industrial Technician - Electrical Certificate

## 17 Semester Hours

The Industrial Technician-Electrical certificate is designed to prepare students to support manufacturing facilities or large industrial complexes. Industrial Maintenance Electrical Technicians are asked to accomplish a variety of electrical tasks depending on the day-to-day needs of their employer. A person interested in pursuing education and employment in this area should have high electrical aptitude and the ability to troubleshoot complex systems. During the program, students will be eligible to take the nationally recognized Manufacturing Skill Standards Council Safety assessment which is part of the Certified Production Technician (MSSC-CPT) credentials. The graduate has the option to continue their education by pursuing the AAS degree in Industrial Maintenance Technology or entering the workplace with the option to return to pursue the AAS degree at a later date.

## REQUIRED COURSES

| ELE | 110 | Introduction to Electricity | 3 |
| :--- | :--- | :--- | :--- |
| ELE | 135 | Programmable Controls | 3 |
| IMT | 110 | Industrial Wiring | 2 |
| IMT | 120 | Industrial Motors \& Controls | 3 |
| MAT | 100 | Technical Mathematics | 3 |
| MFG | 113 | Intro to Manu/Ind Safety | $\frac{3}{17}$ |

## Industrial Technician - Mechanical Certificate

## 16 Semester Hours

The Industrial Technician-Mechanical certificate is designed to prepare students to support manufacturing facilities or large industrial complexes. Industrial Maintenance Mechanical Technicians are asked to accomplish a variety of mechanical and installation tasks depending on the day-to-day needs of their employer. Students will work with a wide variety of modern industrial machines and controls, learning to install and maintain this type of equipment. A person interested in pursuing education and employment in this area should have high mechanical aptitude and the ability to troubleshoot complex systems. During the program, students will be eligible to take the nationally recognized Manufacturing Skill Standards Council Safety assessment which is part of the Certified Production Technician (MSSC-CPT) credentials. The graduate has the option to continue their education by pursuing the AAS degree in Industrial Maintenance Technology or entering the workplace with the option to return to pursue the AAS degree at a later date.

## REQUIRED COURSES

| IMT | 140 | Pumps/Piping | 2 |
| :--- | :--- | :--- | :--- |
| IMT | 150 | Fluid I (Hydraulics) | 3 |
| IMT | 155 | Fluid II (Pneumatics) | 2 |
| IMT | 200 | Mechanical Systems | 3 |
| MAT | 100 | Technical Mathematics | 3 |
| MFG | 113 | Intro to Manu/Indu Safety | $\underline{3}$ |

## Information Management (See Business)

## Law Enforcement

JWCC offers both transfer and non-transfer programs in law enforcement. The trans-fer-level associate in science or associate in arts degree program is intended for students who are interested in pursuing a four-year degree in law enforcement or criminal justice at another college or university upon graduation from JWCC. The non-transfer AAS Degree in Law Enforcement is intended to prepare students for immediate entry-level employment in the field of law enforcement. The program is also suitable for adults currently working in the field of law enforcement who are seeking additional education to further their careers. For more information on the transfer degree or AAS in Law Enforcement, contact a JWCC advisor.

## Law Enforcement <br> Associate in Arts (Transfer)

## 64 Semester Hours

Students completing the transfer program in law enforcement at John Wood Community College typically choose to attend a four-year college or university to complete their bachelor's degree in law enforcement. For more information on this program, contact a JWCC advisor.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.

| LEN 101 | Law Enforcement I - Overview ....................................... 3 hrs. |
| :---: | :---: |
| LEN 111 | Juvenile Justice............................................................. 3 hrs. |
| LEN 150 | Scientific Criminal Investigation ..................................... 3 hrs. |
| LEN 212 | Criminal Law ................................................................ 3 hrs. |

## General Education AA/AS/AFA Degree

A general suggested model for the AA/AS/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Law Enforcement <br> Associate in Applied Science

## 64 Semester Hours

The AAS in Law Enforcement is intended for students seeking immediate employment in the field of law enforcement and for individuals working in the field who are seeking additional training for career and skill advancement purposes.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

| REQUIRED COURSES |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIRST SEMESTER |  |  |  | SECOND SEMESTER |  |  |  |
| ENG | 101 | Rhet \& Comp I | 3 | CMN | 101 | Intro to Speech I OR |  |
| FSC | 174 | Hazardous Materials Oper+ | 3 | CMN | 104 | Interpersonal Comm | 3 |
| FYE | 101 | Blazing Your Trail | 1 | LEN | 150 | Sci Criminal Investigation | 3 |
| LEN | 101 | Law Enforcement I- |  | LEN | 212 | Criminal Law | 3 |
|  |  | Overview | 3 | LEN | 260 | Criminal Justice Seminar I | 3 |
| LEN | 111 | Juvenile Justice | 3 | SOC | 101 | Intro to Sociology | 3 |
| PSY | 101 | Intro to Psychology | 3 |  |  |  | 15 |


| THIRD SEMESTER |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CSC |  | Elective | 3 | FOURTH SEMESTER |  |  |
| CSC | 282 | Essentials for the |  |  |  |  |
| EMS | 150 | Emergency Med Tech* | 6 |  |  | First Responder |$\quad 3$

+LEN 240-Domestic Violence Investigation is an appropriate substitute
*EMS 150 is taught by Blessing Hospital. Students will be responsible for enrolling in the course according to Blessing's schedule.

## Liberal Arts, Humanities, Philosophy and Religion

JWCC offers concentration of study in liberal arts, humanities, philosophy, and religion. These areas seek to preserve, explore, and transmit to students those values and products of our cultural heritage that seem necessary and highly desirable to a cultivated person in a civilized society. This curriculum also develops skills necessary for the attainment of these values. Students who have an interest in subjects in the arts and science areas, but who have not chosen a specific subject in which to major, will find this curriculum to be valuable.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.
HUM 101 Introduction to Humanities ..... 3 hrs .
PHL 101 Introduction to Philosophy ..... 3 hrs.
PHL 201 Major World Religions ..... 3 hrs.
Humanities or Fine Arts General Education Elective ..... 3 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Logistics and Operations Management Associate in Applied Science

## 64 Semester Hours

The AAS in Logistics and Operations Management degree prepares graduates with the practical skills and knowledge for success in supervisory- and management-level positions within the logistics and warehousing industry. Emphasis is placed on technical knowledge in logistic/warehousing, supply chain management, quality control and continuous improvement methods. During the program, students will take the nationally recognized Manufacturing Skill Standards Council Certified Logistic Technician (MSSC-CLT) exams.

## REQUIRED COURSES FIRST SEMESTER

| BUS | 101 | Intro to Business | 3 | BUS | 125 | Supervisory Management | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CSC | 107 | Word Processing-Core Level | 2 | CSC | 104 | Spreadsheets-Core Level | 2 |
| FYE | 101 | Blazing Your Trail | 1 | ENG | 101 | Rhet \& Comp I OR |  |
| LOM | 100 | Intro to Logistics Mgmt | 3 | ENG | 191 | Business Communication | 3 |
| LOM | 102 | Supply Chain Mgmt | 3 | LOM | 101 | Transportation | 3 |
| PSY | 101 | Intro to Psych OR |  | LOM | 104 | Intro to Warehouse Mgmt | 3 |
| PSY | 145 | Human Rel/Workplace | $\underline{3}$ | MAT | 109 | Elementary Statistics | $\underline{3}$ |
|  |  |  | 15 |  |  |  | 17 |

## THIRD SEMESTER

| ACC | 101 | Prin of Accounting I | 3 |
| :--- | :--- | :--- | ---: |
| BUS | 131 | Prin of Marketing | 3 |
| LOM | 180 | Project Mgmt | 3 |
| LOM | 202 | Applied Supply Chain Mgmt | 3 |
| Approved Technical Elective* | $\underline{5}$ |  |  |
|  |  | 17 |  |

FOURTH SEMESTER

| BUS | 121 | Prin of Org \& Mgmt | 3 |
| :--- | :--- | :--- | :--- |
| BUS | 161 | Business Law | 3 |
| CMN | 101 | Intro to Speech OR |  |
| CMN | 104 | Interpersonal Comm | 3 |
| LOM | 199 | Logistics Internship OR |  |
| Approved Technical Elective* | 3 |  |  |
| General Education Elective | $\underline{3}$ |  |  |

*TRK 150 , TRK 180 or any course with one of the following prefixes: BUS, CSC, ECO, LOM or OFT.

## Logistics <br> Certificate

## 32 Semester Hours

The Logistics Certificate is designed to provide students with the practical skills and knowledge of success for positions within the logistic and warehousing industry. This certificate is also valuable for those individuals seeking an upgrade to their current skills or advancement into a supervisory role. Emphasis is placed on technical knowledge in logistic/warehousing, supply chain management, quality control and continuous improvement methods. Students will also receive knowledge and skills related to interpersonal relationship and supervisory skills. During the program, students will take the nationally recognized Manufacturing Skill Standards Council Certified Logistic Technician (MSSC-CLT) exams. Upon completion of the certificate, the graduate has the option of entering the workplace or continuing with the pursuit of an AAS degree in Logistics and Operations Management.

## REQUIRED COURSES

## FIRST SEMESTER

| BUS | 101 | Intro to Business | 3 | BUS | 125 | Supervisory Management | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CSC | 107 | Word Processing-Core Level | 2 | CSC | 104 | Spreadsheets-Core Level | 2 |
| FYE | 101 | Blazing Your Trail | 1 | ENG | 101 | Rhet \& Comp I OR |  |
| LOM | 100 | Intro to Logistics Mgmt | 3 | LOM | 191 | Business Communication | 3 |
| LOM | 102 | Supply Chain Mgmt | 3 | LOM | 101 | Transportation | 3 |
| PSY | 101 | Intro to Psych |  | LOM | 104 | Intro to Warehouse Mgmt | 3 |
| PSY | 145 | Human Rel/Workplace | $\underline{3}$ | MAT | 109 | Elementary Statistics | $\frac{3}{17}$ |

Note: A Truck Driver Training Certificate that offers students the opportunity to attain a stackable college credential toward the AAS degree in Logistics and Operations Management is also available. See page $\mathbf{1 2 4}$ for details.

## Manufacturing Technology Associate in Applied Science

## 64 Semester Hours

The Manufacturing Technology AAS degree is designed to prepare students for the modern manufacturing environment. This program will prepare students for employment with companies that have implemented team-oriented production as well as quality and maintenance systems within the manufacturing environment. American manufacturers are increasingly using high-tech equipment that involves multiple integrated systems. It is critical that these companies be able to recruit and employ individuals who know how to operate, troubleshoot and maintain this high-tech equipment. For this program, students will take a series of required courses and then select two specialized programs of study to complete their degree.

## Required Core Courses

| CAD | 230 | Intro to Mfg Processes | 3 |
| :--- | :--- | :--- | :--- |
| FYE | 101 | Blazing Your Trail | 1 |
| MAT | 100 | Technical Math | 3 |
| MFG | 103 | Intro to Manufacturing Maint | 2 |
| MFG | 104 | Quality/Continuous Improv | 3 |
| MFG | 113 | Intro to Mfg/Industrial Safety | $\frac{3}{15}$ |

## Required General Education Courses

Humanities/Fine Arts Requirement 3
Oral Communication Requirement 3
Social/Behav Sciences Requirement 3
Written Communication Requirement $\quad \frac{3}{12}$
Complete Courses from 2 of the Specialized Areas Below:

| Diesel | Technology |  |  |
| :--- | :--- | :--- | ---: |
| DET | 101 | Diesel Technology | 8 |
| DET | 102 | Diesel Technology | 8 |
| ELE | 110 | Introduction to Electricity | 3 |
| IMT | 150 | Fluid Power I (Hydraulics) | 3 |
| IMT | 155 | Fluid Power II (Pneumatics) | 2 |
| WLD | 180 | Thermal Cutting | $\underline{2}$ |
|  |  |  |  |
|  |  |  |  |
| Industrial Maintenance |  |  |  |
| ELE | 110 | Intro to Electricity |  |
| ELE | 135 | Programmable Controls | 3 |
| IMT | 110 | Industrial Wiring | 3 |
| IMT | 120 | Industrial Motors \& Controls | 3 |
| IMT | 140 | Pumps/Piping | 2 |
| IMT | 150 | Fluid I (Hydraulics) | 3 |
| IMT | 155 | Fluid II (Pneumatics) | 2 |
| IMT | 200 | Mechanical Systems | $\underline{3}$ |
|  |  |  | 21 |
| Welding |  | 1 |  |
| WLD | 122 | Flux Core Inner Shield | 1 |
| WLD | 123 | Flux Core Dual Shield | 1 |
| WLD | 124 | Welding Spray Transfer | 1 |
| WLD | 125 | Stick Welding I | 3 |
| WLD | 161 | Interpreting Welding Prints | 3 |
| WLD | 180 | Thermal Cutting | $-\frac{2}{11}$ |

Engineering Design-SolidWorks
CAD 101 Intro to Dft \& Blueprint

Reading for CAD

ELE 135 Programmable Controls 3
CAD 104 Intro to CAD 3
CAD 114 Intro to Parametric Modeling 3
CAD 204 3D Applications 3
CAD 214 Adv 3D Applications 3
Precision Machining
$\begin{array}{lll}\text { CAD } & 101 & \begin{array}{c}\text { Intro to Dft \& Blueprint } \\ \text { Reading for CAD }\end{array}\end{array}$
MFG 106 CNC Turning 3
MFG 111 CNC Milling 4
MFG 135 Precision Machining I 3
MFG 235 Precision Machining II 3
MFG 250 Metallurgy $\underline{3}$

NOTE:

- After completing the required core courses, the required general education courses, and courses from two of the specialized areas above, if the minimum of 64 credit hours has not been met, a student must take additional approved technical electives to reach the 64 credit hour minimum requirement.
- Approved technical electives consist of all courses with one of the following prefixes: DET, ELE, MFG, CAD, LOM or WLD.
- While working towards the Manufacturing Technology AAS degree, a student has the opportunity to earn multiple program certificates along the way.


## Certified Production Technician Certificate

## 16 Semester Hours

The purpose of the Certified Production Technician (CPT) program is to recognize through the certification, individuals who demonstrate mastery of the core competencies of manufacturing production through successful completion of the Manufacturing Skill Standards Council (MSSC) certification assessments. The goal of
the CPT certification program is to train entry-level production workers and/or raise the level of performance of current production workers. Certified employees provide their employers the skills and knowledge to increase the company's productivity and competitiveness. At the conclusion of the MSSC modules, the student will qualify to sit for the MSSC certified assessment exam. The exam must be taken at a MSSC testing site.

## REQUIRED COURSES

| CAD | 230 | Intro to the Mfg Processes | 3 |
| :--- | :--- | :--- | :--- |
| MAT | 100 | Technical Math | 3 |
| MFG | 103 | Intro to Manufacturing Maint | 2 |
| MFG | 104 | Quality/Continuous Improv | 3 |
| MFG | 113 | Intro to Manu \& Ind Safety | 3 |
| Approved Technical Elective* | $\underline{2}$ |  |  |

*Approved Technical Electives: All courses with CAD, ELE, IMT, LOM, and MFG prefixes

## Precision Machining (CNC) Machinist Certificate

## 34 Semester Hours

The Precision Machining Machinist certificate builds on the Certified Production Technician credential by adding an additional semester of coursework that trains students to be a Computer Numerical Control (CNC) Machinist. CNC machinists qualify for advanced entry-level jobs in the field of precision machining or people who interact with computer numerical controlled machines that are used in manufacturing. Students have the opportunity to earn nationally recognized credentials from the National Institute of Metalworking Skills (NIMS).

## REQUIRED COURSES

| CAD | 101 | Intro to Dft \& Blueprint <br> Reading for CAD | 3 |
| :--- | :--- | :--- | ---: |
| CAD | 230 | Intro to Mfg Processes | 3 |
| FYE | 101 | Blazing Your Trail | 1 |
| MAT | 100 | Technical Math | 3 |
| MFG | 103 | Intro to Manufacturing Maint | 2 |
| MFG | 104 | Quality/Continuous Improv | 3 |
| MFG | 113 | Intro to Manu/Indu Safety | $\underline{3}$ |
|  |  |  | 18 |

## SECOND SEMESTER

| MFG | 106 | CNC Turning | 3 |
| :--- | :--- | :--- | :--- |
| MFG | 111 | CNC Milling | 4 |
| MFG | 135 | Precision Machining I | 3 |
| MFG | 235 | Precision Machining II | 3 |
| MFG | 250 | Physical Metallurgy | $\underline{3}$ |

## Mathematics

Mathematicians today are engaged in a wide variety of activities ranging from the creation of new theories to the translation of scientific and managerial problems into mathematical terms. Generally, there are two broad classes of mathematical work: pure mathematics and applied mathematics. The pure mathematicians advance science by developing new principles and new relationships existing between principles of mathematics. Mathematicians in applied work use mathematics to develop theories, techniques and approaches to solve problems in natural and social science.
The JWCC program of study satisfies the demands and competence of both of these areas by providing the student with a comprehensive course selection. In addition, this curriculum provides the background needed to pursue training in the high technology fields of computer science and engineering. A mathematics major, combined with another major, can open career opportunities in business and industry or areas within education.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.
MAT 220 Analytic Geometry and Calculus I ..... 4 hrs.
MAT 221 Analytic Geometry and Calculus II ..... 4 hrs.
MAT 222 Analytic Geometry and Calculus III ..... 4 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Medical Laboratory Technician Associate in Applied Science

65 Semester Hours

The medical laboratory technician (MLT) is an allied health professional who is qualified by academic and practical training to provide service in a clinical laboratory. The medical laboratory technician performs general tests in all laboratory areas - blood bank, chemistry, hematology, immunology and microbiology. Working with the supervision of a medical technologist, a medical laboratory technician processes specimens for diagnostic purposes.
The future long-term employment for medical laboratory technicians looks bright. Medical laboratory technicians work in a variety of practice settings. Hospitals, for-profit laboratories, clinics, nursing homes, public health facilities, business and industry employ qualified medical laboratory technicians.
Medical laboratory technicians must be accountable, dedicated, skilled and selfmotivated. They are problem solvers who like challenge and responsibility. They must be accurate, reliable, and able to work well under pressure. Students with a solid foundation in high school - biology, chemistry, math and computer science are the most successful.

John Wood Community College, in cooperation with Blessing Hospital, offers the Medical Laboratory Technician AAS degree. Enrollment is limited. Students accepted into the Blessing School of Medical Laboratory Technicians complete 16 credit hours of science specialty courses and 17 credit hours of general education courses at JWCC.
Upon successful completion of requirements of the Blessing School of Medical Laboratory Technicians, 32 credit hours will transfer to complete degree requirements. Courses taken at Blessing Hospital for the MLT program are considered as "in residence."

Students are encouraged to visit the Blessing Health System website for admission processes and criteria for this program at www.blessinghealthsystem.org/medlabprogram or call the Blessing Medical Laboratory Technicians Program Director at 217.223.8400 ext. 6205.

## Required Courses



## General Education

CMN 101 Introduction to Speech I ........................................................ 3 hrs.
CSC 100 Computer Literacy .................................................................. 1 hr.
ENG 101 Rhetoric and Composition I .................................................. 3 hrs.
ENG 102 Rhetoric and Composition II ................................................ 3 hrs.
FYE 101 Blazing Your Trail .................................................................. 1 hr.
MAT 113 College Algebra OR
MAT 109 Elementary Statistics ............................................................ 3 hrs.
PSY 101 Introduction to Psychology ................................................. 3 hrs.
Sub-Total ............................................................................. 17 hrs.
Blessing School of Medical Laboratory Technicians .............................. 32 hrs .
TOTAL REQUIRED FOR DEGREE (Minimum) .................................. 65 HRS.

## Music (See Fine Arts)

## Nursing Assistant

At JWCC, the nursing assistant curriculum includes classroom, lab and clinical experience in a long-term care facility, nursing home or hospital setting. All courses in the nursing assistant program must be completed with a grade of $80 \%$ or higher. The program is offered on an ongoing basis with both day and evening classes offered.
Requirements for admission include a high school diploma or GED, successful completion of a reading competency test, good mental and physical condition including the ability to lift without any lifting resctrictions confirmed by a physical exam, and passing the state mandated criminal background check. Students with English as a Second Language may require further placement testing to meet the Illinois Department of Public Health Standards.

Nursing assistants are employed in hospitals, long-term care facilities/nursing homes, assisted living facilities, or as home healthcare aides. Nursing assistants employed in nursing homes are often the principal care givers and provide direct care to residents developing ongoing relationships and interacting with them in a positive, caring way. Home health aides help elderly, convalescent, or disabled persons to live at home instead of a health facility. In addition to providing personal care, the home health care nursing assistant keeps records regarding services performed as well as the patient's condition and progress.
Upon successful completion of the JWCC Nursing Assistant program, a certificate of completion is awarded and the student is eligible to take the State of Illinois certification exam. Once a student successfully completes the required written competency examination, employment opportunities for certificate nursing assistants (CNAs) are excellent.
A minimum grade of "C" must be achieved in all courses to successfully complete the program.

## Required Courses

NUA 100 Fundamentals for the Nursing Assistant .......................... 3.5 hrs .
NUA 102 Basic Patient Care Skills ...................................................3.5 hrs.
NUA 103 Nursing Assistant Practicum ................................................ 1 hr .
TOTAL REQUIRED FOR CERTIFICATE
8 HRS.

## Professional Nursing Assistant Certificate

The Professional Certified Nursing Assistant Certificate program is designed to prepare competent skilled nursing assistants who can provide care at a more advanced level of knowledge. This program prepares the most current certified nursing assistants to
advance to a higher level by completing the CNA curriculum and additional courses offered as a 16 credit hour certificate.
In addition to the Certified Nursing Assistant curriculum which prepares the student to provide direct patient care to residents/patients in a variety of settings, including nursing and assisted living homes, hospitals and the client's private home which includes additional duties maintaining records of services being provided as well as the patient's condition and progress. A course in rehabilitation and restorative services provides the student with the philosophy, purpose and techniques of rehabilitation and restorative nursing skills and the effects of the disease processes associated with aging and mobility. A medical terminology course gives the student advanced knowledge in the medical language thus enhancing communication within the medical team providing the care to the resident/patient. An additional customer service course prepares students with skills needed to meet and exceed service expectations of both internal and external customers. The course addresses attitude and personal approach with customers; resolution of customer conflicts and complaints; importance of nonverbal communication and listening skills; appropriate telephone, online, and written communication; professionalism; and stress and time management skills.
Courses will be offered each semester. A minimum grade of "C" must be achieved in NUA 100, 102 and 103 to successfully complete the program.

## Required Courses


*Required for the basic nursing assistant program; waived if student possesses a current CNA certificate

## Health Care Assistant Certificate

The Health Care Assistant certificate is designed to prepare competent health care team members with the fundamental tools necessary to step into entry-level healthcare front office and medical task-related positions in which they can apply meaningful skills learned through a combination of classroom, skills lab and clinical experiences. As part of this program, students will complete the Certified Nursing Assistant (CNA) curriculum and be eligible to sit for certification according to Illinois Department of Public Health rules and regulations.
A minimum grade of "C" must be achieved in NUA 100, 102 and 103 to successfully complete the program.

## Required Courses

NUA 100 Fundamentals for the Nursing Assistant*
3.5 hrs .
NUA 102 Basic Patient Care Skills* .3.5 hrs.
NUA 103 Nursing Assistant Practicum* .................................................. 1 hr.
NUA 118 Intro to Diagnostic Testing ...................................................... 1 hr.
NUA 120 Practicum for Health Care Asst.............................................. 1 hr
OFT 170 Intro to Medical Office ........................................................... 4 hrs.
OFT 281 Medical Terminology ............................................................ 3 hrs.
TOTAL REQUIRED FOR CERTIFICATE............................................ 17 HRS.
*Required for the basic nursing assistant program; waived if student possesses a current CNA certificate

## Certified Medical Assistant Certificate

Explore medical assisting if you are organized, interested in helping patients, have excellent communication skills and a team-oriented attitude. Medical assistants are multi-skilled health professionals specifically educated to work in healthcare settings performing administrative and clinical duties. The practice of medical assisting directly influences the public's health and wellbeing, and requires mastery of a complex body of knowledge and specialized skills requiring both formal education and practical experience that serve as standards for entry into the profession.
John Wood's one-year Certified Medical Assisting program includes classroom, laboratory and computer experience, as well as a practicum in an ambulatory care clinic. This program may be taken on a part-time basis. After earning a Medical Assisting certificate, graduates are eligible to take the nationally-recognized Certified Medical Assistant exam. Most employers require certification within one year of graduation.
*Pending state approval. Please see an advisor for specific program details.

## Practical Nurse Certificate

## 53 Semester Hours

## Associate Degree in Nursing Associate in Applied Science

John Wood Community College offers two nursing programs including the practical nurse certificate which prepares students to take the NCLEX exam to become a Licensed Practical Nurse (LPN) and the associate degree in nursing program which prepares students for the RN NCLEX exam to become a Registered Nurse (RN). Both of these nursing programs are designed to prepare students to become competent nurses who provide holistic care to people across the lifespan and in a variety of healthcare settings. The programs offer individuals a variety of options for completion.

## Track I (LPN)

Track I is for students wishing to pursue a Practical Nurse certificate ( 53 semester hours). This track requires that a student successfully complete the required general education courses, first year nursing courses and NUR 190-LPN Scope of Practice. A student exits the program after the first year to obtain a Practical Nurse certificate and sit for the NCLEX-PN exam.

## Track II (ADN)

Track II is for students wishing to pursue an Associate Degree in Nursing (ADN). Students have the option to take an additional course, NUR 190-LPN Scope of Practice to be eligibile to take the NCLEX-PN exam. These students will still continue on and complete the second year ADN coursework.

## Track III (LPN to ADN)

Track III is for the Community LPN already practicing as a Licensed Practical Nurse with a desire to advance his/her career by obtaining an Associate Degree in Nursing. These students would enter into the second year of the ADN program.

## Admission Criteria:

1. Applicant must first apply and be accepted to John Wood Community College prior to applying to the JWCC ADN program.
2. To be considered for, and to progress through, the ADN program, a student must maintain a minimum JWCC cumulative GPA of 2.7 , as well as a 2.7 GPA in required science/support courses (BIO 275, BIO 276, BIO 293, MAT 109, PSY 101 and PSY 233). Coursework may be repeated one time to meet minimum standards.
3. The following courses must be completed with a C or better in order to apply to the ADN program in this application cycle:

- BIO 101 General Biology
- ENG 101 Rhetoric \& Composition I
- MAT 109 Elementary Statistics
- PSY 101 Intro to Psychology

4. The applicant must have completed or be enrolled in BIO 275 Human Anatomy \& Physiology I at the time of application.
5. The following courses must be completed prior to the start of NUR 108:

## -BIO 275 Human Anatomy \& Physiology I <br> -BIO 276 Human Anatomy \& Physiology II <br> -PSY 233 Development Psychology

6. The following course must be completed prior to the start of NUR 148:
-BIO 293 Microbiology**
7. The following course must be completed prior to the start of NUR 203:

## -CMN 101 Introduction to Speech**

8. Upon the October 15 and February 15 application dates, applicants without an ACT score above 22 (ACT is NOT REQUIRED) will be invited to take the HESI A2 Admissions Assessment Test. This computerized test will be given on the JWCC Campus. Applicants will be scheduled for a specific date and time to test. A Reading, Math and Composite score of $78 \%$ is required for entry into the program. Students are allowed to retest once per calendar year. The applicant is responsible for all testing fees; testing fees are nonrefundable.
9. Community LPNs are required to meet above admission criteria, including their current LPN license and proof of employment as an LPN for at least 6 of the previous 12 -month period. In place of the HESI A-2, Community LPNs will be invited to take the NLN NACE exam. Performance on the NACE exam will be used to assist in the ranking of qualified applicants.
10. Admission into the JWCC Nursing program is contingent on the applicant meeting all prerequisite criteria, as well as maintaining a minimum a 2.7 GPA in required science/support courses, a 2.7 Nursing GPA and a JWCC cumulative 2.7 GPA.
Eligibility for admission to the ADN program does not guarantee admission. After the initial review, applicants will receive written notification of their status within the application process.

## GENERAL EDUCATION REQUIREMENTS (31 Semester Hours)

| BIO | 101 | General Biology | 4 |
| :--- | :--- | :--- | :--- |
| BIO | 275 | Human Anat \& Phys I | 4 |
| BIO | 276 | Human Anat \& Phys II | 4 |
| BIO | 293 | Microbiology | 4 |
| CMN | 101 | Intro to Speech I | 3 |
| ENG | 101 | Rhet \& Comp I | 3 |
| MAT | 109 | Elementary Statistics | 3 |
| PSY | 101 | Intro to Psychology | 3 |
| PSY | 233 | Developmental Psychology | 3 |

CORE PROGRAM SEQUENCE

| First Year - Fall Semester* |  |  |
| :--- | :--- | :--- |
| NUR 108 | Fundamentals | 4 |

NUR 118 Physical Assessment 1

NUR 128 Fundamentals II $\underline{5}$
First Year - Spring Semester*
NUR 138 Pharmacology
NUR 148 Health \& Illness Concepts I 5
NUR 190 LPN Scope of Practice* 4

NUR 203 RN Concepts 2
NUR 248 Health \& Illness Concepts II 4
NUR 258 Family Health Concepts $\underline{12}$
Second Year - Spring Semester
NUR 268 Complex Health Concepts 6
NUR 278 Community Health Concepts and Mental Health 4
NUR 289 RN Leadership $\frac{2}{12}$
*Students wishing to complete the Practical Nurse certificate ( 53 semester hours) are required to complete all of the First Year-Fall Semester and First Year-Spring Semester courses in addition to NUR 190-LPN Scope of Practice ( 4 cr . hrs.) and the required general education courses.

## Office Technology

Companies have been revolutionized by advances in computer technology. Now, more than ever, success in the business world is dependent upon adaptability and continuing education. Today's office requires experience in a variety of software packages as well as the traditional skills associated with an office setting.
Office employees are a valuable member of the office team. They perform a variety of computer tasks using higher-level integrated software as well as Internet research skills. They may greet clients, write correspondence, process internal and external documents, manage projects, and operate office equipment. Employees should possess excellent written and oral communication skills and should be detail-oriented and cooperative.
The degrees and certificates available through the office technology program at JWCC feature the blend of new and traditional skills necessary to succeed in a modern office environment. Students may choose from several programs of different lengths to prepare for a variety of local employment opportunities. Typical positions include receptionist, data entry, office manager, and administrative assistant.

## Office Technology Associate in Applied Science

## 64 Semester Hours

The AAS Office Technology program is designed to prepare students to be responsible for a variety of office duties that focus on the development of software skills. Upon completion of the program, students will have experience in a wide variety of software packages, office skills, organizational ability, communication, and interpersonal skills. The program also serves individuals already employed who are seeking to upgrade their skills. This program meets the College's requirement for computer competency.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES <br> <br> FIRST SEMESTER

 <br> <br> FIRST SEMESTER}BUS 101 Intro to Business 3

CSC 122 Presentation Software 2
FYE 101 Blazing Your Trail 1
OFT 101 Beginning Keyboarding 2
OFT 102 Keyboarding I 2
PSY 145 Human Rel in the Workplace 3
Written Communication Requirement $\quad \underline{3}$

## THIRD SEMESTER

ACC 101 Prin of Accounting I 3
BUS 125 Supervisory Mgmt 3
CSC 146 Intro to Web Page Dev 2
CSC 204 Spreadsheets-Expert Level 2
Gen Ed Requirement (Communication) 3
BUS/CSC/OFT Elective $\underline{3}$

## SECOND SEMESTER

| CSC | 104 | Spreadsheets-Core Level | 2 |
| :---: | :---: | :---: | :---: |
| CSC | 107 | Word Processing-Core Level | 2 |
| CSC | 116 | Database-Core Level | 2 |
| CSC | 143 | Intro to Desktop Info Mgmt | 1 |
| MAT | 103 | Bus Computations I | 3 |
| Oral Communication Requirement |  |  |  |
| BUS/CSC/OFT Elective |  |  | 3 |
| FOURTH SEMESTER |  |  |  |
| ACC | 125 | Computerized Accounting | 3 |
| CSC | 207 | Word Processing-Expert Level | 2 |
| CSC | 216 | Database-Expert Level | 2 |
| OFT | 260 | Customer Service | 3 |
| Hum/Soc/Behav Sci Requirement |  |  | 3 |
| BUS/ | SC/O | FT Elective | 3 |

## Office Technology Certificate

## 32 Semester Hours

The Office Technology certificate is intended for persons seeking immediate entrylevel employment as an office assistant or seeking to upgrade from an existing position to a higher one. The certificate includes only those courses that deal directly with the skill areas of office technology.
NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES FIRST SEMESTER

| BUS | 101 | Intro to Business | 3 | CSC | 104 | Database-Core Level | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| CSC | 122 | Presentation Software | 2 | CSC | 107 | Word Processing-Core Level | 2 |
| OFT | 101 | Beginning Keyboarding | 2 | CSC | 116 | Database-Core Level | 2 |
| OFT | 102 | Keyboarding I | 2 | CSC | 143 | Intro to Desktop Info Mgmt | 1 |
| FYE | 101 | Blazing Your Trail | 1 | MAT | 103 | Bus Computations I | 3 |
| PSY | 145 | Human Rel in the Workplace | 3 | OFT | 260 | Customer Service | 3 |
| Written Communication Requirement | $\underline{3}$ | Oral Communication Requirement | $\underline{3}$ |  |  |  |  |

## Office Technology: Medical Option Associate in Applied Science

## 64 Semester Hours

The AAS-Office Technology: Medical option is designed to prepare students for employment in a medical office as an office assistant. Graduates can expect to find
employment in a physician's office, clinic, or hospital. This program meets the College's requirement for computer competency.

NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete.

## REQUIRED COURSES <br> FIRST SEMESTER

BIO 101 General Biology 4

OFT 101 Beginning Keyboarding 2
OFT 102 Keyboarding I 2
OFT 170 Intro to the Medical Office 4
FYE 101 Blazing Your Trail 1
Written Communication Requirement $\quad \frac{3}{16}$
THIRD SEMESTER
CSC 104 Spreadsheets-Core Level 2
CSC 107 Word Processing-Core Level 2
CSC 122 Presentation Software 2
OFT 270 Electronic Health Records 3
OFT 284 Medical Coding-ICD 2
Oral Communication Requirement 3
Approved Electives $\underline{3}$

## SECOND SEMESTER

| BIO | 275 | Human Anat \& Phys I | 4 |
| :--- | :--- | :--- | ---: |
| BUS | 101 | Intro to Business | 3 |
| MAT | 103 | Bus Computations I | 3 |
| OFT | 260 | Customer Service | 3 |
| OFT | 281 | Medical Terminology | $\underline{3}$ |

## FOURTH SEMESTER

CSC 204 Spreadsheets-Expert Level 2
CSC 207 Word Processing-Expert Level 2
OFT 282 Medical Transcription 3
OFT 285 Medical Coding-CPT 2
PSY 145 Human Rel in the Workplace 3
Hum/Soc/Behav Science Requirement $\underline{3}$
*Approved Electives: All courses with BUS, CSC, NUA, NUR or OFT prefixes

## Medical Office Certificate

## 17 Semester Hours

The Medical Office certificate is intended for persons desiring to be able to perform the basic functions in a medical office setting successfully. When the student has completed these courses, he or she will have an understanding of the various types of duties that could be assigned to an office worker in a medical setting.

## REQUIRED COURSES

OFT 101 Beginning Keyboarding 2
OFT 170 Intro to the Medical Office 4
OFT 260 Customer Service 3
OFT 281 Medical Terminology 3
PSY 145 Human Relations in the Workplace 3
Approved Electives $\frac{2-3}{17-18}$
*Approved Electives: All courses with BUS, CSC, NUA, NUR or OFT prefixes

## Paramedicine <br> Associate in Applied Science

## 64 Semester Hours

The Emergency Medical Technician-Paramedicine (EMT-P) program is a very fastpaced, intense program. It prepares the graduate to provide initial patient assessment and management of care for the ill and injured from the pre-hospital setting to the emergency or hospital care environment. Courses include classroom instruction in theory and demonstration and clinical experience in simulated and real emergencies in local trauma centers and in the field.

Upon successful completion of the program, the graduate will be eligible to take the National Registry of Emergency Medical Technicians exam or the Illinois State Licensing exam. Graduates may be employed by ambulance districts or emergency settings and as adjunct training for fire fighters and in law enforcement.
This programs has earned national accreditation from the Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Profession (COA EMSP).
The applicant must meet the following admission requirements:

1. Admission to John Wood Community College
2. Age 18 or older before beginning EMS courses
3. Current EMT-Basic Licensure or EMS 150
4. Paramedic pre-entrance exam
5. Interview with the EMS director
6. Possess current Healthcare Provider CPR certification
7. Pass drug test
8. Pass criminal background check
9. Provide proof of current immunizations

NOTE: First-year coursework does not follow the JWCC traditional schedule. Classes meet twice weekly, two evenings per week, four hours each. There are approximately 12 additional hours per week of required clinical time. Students follow the sequence of courses listed below.

## FIRST YEAR REQUIRED COURSES

| EMS | 161 | Paramedic I | 6 |
| :--- | :--- | :--- | :--- |
| EMS | 166 | Paramedic Clinical Prac I | 2 |
| EMS | 171 | Paramedic II | 6 |
| EMS | 176 | Paramedic Clinical Prac II | 3 |
| EMS | 251 | Paramedic III | 7 |
| EMS | 256 | Paramedic Clinical Prac III | 3 |
| EMS | 261 | Paramedic IV | 6 |
| EMS | 266 | Paramedic Clinical Prac IV | 3 |
| EMS | 199 | Paramedic Internship | 3 |
| FYE | 101 | Blazing Your Trail | $\underline{1}$ |

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40
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# SECOND YEAR REQUIRED COURSES 

 FIRST SEMESTER| BIO | 275 | Human Anat \& Phys I | 4 | BIO | 276 | Human Anat \& Phys II |
| :--- | :--- | :--- | :--- | :--- | :--- | ---: |
| CSC | 100 | Computer Literacy | 1 | CMN 101 | Intro to Speech OR | 4 |
| MAT |  | Gen Ed Requirement | 3 | CMN 104 | Interpersonal Comm | 3 |
| PSY | 101 | Intro to Psychology OR |  | ENG 101 | Rhet \& Comp I | 3 |
| SOC | 101 | Intro to Sociology | 3 | Elective |  | $\frac{2}{12}$ |
| Elective |  | $\underline{1}$ |  |  |  |  |

## Paramedicine <br> Certificate

## 40 Semester Hours

Students may become an Emergency Medical Technician-Paramedic by completing the 13-month Emergency Medical Technician-Paramedicine certificate program. The EMT-P certificate is much like the EMT-P degree program in that it is a very fast-paced, intense certificate program. It prepares the student to provide initial patient assessment and management of care for the ill and injured from the pre-hospital setting to the emergency or hospital care environment. Courses include classroom instruction in theory and demonstration and clinical experience in simulated and real emergencies in local trauma centers and in the field.

Upon successful completion of the certificate, the student will be eligible to take the National Registry of Emergency Medical Technicians-Paramedic exam or the Illinois State Licensing exam. Students must meet the same admission requirements as those in the EMT-P degree program.
The applicant must meet the following admission requirements:

1. Admission to John Wood Community College
2. Age 18 or older before beginning EMS courses
3. Current EMT-Basic Licensure or EMS 150
4. Paramedic pre-entrance exam
5. Interview with the EMS director
6. Possess current Healthcare Provider CPR certification
7. Pass drug test
8. Pass criminal background check
9. Provide proof of current immunizations

## REQUIRED COURSES

| EMS | 161 | Paramedic I | 6 |
| :--- | :--- | :--- | :--- |
| EMS | 166 | Paramedic Clinical Prac I | 2 |
| EMS | 171 | Paramedic II | 6 |
| EMS | 176 | Paramedic Clinical Prac II | 3 |
| EMS | 251 | Paramedic III | 7 |
| EMS | 256 | Paramedic Clinical Prac III | 3 |
| EMS | 261 | Paramedic IV | 6 |
| EMS | 266 | Paramedic Clinical Prac IV | 3 |
| EMS | 199 | Paramedic Internship | 3 |
| FYE | 101 | Blazing Your Trail | $\underline{1}$ |
|  |  |  | 40 |

## Physics

Physicists describe in mathematical terms the structure of the universe and interaction of matter and energy and develop theories that describe the fundamental forces and laws of nature. Applying the basic laws governing phenomena such as gravity, electromagnetism, and nuclear interaction leads to discoveries and innovations. The program is intended to give the student a survey of the fundamental physical concepts that are the foundation of all the sciences. Further, the curriculum is designed to complement the sets of more specialized programs for the student interested in pursuing careers in the field. This experience will be enhanced through the use of microcomputer-based laboratories.

## Area of Concentration Courses

Any student declaring an Area of Concentration in Physics must take a minimum of 12 credit hours of Chemistry/Mathematics/Physics electives.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Political Science

Political scientists study the functions and working of governments. Many of them specialize in a general area of political science, including political theory, U.S. political institutions and processes, comparative political institutions and processes, or international relations and organizations. Some scientists specialize in a particular type of political institution or in the politics of a specific era. The primary goal of the JWCC program of study is the training of students for an active and effective citizenship.

Program offerings are intended to provide for the student a sense of relationship between basic political structures and practice. Further, the program is designed to help students understand the organization and operation of the various levels of government and to distinguish rights, privileges and duties within these realms.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.

| HIS | 121 | U.S. History I |
| :---: | :---: | :---: |
| HIS | 122 | U.S. History II or HIS 222 U.S. History Since 1945 ........... 3 hrs. |
| PSC | 101 | American Government ................................................... 3 hrs |
| PSC | 110 | Introduction to Political Science |

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Pre-Engineering (See Engineering)

## Psychology

Psychologists study behavior of individuals in order to describe, predict, and explain their thoughts and actions. Psychologists are concerned with the problems of emotional stress and adjustment, the causes of mental disorders, or the effective performance of an individual. This program is designed to prepare the student in the basics of the field of psychology. The purposes of these studies are to establish a foundation of knowledge in the different basic approaches to the discipline, the breadth and scope of the field of psychology, and the application of a framework for understanding human behavior that will serve students interested in advanced study.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.
PSY 101 Introduction to Psychology

3 hrs.

PSY 202 Child Psychology ................................................................. 3 hrs.
PSY 233 Developmental Psychology .................................................. 3 hrs.
SOC 101 Introduction to Sociology ...................................................... 3 hrs.

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64.

## Radiologic Technology <br> Associate in Applied Science

## 65 Semester Hours

Graduates of the radiologic technology (RT) program are prepared to perform a variety of functions in radiology departments of hospitals, clinics and other health care facilities. Students receive experience in the operation of diagnostic x-ray equipment in general health, emergency and surgical settings.
Graduates of accredited radiologic technology programs are eligible to write the national examination in radiography administered by the American Registry of Radiologic Technologists and are also eligible to obtain an Illinois license.

Opportunities for graduates are many and varied. Graduates are needed in hospitals, clinics and offices. Advanced opportunities such as computerized tomography, magnetic resonance imaging, ultrasound, cardiovascular interventional technology, nuclear medicine, radiation therapy, and mammography are available to the radiographer.
John Wood Community College, in affiliation with Blessing Hospital, offers the Radiologic Technology AAS degree. Enrollment is limited. Students accepted by the Blessing Hospital School of Radiologic Technology complete 15 credit hours of science/specialty courses and 19 credit hours of general education courses. Upon successful completion of the requirements of the Blessing Hospital School of Radiologic Technology, 31 credit hours will transfer to complete the AAS degree requirements. Courses taken at Blessing Hospital for the RT program are considered as "in residence."

Qualified graduates of other accredited Illinois radiologic technology programs may enroll in this associate in applied science degree program.

Students are encouraged to visit the Blessing Health System website for admission processes and criteria for this program at www.blessinghealthsystem.org under Schools \& Programs or call the Blessing Hospital School of Radiologic Technology Program Director at 217.223.8400 ext. 6163.

## Required Courses

BIO 101 General Biology ..... 4 hrs.
BIO 275 Human Anatomy and Physiology I ..... 4 hrs.
BIO 276 Human Anatomy and Physiology II ..... 4 hrs.
OFT 281 Medical Terminology ..... 3 hrs.
Sub-Total ..... 15 hrs.
General Education
CMN 101 Introduction to Speech I* OR
CMN 104 Interpersonal Communication ..... 3 hrs .
CSC 106 Introduction to Computers ..... 3 hrs.
ENG 101 Rhetoric and Composition I ..... 3 hrs .
ENG 102 Rhetoric and Composition II ..... 3 hrs .
FYE 101 Blazing Your Trail ..... 1 hr .
MAT 109 Elementary Statistics OR
MAT 113 College Algebra* ..... 3 hrs.
PSY 101 Introduction to Psychology ..... 3 hrs.
Sub-Total ..... 19 hrs.
Blessing Hospital School of Radiologic Technology ..... 31 hrs .
TOTAL REQUIRED FOR DEGREE (Minimum) ..... 65 HRS.
*Preferred course

## Sociology

Sociologists study groups that humans form in their associations with others. These groups include families, communities and governments, along with a variety of social, religious, political, business and other organizations. They study behavior and interaction; trace origin and growth; and analyze the influence of group activities on individual members. In order for students to engage in this study, they will be introduced to major theoretical and methodological issues of the discipline. Students will be able to choose from a variety of topical courses reflecting social issues and contemporary concerns. The program provides analysis of specific structures and social implications.

## Area of Concentration Courses

Any student declaring an Area of Concentration must take all courses from the list below.
SOC 101 Introduction to Sociology ..... 3 hrs.
SOC 111 Social Problems ..... 3 hrs.
SOC 224 Marriage and the Family ..... 3 hrs.
Sociology Elective ..... 3 hrs .

## General Education AA/AS/AES/AFA Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 79. The minimum total number of credit hours required for the AA or AS degree is 64 .

## Surgical Technology <br> Associate in Applied Science

## 64 Semester Hours

An associate degree in surgical technology is becoming the preferred education credential for surgical technologists due to increasing responsibilities. Health care administrators and supervisors are looking for technologists who can demonstrate professionalism and adapt to complex administrative and technical changes with proficiency.
The degree track is a professional based educational cornerstone to growth and development within the surgical technology profession. The surgical technology degree can advance a surgical technologist to the next level in the professional career ladder and offers employment opportunities as a surgical technology instructor, director, hospital materials manager or surgical sales representative.
Admission into the degree program requires completion of an accredited Surgical Technology Certificate program and current certification from the National Board of Surgical Technology and Surgical Assisting (NBSTSA). Students who have completed a Surgical Technology Certificate from another institution will be given credit for SUR $100,110,120$ and 140 for a total of 27 credit hours. All other courses will be examined on a course by course basis. Students who completed the JWCC Surgical Technology Certificate will be given credit for the first year courses in the Surgical Technology AAS Degree.

[^4]REQUIRED COURSES
PREREQUISITE
BIO 293 Microbiology
OFT 281 Medical Terminology

| (Completion of BIO 293 and OFT 281 with a " C " or higher is required prior to beginning the fall |
| :--- |
| semester) | la

## FIRST YEAR

| FALL |  |  |  | SPRİ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BIO | 275 | Human Anat \& Phys I | 4 | BIO | 276 | Human Anat \& Phys II | 4 |
| FYE | 101 | Blazing Your Trail | 1 | CMN | 101 | Intro to Speech I OR |  |
| SUR | 100 | Professional Issues for the Surg Tech | 1 | ENG | 101 120 | Rhet \& Comp I Surgical Tech I | 3 9 |
| SUR | 110 | Intro to Surgical Tech | $\underline{8}$ |  |  |  | 16 |

## SUMMER

| PSY | 101 | Intro to Psychology | 3 |
| :--- | :--- | :--- | ---: |
| SUR | 140 | Surgical Tech II | $\underline{9}$ |

## SECOND YEAR

FALL

| SPRING |  |  |  |
| :--- | :--- | :--- | :--- |
| CMN | 104 | Interpersonal Comm | 3 |
| PHL | 111 | Logic/Critical Thinking OR |  |
| PHL | 121 | Ethics | 3 |
| SUR | 114 | Surgical Pharmacology | $\underline{2}$ |

## Swine Management (See Agriculture)

## Truck Driver Training

 Certificate
## 16 Semester Hours

The Truck Driver Training Certificate prepares students for the CDL examination leading to employment as Class A truck drivers. This program offers students the opportunity to attain a stackable college credential toward an AAS degree in Logistics and Operations Management. Students will learn the basics of logistics and supply chain management as well as the basic introductory information needed to acquire a Class A CDL. Students will gain in-depth knowledge and hands-on experience in the proper operation of Class A trucks. JWCC uses industry standard equipment for training and employs the latest technology, including an up-to-date computer lab.
The JWCC Truck Driver Training program offers courses certified by the Professional Truck Driver Institute, 555 East Braddock Rd., Alexandria VA 22314, telephone 703.647.7015, www.ptdi.org. Students completing the program receive a certificate from the Professional Truck Driver Institute.Students are heavily recruited by many prominent companies, with most students being offered employment prior to completion.
The program is eligible for funding through the Workforce Investment Act (WIA) or other public agencies. For more information on the program, please contact the Transportation Office at 217.641.4971 or 217.641.4914.
This program is also available for noncredit. Noncredit options include an 8-week long training with students attending Monday through Thursday from 7 a.m. to $4: 30$ p.m.

## REQUIRED COURSES

| LOM | 100 | Intro to Logistics Mgmt | 3 |
| :--- | :--- | :--- | :--- |
| LOM | 102 | Supply Chain Management | 3 |
| TRK | 150 | Intro to Truck Driver Training | 1 |
| TRK | 180 | Truck Driver Training Fund | 4 |
| TRK | 181 | Truck Driver Training Oper | $\underline{5}$ |

## Basic Welding Certificate

## 17 Semester Hours

The Basic Welding Certificate includes reading and interpreting welding symbols and blueprints, thermal cutting, flux core (inner and dual), spray transfer, safety, and basic MIG. Students will also sit for their OSHA-10 General Industry certification and Manufacturing Skill Standards Council safety certification. This program prepares students for a SENSE I credential in several welding practices from the American Welding Society. Graduates from this certificate program can directly enter the workforce and ladder coursework into JWCC's Manufacturing Technology Associate in Applied Science degree, which is transferable to Western Illinois University, Northern Illinois University, Missouri Western State University, Southern Illinois University, Governors State University and University of Northern Iowa.

## REQUIRED COURSES

| MAT | 100 | Technical Math | 3 |
| :--- | :--- | :--- | ---: |
| MFG | 113 | Intro to Manu/Indu Safety | 3 |
| WLD | 122 | Flux Core Inner Shield | 1 |
| WLD | 123 | Flux Core Dual Shield Welding | 1 |
| WLD | 124 | Welding Spray Transfer | 1 |
| WLD | 125 | Stick Welding I | 3 |
| WLD | 161 | Interpreting Welding Prints | 3 |
| WLD | 180 | Thermal Cutting Processes | $\underline{2}$ |
|  |  |  | 17 |

## Industrial Welding Certificate

## 29 Semester Hours

The Industrial Welding Certificate is a continuation of the skills learned in the Basic Welding Certificate. Courses include basic TIG, stick, commercial welding practices, and welding inspection and testing. This program also prepares students for SENSE 1 credentialing in several welding practices from the American Welding Society. Graduates from this certificate program can directly enter the workforce and ladder coursework into JWCC's Manufacturing Technology Associate in Applied Science degree, which is transferable to Western Illinois University, Northern Illinois University, Missouri Western State University, Southern Illinois University, Governors State University and University of Northern Iowa.

## REQUIRED COURSES

FIRST SEMESTER

| MAT | 100 | Technical Math | 3 |
| :--- | :--- | :--- | :--- |
| MFG | 113 | Intro to Manu/Indu Safety | 3 |
| WLD | 122 | Flux Core Inner Shield | 1 |
| WLD | 123 | Flux Core Dual Shield Welding | 1 |
| WLD | 124 | Welding Spray Transfer | 1 |
| WLD | 125 | Stick Welding I | 3 |
| WLD | 161 | Interpreting Welding Prints | 3 |
| WLD | 180 | Thermal Cutting Processes | $\underline{2}$ |
|  |  |  | 17 |

## SECOND SEMESTER

WLD 121 MIG Welding Short Circuit 3
WLD 126 Stick Welding II 3
WLD 127 TIG Welding Carbon Steel 2
WLD 128 TIG Welding Aluminum 1
WLD 129 TIG Welding Stainless Steel 1
WLD 130 Welding Inspection \& Testing 1
WLD 194 Capstone Project OR
WLD 195 Welding Internship 1-2


## COURSE DESCRIPTIONS

## How to Use This Section of the Catalog

This section of the college catalog is one of the most useful sections but is also one of the most confusing to those unfamiliar with college catalogs. Below is a sample entry for a course:


The course prefix, MAT, places the course in alphabetical order in this section of the catalog and assigns the course to a major field or discipline; in this case, MAT is the prefix for courses in mathematics. The course number, 109 in this case, indicates level of course (see next page for course numbering explanation).

Immediately to the right of the course title is one, two or three asterisks (*), indicating the number of times a course may be repeated.

To the right of the repeatability designation is the number of credit hours assigned to the course. (A few courses may vary in credit hours according to specific circumstances.)

Beneath the course title are indicated any special requirements that students must meet before they enroll in the course. For some courses, students must have already completed certain other courses (these other courses are called prerequisites) or have the specific permission of the department to enroll; for others, a particular course should be taken concurrently (at the same time) as the course describes. Any such special requirements or even recommendations are listed immediately beneath the course title.

Immediately following the description of course content is the IAI (Illinois Articulation Initiative) code to assist students planning to transfer to another Illinois institution. See "College Transfer Programs" section for details on the IAI. Lecture hours and laboratory and/or clinical hours are indicated for courses requiring contact hours in addition to the lecture hours. For courses that are offered only via the Internet, as Open Learning courses, or at a certain location (i.e., Agricultural Education Center), a statement may follow the course description.

## COURSE LISTING

The course listing section is divided into three subsections:
I. Courses Applicable to Associate Degrees, Career/Technical Certificates, Vocational Skills and General Studies Courses. This is the vast majority of courses.
II. Adult Basic Education/Adult Secondary Education (GED) Courses.
III. Community Education Courses.

John Wood Community College does not recommend that students do self- or peer-advising. The selection of courses and programs of study can be somewhat confusing and complex. The College strongly recommends that students rely on the College's experienced advising staff to help select the right course/courses to ensure transferability and to meet degree requirements.

Note: Students who completed technical courses more than four years in the past may find the information and skills from such courses to be obsolete. In order for technical program graduates to possess current knowledge and skills applicable to the job market, students are required to repeat any technical course for certificate/degree completion which was completed more than four years prior to the current term. Exceptions to this standard can be requested by the student to the appropriate instructional department chair. Approval of exceptions can only be granted by the respective department chair based on documented evidence provided by the student. The department chair shall formally notify the registrar of approved exceptions.

Generally, courses are numbered as follows:

001 through 099 - Developmental, remedial, and college preparatory courses. These courses do not apply toward transfer degrees; however, certain courses may apply to an AAS degree.

100 through 299 - Career/technical and baccalaureate-level courses. (These courses may transfer depending on the transfer policy of the institution and academic department to which the student plans to transfer.) These courses mirror the first two years of coursework at a four-year college or university.

## I. COURSES APPLICABLE TO ASSOCIATE DEGREES, CAREER/TECHNICAL CERTIFICATES, VOCATIONAL SKILLS, AND GENERAL STUDIES COURSES

## ACCOUNTING

ACC 101 Principles of Accounting I 3 cr. hrs.
Corequisite: CSC 104
Prerequisite: MAT 010 or appropriate placement test score or consent of department
An introduction to accounting within the context of business and business decisions. Students learn the accounting cycle and operating activities of the business. Students explore accounting information's role in the decision-making process. Seeing how accounting information can be used to make better business decisions will benefit all students regardless of their major or chosen career.

ACC 102 Principles of Accounting II $\mathbf{3}$ cr. hrs. Prerequisite: ACC 101 with a grade of "C" or above within two academic years or consent of department
A continuation of ACC 101. Students learn the investing and financing activities of the business and learn how to use various types of accounting information found in financial statements and annual reports. Analyzing annual reports will benefit all students regardless of their major course of study or chosen career.

ACC 114 Payroll Accounting 2 cr. hrs.
Prerequisite: ACC 101 with a grade of "C" or above within two academic years or consent of department
Focuses on one of the most important components of an organization's total accounting system. Students will complete units that address payroll computa tions, Social Security taxes, income tax withholding and unemployment compensation taxes. Payroll transactions will be analyzed and journalized. Available only as an Open Learning course.

ACC 125 Computerized Accounting 3 cr. hrs. Prerequisite: ACC 101 with a grade of "C" or above within two academic years or consent of department
A realistic, hands-on approach to integrated accounting principles consisting of seven major accounting systems commonly found in computerized accounting environments: general ledger, accounts receivable, accounts payable, financial statement analysis, depreciation, inventory and payroll. All of the systems except depreciation, inventory, and payroll are integrated. As a result of the integration, a transaction entered into an applicable system generates the information, as required, for all systems to update and accumulate data required for accounting records, management reports, and financial statements. Available only as an Open Learning course.

ACC 195 Special Topics in Accounting*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in accounting not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record. and a minimum of a $\mathbf{2 . 0} \mathbf{G P A}$
This course offers students several different options for acquiring work-based education in the business environment. Students may elect to participate in an approved apprenticeship, internship, job shadowing, or mentoring activity as it pertains to their career goals. The course provides the opportunity to apply classroom theory and to experience the dynamics of modern business. Course requires 80 hours of work experience for each credit hour.

ACC 200 Managerial Accounting 3 cr. hrs. Prerequisite: ACC 101 with a grade of "C" or above within two academic years and MAT 020 or MAT 109 with a grade of " C " or above within two semesters or consent of department
Deals with identification and analysis of accounting data for management decision making, planning and controlling, capital budgeting, and tax planning required for all. IAI: BUS 904

ACC 221 Intermediate Accounting I 3 cr. hrs.
Prerequisite: ACC 102 with a grade of "C" or above within two academic years or consent of department
A continuation of the traditional financial accounting topics covered in ACC 101 and 102 , but in greater depth. Review of the accounting process. The balance sheet, statements of income, retained earnings, and cash flows are analyzed as to the components of each, usefulness of the statements, and limitations of their use. The nature and composition of cash, receivables and inventories are presented together with the valuation problems pertaining to each.

ACC 222 Intermediate Accounting II 3 cr. hrs. Prerequisite: ACC 221 with a grade of "C" or above within two academic years or consent of department
Acquiring and disposing of property, plant, and equipment and the related cost allocation process involved in recognizing depreciation and depletion. Intangible assets will be analyzed. Liability recognition and measurement for both current and long-term liabilities will be reviewed. Debt restructure, bond amortization, and bond redemption will be included. Stockholders' equity is analyzed as to contributed capital and retained earnings. The effect of dilutive securities and their impact on earnings-per-share of stock is also examined.

ACC 230 Governmental/Not-for-Profit Accounting $\mathbf{3}$ cr. hrs. Prerequisite: ACC 101 with a grade of " C " or above within two academic years or consent of department
A basic governmental and not-for-profit accounting course covering fund accounting for governments-state, local, and federal. Also included are other not-for-profit organizations, health care entities, and colleges and universities.

ACC 240 Tax Accounting
3 cr. hrs.
Prerequisite: ACC 102 with a grade of " C " or above within two academic years or consent of department
An introduction to taxation that provides an understanding of the federal tax laws and regulations for individuals. Study also includes property transactions, accounting periods and methods, gift, estate, and trust taxation.

Deals with current topics in accounting not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.

## AGRICULTURE

## AGR 150 Agriculture and Consumer-Related Occupations I $\mathbf{1 ~ c r . ~ h r . ~}$

An introduction to various agricultural occupations, this course involves a study of career opportunities in agriculture industry, business, farming, teaching, resource management and environmental control. It is designed to gather occupational information which will allow the student to develop educational and occupational goals. Satisfies JWCC job-seeking skills course requirement.

AGR 152 Natural Resource Management
3 cr. hrs.
Basic course emphasizing the importance and practical aspects of planning a conservation program for the agriculture producer. The student will study and develop a conservation plan for his or her own farm or a farm provided by the instructor. In-depth study of conservation practices and their economic considerations will provide the student with a better understanding of the need to plan the use, treatment and protection of soil, water, air, woodlands, wildlife, and energy use. Available at the Agricultural Education Center (Perry).

AGR 155 Crop Management Technology 2 cr. hrs.
Designed to introduce students to the fundamental processes of precision navigation systems and their applications to crop production and the agribusiness supply and service industry. Technical skills and knowledge in the operation of hardware and software will be emphasized. Specific topics include: basic geo-referencing principles, mapping software, data collection, data analysis and precision equipment. 1 lecture hour, 2 lab hours

AGR 161 Animal Evaluation and Selection I
2 cr. hrs.
Study of relationship between form and function in the evaluation and selection of breeding and market livestock. Available at the Agriculture Education Center (Perry). 1 lecture hour, 2 lab hours

AGR 162 Animal Evaluation and Selection II 2 cr. hrs. Prerequisite: AGR 161 or consent of department
Study of relationship between form and function in the evaluation and selection of breeding and market livestock. A continuation of AGR 161 for students who want to continue with additional livestock evaluation experiences. Available at the Agricultural Education Center (Perry). 1 lecture hour, 2 lab hours

## AGR 163 Advanced Animal Evaluation and Selection 4 cr. hrs. Prerequisite: AGR 162; AGR 202 is recommended or concurrent with these classes or consent of department

Advanced study of relationship between form and function in the evaluation and selection of breeding and market livestock. Includes advanced level of oral justification. Available at the Agricultural Education Center (Perry). 2 lecture hours, 4 lab hours with monogastric and ruminant digestive systems. Study of essential nutrients, feed ingredients and additives, balancing rations and economic considerations in feeding. In-depth analysis is given to nutritional content of crops commonly produced and fed to livestock. Available at the Agricultural Education Center (Perry). 2 lecture hours, 2 lab hours
AGR 165 Beef Management - Breed to Wean
2 cr. hrs.
Designed to focus upon those principles of beef production which emphasize the skills and knowledge needed to manage the beef cow herd. Topics include selection of breeding stock, artificial insemination, reproductive physiology, beef cow nutrition, herd health programs, forage management, and general herd management. Available at the Agricultural Education Center (Perry) during the spring semester of even years only.
AGR 166 Beef Management - Wean to Finish 2 cr. hrs. Designed to focus upon those principles of beef production which emphasize the skills and knowledge needed to manage the cow and calf, yearling cattle, and feedlot cattle. Topics include nutrition, herd health, general management, and marketing. Available at the Agricultural Education Center (Perry) during the spring semester of odd years only.
AGR 167 Applied Beef Production Skills 2 cr. hrs. Students will be assisting with duties related to cows and calves at the University of Illinois Orr Beef Research Center. Possible duties might include vaccinating, moving and handling breeding cows, preparing for parturition and calving cows, processing newborns, and caring for young calves. Students could also assist with other research activities with cows and newborn calves. Available at the Agricultural Education Center and UI Beef Research Center (Perry). 0.5 lecture hours, 3 lab hours
AGR 169 Artificial Insemination - Cattle
$1 \mathrm{cr} . \mathrm{hr}$.
Study of the physiology of the reproductive tract of cattle and the use of insemination equipment for breeding of cattle; includes procedures that make artificial insemination practical. 0.5 lecture hours, 1 lab hour
AGR 171 Introduction to Electricity 2 cr. hrs. Designed to develop knowledge and skills in electrical wiring, motors and controls. Emphasis is placed on planning, wiring, testing, safety, and related skills and knowledge. Available at the Agricultural Education Center (Perry). 1 lecture hour, 2 lab hours
AGR 172 Introduction to Welding
2 cr. hrs.
Designed for the individual who needs skills and knowledge in welding for repairing and fabrication of agriculture equipment. Welding will be done with arc, MIG, acetylene, and TIG welders. Available at the Agricultural Education Center (Perry). 0.5 lecture hours, 3 lab hours
AGR 173 Advanced Welding
2 cr. hrs.
Prerequisite: AGR 172 or consent of department
Designed for the individual who needs more in-depth skills and knowledge in welding for projects, maintenance welding, or fabrication welding. Welding will be done with arc, MIG, acetylene, and TIG welders. Available at the Agricultural Education Center (Perry). 0.5 lecture hours, 3 lab hours
AGR 174 Artificial Insemination - Swine
$1 \mathrm{cr} . \mathrm{hr}$. The physiology of the reproductive tract of farm animals and the use of insemination equipment for breeding of livestock is studied. Included are management procedures that make artificial insemination practical. Available at the Agricultural Education Center (Perry). 0.5 lecture hours, 1 lab hour

Introduction to the applications of the microcomputer to agribusiness: word processing, spreadsheets, data base management, presentation software, and use of the Internet. Satisfies JWCC computer competency requirement. Available at the Agricultural Education Center (Perry). (Same as CSC 106)
Pork Production Practicum
2 cr . hrs.
Introduces the student to pork production with supervised practice of basic pork production skills. Focus is on providing interactive feedback, plus question and answer opportunity with the supervisor and instructor. 1 lecture hour, 2 lab hours

## AGR 177 Introduction to Equine Science I

2 cr. hrs.
A basic course in the principles of equine care and management, including breed identification, training, evaluation, selection, feeding, reproduction, and physiology of equine animals. Particular attention is paid to the feeding and training of horses and the role of the equine industry in modern times.

AGR $180 \quad$ Swine Management - Breeding \& Genetics
2 cr. hrs.
Covers factors used to select and manage a breeding herd. Emphasis on the skills and practices necessary for maximizing reproductive performance in confinement. The course includes choosing replacement females, selecting boars, cross breeding, artificial insemination, pen and hand breeding, and genetics. Covers the science and reasoning behind the application of the above topics. Available at the Agricultural Education Center (Perry) during the spring semester of odd years only.
AGR 181 Swine Management - Farrow to Market
2 cr . hrs.
A study of management factors necessary for increasing production efficiency by the timely application of pig processing procedures and production practices from birth to market. Emphasis on the acceptable procedures of care of sow and litter from just prior to farrowing to three weeks after farrowing. Management of newly purchased feeder pigs, carcass evaluation, and marketing feeder pigs and market hogs will also be discussed. Available at the Agricultural Education Center (Perry) during the spring semester of even years only.

## AGR 182 Applied Pork Production Skills

$2 \mathrm{cr} . \mathrm{hrs}$.
Students gain practical experience in pork production skills through classroom and laboratory work. Pregnancy testing of sows, studying methods of breeding sows and gilts, using chemical and manual assistance in delivering pigs, clipping needle-teeth, docking tails, vaccinations, injections, castration of hogs, and general daily hog production activities are covered. Available at the Agricultural Education Center (Perry). 0 lecture hours, 4 lab hours

## AGR 186 Agriculture Business Management

3 cr . hrs. Emphasizes the development of a business plan for the farm or agriculture-related business. The decision-making process, budgeting (enterprise, partial, business, and cash-flow), setting priorities, production efficiency and related topics are important components of the course. Available at the Agricultural Education Center (Perry).

AGR 188 Agricultural Sales and Marketing
3 cr . hrs.
Fundamental study of human relations needed in order to operate an agricultural business successfully. Basic sales methods are discussed as they relate to the customers' needs. Primary emphasis is placed on sales and service of agricultural products, the importance of a satisfied customer, and the necessity for product knowledge. Available at the Agricultural Education Center (Perry).

The study of record keeping systems and accounting principles. Types of accounting systems, budgeting depreciation, and amortization schedules will be discuss. Additional topics include the importance of the proper use of credit in the agriculture business; the use of equity and debt capital as a management tool; the application of short, intermediate, and long-term credit; alternative sources of credit; lender's credit analysis and loan servicing; and debt management. Available at the Agricultural Education Center (Perry).

AGR 193 Agriculture and Consumer-Related Occupations II $1 \mathrm{cr} . \mathrm{hr}$. Prerequisite: AGR 150
Further introduction and discussion of various agriculture occupations, this course involves a study of career opportunities in agriculture industry, business, farming, teaching, resource management and environmental control. It is designed to gather occupational information which will allow the student to develop educational and occupational goals. Satisfies JWCC job-seeking skills course requirement.

AGR 195 Special Topics in Agriculture*** variable 1-4 cr. hrs.

## Prerequisite: Consent of department

Deals with current topics in agriculture not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

AGR 199 Occupational Internship I
variable $\mathbf{1 - 5} \mathbf{c r}$. hrs. Prerequisite: Consent of department
Students are placed in selected areas of production, horticulture and agribusiness to learn about these businesses under actual working conditions. This experience allows the student to explore and apply knowledge to his/her career interests. Dual supervision is provided by college staff and the operating business. Course requires 80 hours of work experience for each credit hour.

AGR 200
Introduction to Soil Science
4 cr. hrs.
Prerequisite: One course in chemistry recommended
Introduction to the origin and development of our soils. Study will be primarily on the biological, chemical and physical aspects of soil and how they are influenced by environmental and cultural production practices. Soil testing and interpretation will be studied. Available on the Quincy Campus during the fall semester of even years only. 3 lecture hours, 2 lab hours; IAI: AG 904years only. 3 lecture hours, 2 lab hours; IAI: AG 902. American agriculture. Includes study of finance, taxation, legal descriptions, input allocation and marketing programs, and governmental policies as they relate to agriculture. Available on the Quincy Campus during the spring semester of even years only. IAI: AG 901

AGR 204 Principles of Crop Science
4 cr . hrs.
Introductory study of various plant species of economic importance. Particular emphasis is placed on an understanding of the basic principles of plant growth, development, and reproduction. Cultural practices to maximize production are emphasized. This course also studies weeds, insect and disease identification and control. Available on the Quincy Campus during the fall semester of odd years only. 3 lecture hours, 2 lab hours; IAI: AG 903

AGR 295 Advanced Special Topics in Agriculture*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in agriculture not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

AGR 299 Occupational Internship II variable 1-5 cr. hrs. Prerequisite: Consent of department
A continuation of AGR 199; a learning experience to develop an extended knowledge of agricultural businesses. Course requires 80 hours of work experience for each credit hour.

## ART

ART 100 Drawing I: Fundamentals $\mathbf{3}$ cr. hrs. This course will explore the basic aspects of drawing with the emphasis on developing an understanding of visual and technical skills pertinent to all art fields. 1 lecture hour, 4 lab hours

ART 106 Ceramics I 3 cr. hrs.
An introductory studio course consisting of both hand and wheel methods of construction. Includes the study of clay bodies, glazes, decoration methods, and kiln firing. 1 lecture hour, 4 lab hours

ART 115 Art Appreciation
$3 \mathrm{cr} . \mathrm{hrs}$.
Designed to expose/cultivate an awareness of art in our culture with some emphasis on contemporary times. IAI: F2 900

ART 120 Art Survey and Appreciation II $\mathbf{3}$ cr. hrs.
A course designed to provide an understanding of the history of the visual arts and the role it plays in serving humankind. Using visuals from books, Web sources, some video clips, and museum trips (virtual or real), students will explore why art is created, its function in society, how it affects us, and how it can enrich our lives. Available via Internet only.

| ART 121 | Drawing II <br> Prerequisite: ART 100, ART $\mathbf{1 2 6}$ or consent of department <br> Continuation of the materials, skills and techniques of drawing. Emphasis is on <br> the exploration and development of individual expression of form and content. 1 <br> lecture hour, 4 lab hours |
| :--- | :--- |

A study of visual perception and composition on a 2-D surface. The basics of visual problem solving will be stressed in space, shape, line, and color. 1 lecture hour, 4 lab hours

| ART 127 | 3-D Design and Color <br> Prerequisite: ART 126 |
| :--- | :--- |
|  | A studio course exploring the fundamentals of the formal systems and basic |
| elements of visual organization through 3D design principles and theories using |  |
| a variety of materials. 1 lecture hour, 4 lab hours |  |


| ART 136 | Graphic Design I <br> Prerequisite: ART 100, ART 126 <br> experience or consent of department |
| :--- | :--- |

This course focuses on concepts and visual communication skills necessary for graphic design. Students will acquire an understanding of single and multi-page documents, both in black/white and color, covering document construction, integration of word processing programs, working with images and typography, custom colors and standard output. Introduces the production of printed materials using illustrations and image manipulation software via computers.

## ART 137 Graphic Design II <br> 3 cr. hrs.

 Prerequisite: ART 136This course builds on aesthetic and technical skills begun in ART 136. Develops alternate illustration, type generation, scanning, and layout skills as well as improves software skills in vector illustration, photo manipulation and layout in a project-based format. Typography, printing processes, work flow and communication effectiveness are emphasized.

ART 195 Special Topics in Art***
variable 1-4 cr. hrs.

## Prerequisite: Consent of department

Deals with current topics in art not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

ART 226 Graphic Design III
3 cr . hrs.
Prerequisites: ART 136 and ART 137
Students continue with advanced studies of design principles related to marketing, communications and business. Color processes, photo manipulation, and print technology will be targeted. Students research ad design and layout and create advertising and editorial illustration for magazines, books and Web pages.

ART 227 Graphic Design IV - Internship
3 cr. hrs.
Prerequisite: ART 136, ART 137, and ART 226
Prepares the student in an internship setting to apply design skills, troubleshoot and solve problems related to projects in graphic design and related areas. Students will be supervised by the instructor and a mentor. 0 lecture hours, 6 lab hours

| ART 240 | Painting I |
| :--- | :--- |
|  | Prerequisite: ART 100 or consent of department |
|  | An introduction to basic painting techniques and color principles applied to the |
| exploration of oil and/or acrylic painting media. 1 lecture hour, 4 lab hours |  | exploration of oil and/or acrylic painting media. 1 lecture hour, 4 lab hours

This course is designed to continue building aesthetic and technical skills begun in Painting I. Emphasis will be placed on the investigations of media usage, color development, and painting as a medium of communication. 1 lecture hour, 4 lab hours

ART 295 Advanced Special Topics in Art*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in art not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

## ASTRONOMY

AST 101 Elementary Astronomy
3 cr . hrs.
An elementary survey of the nature and behavior of the solar system and the regions beyond and of basic physical processes occurring throughout the universe. IAI: P1 906

## BIOLOGICAL SCIENCES

BIO 101 General Biology 4 cr. hrs.
Prerequisite: MAT 010 with a grade of " $C$ " or above within two semesters, or appropriate placement test score, or consent of department+
An introductory biology course covering the chemistry of living organisms, cellular biology, cellular respiration, photosynthesis, genetics, and topics in evolution. Current issues related to the aforementioned topics are discussed. 3 lecture hours, 2 lab hours; IAI: L1 900L

BIO 103 Environmental Conservation
3 cr . hrs.
A look at the conservation of biodiversity, including the study of ecology (interactions of plants and animals with their environment), the study of natural ecosystems and human disturbances placed on them, and the ethical and practical issues involved in conserving biodiversity. Available via Internet only.

BIO 105 Human Biology 3 cr. hrs.
Prerequisite: MAT 010 with a grade of " $C$ " or above within two semesters, or appropriate placement score, or consent of department+
An introductory course that looks at the role of the human being as a species and at how humans are changing and affecting the world in which we live. Selected topics such as cloning, biotechnology, health, general wellness, bio-ethical issues and our impact on the environment will be integrated with how humans affect society. Human physiological systems will also be studied as they relate to topics being studied. IAI: L1 904

BIO 111 \begin{tabular}{l}
General Botany <br>

| Prerequisite: BIO 101 with a grade of "C" or above or consent of |
| :--- |
| department |

\end{tabular}

A study of plant structure, growth, physiology, reproduction, evolution, classification, and distribution. 3 lecture hours, 2 lab hours; IAI: L1 901L

Deals with current topics in biological sciences not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.

BIO 221 \begin{tabular}{ll}
General Zoology <br>

\& | Prerequisite: BIO 101 with a grade of "C" or above and MAT 010 with a |
| :--- |
| grade of "C" or above within two semesters, or appropriate placement test | <br>

\& score, or consent of department+ <br>
\& A comparative study of the animal kingdom focusing on the study of animal <br>
structure, growth, physiology, reproduction, classification, and distribution. This <br>
course is designed for students planning to pursue additional study in the natural <br>
sciences. 3 lecture hours, 2 lab hours; IAI: L1 902L
\end{tabular}

BIO 275 Human Anatomy and Physiology I 4 cr. hrs. Prerequisite: BIO 101 with a grade of "C" or above or ACT science score of $\mathbf{2 5}$ or higher or consent of department via a minimum BIO 101 placement exam score+
A study of the structures and functions of the human body; an integrated study of the systems of the human body including gross and microscopic structures and their physiology. Course covers cells, tissues, chemistry of life, metabolism and the systems: integumentary, skeletal, muscular, digestive and urinary. 3 lecture hours, 2 lab hours; IAI: L1 904L

BIO 276 Human Anatomy and Physiology II 4 cr. hrs. Prerequisite: BIO 275 with a grade of "C" or above or consent of department+
A continuation of BIO 275. Emphasis is on more depth in the physiology of various body systems including the central and peripheral nervous systems, sensory organs, endocrine, cardiovascular, lymphatic, respiratory, male and female reproductive and human development. 3 lecture hours, 2 lab hours

BIO 293 Microbiology
4 cr. hrs.
Prerequisite: BIO 101 with a grade of "C" or above or ACT science score of 25 or higher or consent of department via a minimum BIO 101 placement exam score +
Introduces characteristics, actions and control of microorganisms with emphasis on their relation to health and disease. The application of the principles of microbial control and laboratory techniques will be stressed. 3 lecture hours, 2 lab hours

BIO 295 Advanced Special Topics in Biology*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in biological sciences not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.
+Consent of JWCC Natural Sciences Department Chair is dependent upon the requesting student successfully passing an assessment (placement) exam for the particular prerequisite course. A passing BIO 101 placement exam score is 78 percent or above to opt out of the BIO 101 requirement. Otherwise, the student requesting acceptance into a course without completion of prerequisites must provide substantiated documentation of equivalent transfer credit to enroll in the course.

## BUSINESS

business and the relationships to the environment in which it exists.BUS 110 Entrepreneurship $\mathbf{3}$ cr. hrs.
An introduction to entrepreneurship, including a study of the organizational, financial, and risk-taking skills associated with starting and managing a business enterprise

BUS 121 Principles of Organization and Management $\mathbf{3}$ cr. hrs.
A treatment of fundamental principles applying to all management, including cost control and human relations, for the improvement of operating efficiency.

BUS 122
Principles of Sales I
3 cr. hrs.
Principles of selling goods and services. Topics covered include buyer characteristics and motivation, responsibilities and qualifications of salespeople, and sales techniques.

BUS 123 Principles of Sales II
3 cr. hrs.
Prerequisite: BUS 122 or consent of department
A functional overview of the principles of selling goods and services. Topics include the sales process, sales techniques, sales careers, responsibilities and qualifications of salespeople, and buyer characteristics and motivation.

BUS 125 Supervisory Management $\mathbf{3}$ cr. hrs. Basic techniques supervisors need to know for motivating and handling people, managing their jobs, and succeeding in a supervisory position.

BUS 131 Principles of Marketing $\mathbf{3}$ cr. hrs.
A survey of the field of marketing, designed to give basic understanding of the principles of marketing and the operation of our marketing system.

BUS 141 Principles of Finance $\mathbf{3}$ cr. hrs.
Prerequisite: One semester of accounting or consent of department
Fundamental principles of financial management, including planning, control, and business formation.

BUS 161 Business Law I
3 cr. hrs.
A study of the legal environment of business, including contracts, negotiable instruments, and sales.

BUS 195 Special Topics in Business*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in business not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.and a minimum of a 2.0 GPA

This course offers business students several options for acquiring work-based education in a business environment. Students may elect to participate in an approved internship, job shadowing, or mentoring activity as it pertains to their career goals. The course provides the opportunity to apply classroom theory and experience the dynamics of modern business. Course requires 80 hours of work experience for each credit hour.

In this basic course, students will study the various functions involved in supply chain management, including storage, warehousing, transportation, materials handling, inventory control, purchasing, plant location, and information flow. Course requires students to step beyond the typical lecture mentality to begin self-education. Students will be required to demonstrate the ability to understand the fundamentals of the field and to stretch this understanding to comprehend the intricate processes needed by logistical and transportation managers.

BUS 231
Consumer Behavior
$3 \mathrm{cr} . \mathrm{hrs}$.
An analysis of the factors that affect consumer behavior, including consumer motivation, product quality, economics and advertising, and buying habits. Special attention is given to acquainting prospective sales personnel with consumer behavior that is likely to affect sales.

BUS 240 | Legal/Ethical Issues in Business |
| :--- |
| Prerequisite: Consent of department |
| A discussion course which explores a variety of legal/ethical decision-making |
| procedures via a case study approach in order to help students develop critical |
| decision-making skills useful in dealing with legal and ethical issues likely to |
| confront the business person. |

BUS 295 Advanced Special Topics in Business*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in business not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

## CHEMISTRY

| CHM 100 | General Chemistry <br> Prerequisite: MAT 020 with a grade of "C", or above within two semesters, <br> or appropriate placement test score, or consent of department |
| :--- | :--- |

Fundamentals of chemistry for the non-science major. One semester may be taken by science majors who have not passed the placement test for regular beginning college chemistry for science majors. 3 lecture hours, 2 lab hours; IAI: P1 902L

CHM 103 | Principles of Chemistry I |  |
| :--- | :--- |
|  | Prerequisite: MAT 113 with a grade of "C" or above within two semesters, |
| or appropriate placement test score, or consent of department; Students who |  |

CHM 104 Principles of Chemistry II 4 cr. hrs.
Prerequisite: CHM 103
Continued comprehensive coverage of the basic principles of chemistry including atomic structure, covalent bonding, molecular structure, properties of gases, liquids, solids, and solutions, acid-base chemistry, oxidation-reduction reactions, and electrochemistry. 3 lecture hours, 2 lab hours; IAI: CHM 912

| CHM 195 | Special Topics in Chemistry*** variable 1-4 cr. hrs. <br> Prerequisite: Consent of department <br> Deals with current topics in chemistry not covered in other courses. Topics will <br> vary with needs, interests, and goals of the student and instructor. No topic <br> will be offered more than twice within three years. May be repeated three times <br> with different topics. Topic to be listed on student's permanent academic <br> record. |
| :--- | :--- |
| CHM 201 | Organic Chemistry I <br> Prerequisite: CHM 103 and CHM 104 or equivalent <br> Structure, nomenclature, classification, properties and reactions of organic <br> compounds including saturated and unsaturated hydrocarbons and alcohols. <br> Determination of molecular structure using infrared, nuclear magnetic and mass <br> spectroscopy. Designed for pre-med, pre-pharmacy, engineering, biology and <br> chemistry majors. 3 lecture hours, 4 lab hours; IAI: CHM 913 |
| CHM 202 | Organic Chemistry II <br> Prerequisite: CHM 201 <br> Continued coverage of the structure, nomenclature, classification, properties and <br> reactions of organic compounds including ethers, conjugated double bonds, <br> aromatic hydrocarbons, carbonyl compounds, amines, carboxylic acids and their <br> derivatives, and an introduction to biochemistry. 3 lecture hours, 4 lab hours; IAI: |
| CHM 914 |  | record.

## CHINESE

CHN 101 Elementary Chinese I 4 cr. hrs.

This course provides an introduction to beginning Mandarin Chinese. The goal of this course is to develop communicative competence in listening, speaking, reading, and writing with emphasis on speaking skills. This course will introduce selected topics on traditional Chinese culture, current trends in China and Taiwan, as well as U.S. Interaction with China. 3 lecture hours, 2 lab hours

CHN 102 Elementary Chinese II 4 cr. hrs.

## Prerequisite: CHN 101

This course is a continuation course designed for students who already have basic knowledge and language skills of Mandarin Chinese. The goal of this course is to continue helping students build competence in listening, speaking, reading, and writing with emphasis on daily oral Chinese. This course will also introduce selected topics on traditional Chinese culture, religion and philosophy, and current trends. 3 lecture hours, 2 lab hours

| CMN 080 | Understanding Written Communication*** | $3 \mathrm{cr} . \mathrm{hrs}$. |
| :---: | :---: | :---: |
|  | Prerequisite: Appropriate placement score |  |

An intermediate course in reading and vocabulary development that emphasizes literal and interpretive comprehension of a range of materials and texts for pleasure, professional, and academic reading tasks. Students will be provided instruction and practice in fundamental strategies intended to assist in strengthening the skills and confidence that will prepare them to complete the shorter types of readings often utilized in entry-level college courses.


#### Abstract

CMN 090 Interpreting Written Communications*** $\mathbf{3}$ cr. hrs. Prerequisite: CMN 080 with a grade of " C " or above within two semesters, or appropriate placement test score, or consent of department Instruction in developing one's comprehension of written communication and vocabulary and study skills. For students who need assistance to bring their reading skills to a college level. A grade of "C" or higher and a placement score of 10.0 or higher is necessary to exit the course.


## CMN 101 Introduction to Speech I

3 cr . hrs.
An introduction to the basic principles of oral communication as applied to public speaking. The course emphasizes the mastery of oral communication skills through a variety of exercises in which the student speaks before the group. Involves analysis of such topics as preparation, organization, and delivery. IAI: C2 900

CMN 104 Interpersonal Communication
3 cr . hrs.
An introduction to the basic theories and concepts relevant to face-to-face interaction. Emphasis is placed on the role of communication in the creation, maintenance, and termination of social, romantic, familial and professional relationships. IAI: MC 901
CMN 123 Beginning American Sign Language $\mathbf{3}$ cr. hrs. An introduction to American Sign Language (ASL) and the culture of the deaf community. Basic sign vocabulary and information on beginning structure of the language will be presented.
CMN 195 variable 1-4 cr. hrs. $\begin{aligned} & \text { Special Topics in Communications*** } \\ & \text { Prerequisite: Consent of department } \\ & \text { Deals with current topics in communications not covered in other courses. Topics } \\ & \text { will vary at discretion of the instructor. No topic will be offered more than twice } \\ & \text { within three years. May be repeated with different topics to maximum of four } \\ & \text { credit hours. Topic to be listed on student's permanent academic record. }\end{aligned}$
CMN 220 Mass Media
3 cr. hrs.
Prerequisite: CMN 101 or consent of department
An overview of the nature, functions, and responsibilities of the mass communication industries in a global environment with an emphasis on the media's role in American society. IAI: MC 911
CMN 295 Advanced Special Topics in Communications*** variable 1-4 cr. hrs.

## COMPUTER-AIDED DESIGN

| CAD 101 | Introduction to Drafting and Blueprint Reading for CAD $\mathbf{3}$ cr. hrs. Introduces the student to basic tools and techniques needed in the drafting and blueprint reading profession as applied to CAD. 1.5 lecture hours, 3 lab hours |
| :---: | :---: |
| CAD 102 | Drafting Terminology for CAD <br> Prerequisite: CAD 101 <br> Introduces the student to the terminology used in the drafting field as related to computer-aided design. This course is not intended to be a drafting course. 2.5 lecture hours, 1 lab hour |
| CAD 104 | Introduction to Computer-Aided Design <br> Prerequisite: CAD 101 or concurrent, or consent of department <br> An introduction to the use of CAD. Students are introduced to the capabilities of various hardware and software systems by creating, editing, copying, moving and/or deleting entities. 1.5 lecture hours, 3 lab hours |
| CAD 106 | CAD Applications I <br> The first of three courses in CAD applications. The focus of this course will include parametric modeling, layouts, notes and dimensions, tolerances, and plotting drawings. 1.5 lecture hours, 3 lab hours; IAI: IND 911 |
| CAD 114 | Introduction to Parametric Modeling <br> This course is an introduction to engineering design and graphics, including design problems, sketching, dimensioning, tolerancing, multi-view orthographic representations, auxiliary views, section views, and working drawings. Students are required to use CAD in this course. 1.5 lecture hours, 3 lab hours |
| CAD 195 | Special Topics in Computer-Aided Design*** <br> variable 1-4 cr. hrs. <br> Prerequisite: Consent of department <br> Deals with current topics in CAD not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record. |
| CAD 200 | CAD Applications II <br> Prerequisite: CAD 106 or consent of department <br> A continuation of CAD 106. Items include assembly of parametric models, working drawings, dimensioning and notes. 1.5 lecture hours, 3 lab hours |
| CAD 202 | CAD Applications III <br> Prerequisite: CAD 200 or consent of department <br> A continuation of CAD 200. Items covered include advanced 3-D drawings, reverse engineering of parts and assemblies. 1.5 lecture hours, 3 lab hours |
| CAD 204 | Three-Dimensional Applications <br> Prerequisite: CAD 114 or consent of department <br> Expands upon the area of 3-D; covers drawing enhancements available, translation of drawing files (3-D) into compatible file formats for other operations such as mass property calculations, centers of gravity calculations using SolidWorks. 1.5 lecture hours, 3 lab hours |

This course is a continuation of CAD 204. This project-based course focuses on 3-D sheet metal design techniques and advanced assembly modeling using the current version of SolidWorks. 1.5 lecture hours, 3 lab hours

CAD 230 Introduction to the Manufacturing Processes $\mathbf{3}$ cr. hrs. Acquaints the student with the following areas of manufacturing processes: material control, production control, material handling, quality and cost controls, purchasing procedures, and the J-I-T process. Students will qualify to sit for the MSSC-M3 - Manufacturing Processes and Production Certification.

CAD 231 Tool Design I
3 cr. hrs.
Prerequisite: CAD 200 or concurrent
Exposes the student to the field of tool design; includes the basics of the design of tools, fixtures and jigs. 2 lecture hours, 2 lab hours
CAD 233 Architectural Design I
3 cr. hrs. Prerequisite: CAD 200 or concurrent
Introduces the student to the architectural drafting and design field and its interface to CAD. Covers the drafting techniques that are commonly used in the architectural drafting field and familiarizes the student with building and construction codes. 1.5 lecture hours, 3 lab hours

CAD 299 CAD Internship*** variable 1-5 cr. hrs. Prerequisite: Consent of department
Students are placed in selected areas of manufacturing and production using CAD/CAM (Computer-Aided Design/Computer-Aided Manufacturing) to learn and become acquainted with the many different aspects of the working environment. Dual supervision provided by College staff and the operating business. 0 lecture hours, 10 lab hours

## COMPUTER SCIENCE

An introductory course in the history, characteristics, and significance of computers, including basic hardware and software components and a survey of applications. For persons with little or no background in computers who desire a general knowledge of computers or a foundations course on which to build a strong background in computing. Some "hand-on" experience.

CSC $104 \quad$ Spreadsheets - Core Level (Excel) 2 cr. hrs.
An introduction to the use of the electronic spreadsheet, a software package with many diverse applications in bookkeeping and accounting. Topics include basic spreadsheet terminology and concepts, creating spreadsheets, use of formulas and formatting, moving data within and between workbooks, maintaining workbooks, creating charts, and enhancing the display of workbooks.

CSC 106 Introduction to Computers
3 cr. hrs.
An introductory course in which students learn basic terminology, equipment, history, various software including operating system and application software, and the impact of the computer in society. Includes "hands-on" experience. Satisfies JWCC computer literacy requirement. (Same as AGR 175)

CSC 107 Word Processing - Core Level (MS Word)
2 cr. hrs.
An introduction to the use of word processing software. Topics covered include creating, printing, and editing Word documents; formatting characters and using Help; formatting paragraphs and documents; customizing documents; creating and formatting tables; and enhancing documents with special features.

Introduction to the uses of the microcomputer in a business environment. Software used includes word processing, spreadsheet, data base, and graphics. Associated concepts and terminology also introduced. This course uses popular software package(s).

CSC 112 Computer-Based Problem Solving 3 cr. hrs.
An introduction to problem-solving strategies and methodologies. Programming logic, looping, branching, and arrays are explained through the use of flow charts and pseudo code.

CSC 115 Introduction to Computer Programming (Visual BASIC) 3 cr. hrs. Prerequisite: CSC 112 with a grade of "C" or above or consent of department
Introduction to computer programming, problem-solving processes and structured and object-oriented programming techniques using Visual BASIC.

CSC 116 Database - Core Level (Access)
2 cr. hrs.
An introduction to the use of data management systems. Topics covered include creating a database table, creating relationships between tables, creating a table using a Wizard and using Help, performing queries and filtering records, creating forms, creating reports mailing labels, and charts, importing and exporting data, creating Web pages and using database Wizards. Course will be taught using a popular database management system software package.

CSC 119 Programming I 3 cr. hrs.
Prerequisite: CSC 112 with a grade of " $\mathbf{C}$ ' or above; Intermediate algebra skills recommended
This course involves problem solving on the introductory level, teaches structured and object oriented language, $\mathrm{C}++$, and exposes students to methodology that serves as a foundation for later course work.

CSC 122 Presentation Software 2 cr. hrs.
This course covers presentation software, concepts, and terminology. Topics include preparing, editing, and formatting presentations, adding visual elements to a presentation, sharing and connecting data, linking and embedding objects and files, and sharing presentations. Course uses a popular commercial software package.

CSC 125 Introduction to Desktop Publishing (Publisher) 1 cr. hr.
Prerequisite: Experience with computers and MS Word is strongly recommended
This course is an introduction to desktop publishing using Microsoft Publisher. Students will create informational, periodical, promotional, and specialty publications and stationery.

CSC 136 Linux Operating System
$3 \mathrm{cr} . \mathrm{hr}$.
This course will cover the essentials of installing, configuring, maintaining, administering and troubleshooting the Linux operating system. 2 lecture hours, 2 lab hours

CSC 141 Introduction to Internet
$1 \mathrm{cr} . \mathrm{hr}$.
This course is an introduction to the Internet and the World Wide Web. Topics include navigating the Web, using the Internet as a resource, communicating over the Internet, and working with hypertext documents. This course will be taught using popular Web software. include utilizing e-mail; using calendar for scheduling; managing contacts; creating tasks, notes, and journals.

## CSC 146 Introduction to Web Page Design <br> 2 cr. hrs.

Prerequisite: CSC 100 or CSC 106 or consent of department
An introduction to Web page design. Topics include an introduction to the Internet, Web design theory and associated information, creating a Web page in Hypertext Markup Language (HTML) and creating a Web page using a popular introductory Web page design software package.

CSC 152 Computer Hardware Essentials $\mathbf{3}$ cr. hrs.
This course is designed to improve the student's understanding of computer hardware and peripherals. The student shall gain an ability to determine the source of elementary equipment problems and the ability to isolate problems relating to software and hardware. Through hands-on labs, the student will obtain and demonstrate knowledge of installation, configuration and repair. 2 lecture hours, 2 lab hours

CSC 155 Microcomputer Operating Systems 1 cr. hr.
An introduction to the Microsoft Windows and Apple Macintosh operating environments. Topics include getting started, working with programs, managing files and folders, customizing file and folder management, customizing the control panel and working with utility programs.

CSC 163 Fundamentals of Networking 2 cr. hrs. This course is designed to provide students with the background necessary to understand the local area networking information in Microsoft courses on workstations and networking. This course provides students with the information needed to build a foundation in current networking technology for local area networks, wide area networks and the Internet.

CSC $180 \quad$ Voice Recognition
$1 \mathrm{cr} . \mathrm{hr}$.
Prerequisite: Word processing experience
This course is an introduction to the use of voice recognition software. Topics covered include setting up the voice software, dictating skills, fixing mistakes, capitalizing, moving, inserting, saving, opening and printing using voice commands, and formatting documents.

CSC 186 Desktop Publishing with InDesign
3 cr. hrs.
Prerequisite: CSC 100 or CSC 106, or consent of department
Introduction to the use of the computer as a tool in management and production of text and graphics in visual communication. Students will learn to set up complex, professional documents working with frames, colors, linked text and graphics, transparency, tools and tables. This course will be taught using a popular desktop publishing package.

CSC 190 Portable Document Format (Adobe Acrobat) 1 cr. hr.
Prerequisite: CSC 100 or CSC 106 or consent of department
Focuses on creating and distributing portable documents using industry standard portable document formats. Topics include creating PDF documents from other applications, sharing PDFs, document review processes, PDFs for print or Web use, interactive forms, document security, paperless publishing and collaboration solutions. Course is taught using industry standard electronic document exchange program.

Deals with current topics in computer science not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

CSC 199 Computer Science Internship*** variable 1-5 cr. hrs. Prerequisite: Successful completion of at least 24 credit hours of course work and a minimum of a $\mathbf{2 . 0}$ GPA
Students may elect to participate in an approved apprenticeship, internship, job shadowing, or mentoring activity as it pertains to their career goals. The course provides the opportunity to apply classroom theory and experience the dynamics of modern industry. Students complete 80 hours of on-the-job training per semester for each enrolled credit hour. Course requires 80 hours of work experience for each credit hour.

CSC 204 Spreadsheets - Expert Level (Excel)
2 cr . hrs.
Prerequisite: CSC 104 with a grade of "C" or above
A continuation of CSC 104. Topics include formatting Excel worksheets using advanced formatting techniques, working with templates and workbooks, using advanced functions, working with lists, using Excel's analysis tools, managing and auditing worksheets, collaborating with workgroups, and using data from the Internet and other sources.

CSC 207 Word Processing - Expert Level (MS Word) 2 cr. hrs. Prerequisite: CSC 107 or OFT 102 with a grade of "C" or above
Topics covered in this course include merging documents and sorting and selecting data, formatting with special features, adding visual appeal to documents, formatting with macros and styles, working with shared documents, creating specialized tables and indexes, preparing and protecting forms, and sharing data.

CSC 216 Database - Expert Level (Access)
2 cr. hrs.
Prerequisite: CSC 116 with a grade of "C" or above
Topics include creating and modifying advanced tables, creating and modifying forms, refining queries, using advanced report features, defining relationships, using Access tools, creating database applications, and using data from the Internet and other sources. Course will be taught using a popular database management system software package.

CSC 220 Graphic and Photo Manipulation (Photoshop) $\mathbf{3}$ cr. hrs.
An introduction to the use of the computer in graphic design. Students learn how to repair images, work with layers, make selections, incorporate color techniques, and place type in an image. The course focuses on using painting tools, special layer functions and filters, enhancing specific selections, making color adjust ment, working with clipping masks and paths. The course will be taught using industry-standard photo manipulation software.

CSC 246 Advanced Web Page Design (Dreamweaver) 3 cr. hrs. Prerequisite: CSC 146 or consent of department
A continuation of the concepts and skills learned in CSC 146. Students learn how to design and develop more sophisticated Web pages. Topics include working with text and graphics, links, collecting data with forms, using styles and style sheets, adding media objects, creating and using templates, and working with library items and snippets. Students also learn how to work with a Web server and manage Web site files. Course is taught using industry standard Web design software. suitable for use on Web pages. Topics include working with objects; importing, selecting, and modifying graphics; modifying pixels and manipulating images; working with symbols and interactivity; creating animations and special effects; preparing and publishing movies; and adding sound and video. Course is taught using industry standard software packages.

CSC 248 Computerized Illustration (Adobe Illustrator)
3 cr. hrs.
A course in the most important topics of design principles and vector graphics. Students learn how to create text and gradients, draw and compose an illustration, transform and distort objects, work with layers, create graphs, draw with symbols, and create 3-D objects. Course is taught using industry standard illustration software.

CSC 249 Advanced Graphic Applications
3 cr . hrs.
Prerequisite: CSC 220 or consent of department
Course builds on the knowledge and skills developed in previous applications courses and focuses on advanced techniques working with layers, layer styles, color, blending modes and designing with multiple images. Students learn to use tools to adjust and fine-tune images for more sophisticated, professional effects. Course is taught using industry-standard graphic design software.

CSC 274 Language Survey (Java) 3 cr. hrs. Prerequisite: CSC 112 with a grade of "C" or above or consent of department
This course will guide students in developing applications and applets using the Java programming language. Students will also build visually interesting GUI and Web-based applications and learn the basics of structured and object-oriented programming techniques.

CSC 295 Special Topics in Computer Science*** variable 1-4 cr. hrs. Prerequisite: Consent of department
On demand. Includes such course offerings as Facilities Management and Computerized Farm Records. No topic/problem will be offered more than twice in three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record.

## DIESEL TECHNOLOGY

 rating additional and more challenging major jobs which require troublehshooting, diagnostics, problem solving and completion of major repairs based on diagnostic findings and cost effectiveness. The lab will be operated to simulate an actual diesel equipment service facility. Off campus internships at local diesel service businesses will be incorporated into the program for selected students. During the second semester, students will participate in a learning unit in preparation for obtaining an Illinois CDL (for in-state driving). The expectation for the successful complete of the two-year program would be to earn both the CDL License as well as the industry-recognized diesel technician certification for immediate employment or continuation in a related post-secondary Diesel technology program. 2 lecture hours, 12 lab hours
## DRAMA

DRA 103 Introduction to Drama
3 cr . hrs.
The broad concepts of the aesthetics and form of drama as evidenced in the living theater. Includes reading of plays and the study of dramaturgy with general discussion of elements of the play and theater. IAI: F1 907
DRA 125 Acting I: Movement and Voice
3 cr. hrs.
Intensive training of the physical instrument, utilizing a variety of traditional and non-traditional techniques.
DRA 195 Special Topics in Drama variable 1-4 cr. hrs.
Deals with topics in drama not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

DRA 295 Advanced Special Topics in Drama
variable 1-4 cr. hrs.
Deals with topics in drama not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## ECONOMICS

ECO 101 Principles of Economics I $\mathbf{3}$ cr. hrs.
Introduction to the major areas of modern economic theory and public policy, including fiscal policy, international trade and finance, economic growth and development, and contemporary macro economic problems. IAI: S3 901

## ECO 102 Principles of Economics II <br> 3 cr. hrs.

Market structures, distribution of income, allocation of resources through the market, and contemporary micro-economic problems. IAI: S3 902
ECO 195 Special Topics in Economics*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in economics not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

ECO 295 Advanced Special Topics in Economics*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in economics not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

## EDUCATION


#### Abstract

EDU 100 Introduction to Education 3 cr. hrs. An introduction to teaching as a profession in the American educational system. Presentation of a variety of perspectives on education including historical, philosophical, social, legal, and ethical issues in a diverse society. Includes organizational structure and current trends in school governance. Classroom observation as a clinical component is required. 2.5 lecture hours, 1 lab hour

An introduction to early childhood education philosophies and methods. Students are introduced to the fundamentals of planning developmentally appropriate interactions and techniques. Topics of study include age appropriate methodology, guiding child behavior, internal and external environments, and regulations affecting child care in today's changing world. 2.5 lecture hours, 1 lab hour EDU 124 Health and Safety for Young Children $\mathbf{3}$ cr. hrs. Introduction to the health, safety and nutritional needs of young children. Topics include eating habits, menu planning, safe food storage and handling, recognizing common health concerns, creating a safe environment, and principles of child first aid and CPR for infants and children. 2 lecture hours, 2 lab hours

EDU 150 Caring for Infants and Toddlers $\mathbf{3}$ cr. hrs. Study of the specialized needs of infants and toddlers, including the development of routines and environments that promote effective cognitive, motor and language development. Emphasis is placed on providing appropriate care, stimulating environments, and assessing the needs of infants and toddlers. Cultural and social diversity and the creation of partnerships with families and childcare facilities are integrated throughout the course. 2.5 lecture hours, 1 lab hour


EDU 160 Art and the Young Child 2 cr. hrs.
Study of the materials, methods and techniques, used to promote creative expression in teaching art to young children. Student projects and experiential learning are geared toward age appropriate learning environments. 1 lecture hour, 2 lab hours.

EDU 171 Play and Motor Activities for Young Children 2 cr. hrs. Focus is on the theories, function, and value of play for young children. Included are materials, methods, and techniques for teaching and creating an environment for creative play as well as fine and gross motor activities. 1 lecture hour, 2 lab hours

EDU 195 Special Topics in Education*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in education not covered in other courses are covered. Topics will vary at discretion and need of the department. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.
EDU 201 Educational Psychology
3 cr . hrs. Prerequisite: PSY 101
A study of the application of the principles of psychology to the field of education and a review of educational research in the areas of motivation, intelligence, measurement, evaluation, the learning process, learning styles, and the impact of culture in education. Observational experiences may be included. (Same as PSY 201)
EDU 202 Child Growth and Development 3 cr. hrs.
The study of the development of the child from birth to age 12. Emphasis is given to the physical, motor, social, emotional, language, perceptual, cognitive, moral, psychological, and personality development. Observation of infant, preschool, or school-age child is required. focuses on both knowledge and performance and includes hands-on technology activities. 2 lecture hours, 2 lab hours

## EDU 205 Introduction to Special Education 3 cr. hrs. Prerequisite: EDU 100 or EDU 102, and EDU 202 (EDU 202 may be taken concurrently)

An overview for education majors and those entering special education, presenting the history and philosophy of the various types of special education for exceptional children. Observations and field experience is required.
EDU 210 Language and Literature for the Young Child
3 cr . hrs. The study of how children acquire language, including articulation, semantics, and syntax; includes materials and techniques for teaching language, language arts, literature, pre-reading and reading fluency to young children. Review of quality children's literature required. 2.5 lecture hours, 1 lab hour
EDU 215 Observation and Assessment in Early Childhood 3 cr. hrs. Prerequisite: EDU 100 or EDU 102, and EDU 202
Students will learn the methods of authentic, alternative classroom based assessment with young children. Opportunity given to gain knowledge and skills to observe, interpret and use information to respond to and support children's learning and development. Typical and atypical children will be studied and evaluated. Child observation is required. 2.5 lecture hours, 1 lab hour

EDU 220 Guidance of Young Children $\mathbf{3}$ cr. hrs.
Theories, methods, and techniques for guiding the behavior of children in a group setting is stressed. A variety of behavioral modification techniques will be covered that fall within the established standards of early childhood protocol. 2.5 lecture hours, 1 lab hour
EDU 230 Math for Young Children $\mathbf{3}$ cr. hrs.
Content, materials, methodology, and techniques for teaching math to young children will be learned. Lesson planning and teaching model lessons will take place in field experiences and activities. Experiential learning opportunities will be provided on and off campus for authentic learning and practice. 2.5 lecture hours, 1 lab hour

EDU 240 Science for Young Children $\mathbf{3}$ cr. hrs.
Active hands-on experiential learning will be the focus on teaching science to children using experiments, scientific lesson plans in life, physical, earth and environmental content areas, and technology and focusing on issues of nature and conservation. Indoor and outdoor lab time required. 2.5 lecture hours, 1 lab hour

This course introduces the student to the principles and practices of establishing and/or administering a child care program. The student will focus on administrative techniques in such areas as finances, purchasing, personnel management, client policies, regulatory agencies and public relations.
EDU 260 Curriculum for Early Childhood Programs $\mathbf{3}$ cr. hrs. Prerequisite: EDU 102, EDU 210, EDU 230, and EDU 240 (may be taken concurrently with consent of department)
Philosophy, principles and methods for planning and implementing an educationally and developmentally age appropriate program for young children from infancy through eight years of age. Students will develop effective approaches to promote learning and assessment, family and community relationships and creative interdisciplinary environments. 2.5 lecture hours, 1 lab hour partnerships with families in today's diverse society. Techniques to promote family involvement, communication, commitment, support and acceptance for the educational advantage of the child are emphasized. Field experiences and observations are required. Investigation of community resources that serve families.

EDU 290 Clinical Experience in Education**
$1 \mathrm{cr} . \mathrm{hr}$.
Documented clinical experience involving observation and interaction with children and teachers in a classroom setting to be determined by the JWCC supervising instructor. This experience is planned, guided, and evaluated by a supervising teacher in the classroom according to the syllabus provided by the JWCC instructor. Grades are determined by the completion of required paperwork and evaluation. 0 lecture hours, 3.5 lab hours

EDU 292 Middle School Methods \& Philosophy $\mathbf{3}$ cr. hrs.
This course is a study of the philosophy and methodology designed to be used by middle school teachers to develop a successful curriculum. Following the middle school concept, current methodology using the team teaching approach, advisory groups and cooperative learning projects will be developed to promote successful active hands-on/minds-on learning for young adolescents. Development of thematic integrated units of study in literature, science and social studies will be assigned to promote culturally diverse experiences. Organization skills necessary for planning meaningful fieldtrips will be practiced and explored. Students seeking out middle school credential will benefit from the content and delivery of this class.
EDU 295 Advanced Special Topics in Education*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in education not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.
EDU 298 Early Childhood Education Practicum variable 1-5 cr. hrs. Prerequisite: Completion or co-enrollment in all required early childhood education courses or consent of department
This course is an integration of knowledge gained in the child care curriculum through supervised practical experience in the field of child care. Students are expected to demonstrate competency in a broad range of duties associated with the occupations represented by the cooperating agencies and/or schools. Upon successful completion of this class, students will gain a solid range of experience needed to earn credentials needed for professional development of skills in the childcare industry.

## ELECTRICAL TECHNOLOGY

ELE 100 Survey of the Electrical Trade 2 cr. hrs.
The course is designed to provide career information for an electrician. The type of work performed by an electrician, including working conditions, physical requirements, necessary mechanical aptitude, safety considerations, and other aspects, will be explained. Students will develop skills in the use of basic instruments, equipment, techniques, and hand tools. Electrical codes, blueprints, and electrical systems will be covered. 1 lecture hour, 2 lab hours
ELE 101 Blueprint Reading for Electricians
3 cr. hrs.
This course is designed to help students understand prints and diagrams used by electricians. Drawings of residences and commercial buildings will be studied. The National Electrician Code will be studied along with the exercises. fundamentals. Laboratory activities explore the underlying principles of DC and AC circuitry through measurement analysis and problem solving strategies. 2 lecture hours, 2 lab hours
ELE 120 Introduction to National Electrical Code $\mathbf{3}$ cr. hrs. An introduction to the national electrical code that will provide the student with a working knowledge of the requirements set forth nationally for practicing electricians.
ELE 125 Electrical Applications I $\mathbf{3}$ cr. hrs. Prerequisite: ELE 120, or consent of department
This course provides the basic skills and knowledge that the electrician uses in the day-to-day routine. Students develop skills in applying electrical blueprint reading, wiring diagrams, and schematic drawings to problem situations. In addition, students develop material lists, cite appropriate codes, and identify potential safety hazards associated with specific jobs. Practical laboratory activities are provided. 1.5 lecture hours, 3 lab hours
ELE 130 Residential Electricity
3 cr . hrs.
Prerequisite: ELE 100 and ELE 110, or consent of department
An introduction to residential wiring, plans, specifications, and codes. Students are provided theory and lab assignments in the use of wiring diagrams, hooking up single-phase systems, wiring basic lighting and receptacle circuits, and installing low-voltage switching and control circuits. 1.5 lecture hours, 3 lab hours
ELE 135 Programmable Control
3 cr. hrs. Prerequisite: IMT 120 or consent of department
A practical and theoretical approach to the installation, programming, and maintenance of programmable control (PC) equipment. The course develops skills in the application of PC equipment and computers in manufacturing processes. Practical laboratory activities are provided. 1.5 lecture hours, 3 lab hours

ELE 195 Special Topics in Electrical Technology*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in electricity not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.

## ELE 199

Electrical Technology Internship*** variable 1-5 cr. hrs. Prerequisite: Successful completion of at least 24 credit hours of course work and a minimum of a 2.0 GPA
This course offers electrical technology students several options for acquiring work-based education in the electrical work site environment. Students may elect to participate in an approved apprenticeship, internship, job shadowing, or mentoring activity as it pertains to their career goals. The course provides the opportunity to apply classroom theory and experience the dynamics of modern industry. Students complete 80 hours of on-the-job training per semester for each enrolled credit hour. Course requires 80 hours of work experience for each credit hour.
ELE 205 Commercial Electricity
3 cr . hrs. Prerequisite: ELE 125 or consent of department
Theory and laboratory assignments in commercial wiring, conduit, blueprint reading, safety, and the National Electrical Code as they apply to commercial circuits. Students will plan, lay out, install, and troubleshoot high- and low-voltage circuits and devices used in commercial buildings. 1.5 lecture hours, 3 lab hours

Provides the advanced skills and knowledge that the electrician uses in solving electrical problems found in day-to-day situations. Students develop skills in applying electrical theory to the solution of these problems. In addition, students develop material lists, cite appropriate codes and identify potential safety hazards associated with specific jobs. Practical laboratory activities are provided. 1.5 lecture hours, 3 lab hours
ELE 225 Industrial Electricity

## Prerequisite: ELE 205 or consent of department

An introduction to industrial wiring, blueprint reading, troubleshooting, and the National Electric Code. Theory and lab assignments in bus systems, unity substations, panelboards, subfeeders, conduit, and special equipment. 1.5 lecture hours, 3 lab hours

ELE $230 \quad$ Specialized Electrical Circuits 3 cr. hrs. Prerequisite: ELE 205 and ELE 220, or consent of department
The introduction of specialized electrical circuits, such as emergency lighting, security, communications, fire alarm, and data processing systems. Students will apply knowledge of blueprints, codes and safety precautions in the solution of installation problems. 1.5 lecture hours, 3 lab hours

ELE 235 Electrical Systems Analysis 3 cr. hrs.
Prerequisite: ELE 135 or consent of department
A comprehensive program of laboratory experiments and report writing to master the principles and operation of machines and devices that generate, transform, and use electrical power. Emphasis is placed on the analysis and assessment of complex electrical circuits. 1.5 lecture hours, 3 lab hours
ELE 240 Instrumentation 3 cr. hrs. Prerequisite: IMT $\mathbf{1 2 0}$ or consent of department
This course is designed to introduce the student to various types of instrumentation and control systems and devices. Topics of study include principles of control systems, methods of measurement, and control elements. This course will primarily cover pressure, temperature, level and flow detection instrumentation. 2 lecture hours, 2 lab hours

ELE 295 Advanced Special Topics in Electrical Technology*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in electricity not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.

## EMERGENCY SERVICES

| EMS 130 | First Responder <br> Provides training in emergency medical care for those who may be required to <br> provide the initial care to sustain life and maintain life support until the victim(s) <br> of accidents or sudden illness is cared for by qualified medical personnel. |
| :--- | :--- |
| EMS 150 | Emergency Medical Technician <br> The development of student skills in recognizing symptoms of illnesses and <br> injuries and proper procedures of emergency care; includes demonstration and <br> practice. 1 lecture hour, 10 lab hours |
| EMS 161 | Paramedic I <br> Prerequisite: Admission to the AAS paramedic program, valid Illinois EMT |
|  | license, valid healthcare provider CPR card <br> Corequisite: EMS 166 |

This combined didactic/lab course provides a strong foundation for the student beginning with roles and responsibilities of the paramedic, wellness, legal and ethical topics and a wide range of other preparatory lessons. As the semester progresses, the student will learn more about human anatomy and physiology as well as basic pathophysiology. Pharmacology principles are introduced with a focus on drug classifications, pharmacokinetics and pharmacodynamics as well as medical mathematics, medication administration and venous access. The student will also concentrate on basic and advanced level skills to manage an airway. 5 lecture hours, 2 lab hours

| EMS 166 | Paramedic Clinical Practice I <br> Prerequisite: Admission to the AAS paramedic program, valid Illinois EMT <br> license, valid healthcare provider CPR card <br> Corequisite: EMS 161 |
| :---: | :--- |
| This clinical course introduces the student to the hospital clinical environment |  |
| and provides the student with opportunities to apply learned theory, assessment |  |
| and foundational ALS skills while under the direct supervision and guidance of |  |
| clinical department staff. The course is planned so that the assigned clinical and |  |
| clinical objectives are closely aligned with theory and skills being taught in the |  |
| co-requisite course. 0 lecture hours, 6 lab hours |  |$\quad \mathbf{6 ~ c r . ~ h r s . ~}$

EMS 176 Paramedic Clinical Practice II
$3 \mathrm{cr} . \mathrm{hrs}$.
Prerequisite: EMS 161 and EMS 166 Corequisite: EMS 171
This clinical course provides the students with continued opportunities to apply learned theory, assessment and foundational ALS skills while under the direct supervision and guidance of clinical department staff in the hospital setting and begins the Field Internship. The course is planned so that the assigned clinical and clinical objectives are closely aligned with theory and skills being taught in the corequisite course EMS 171 with a focus on the medical patient. 0 lecture hours, 9 lab hours

EMS 195 Special Topics in Emergency Services*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in emergency services not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.

EMS 199 Paramedic Internship<br>variable $1-5 \mathrm{cr}$. hrs.<br>Prerequisite: EMS 161, EMS 166, EMS 171, EMS 176, EMS 251, EMS 256, EMS 261 and EMS 266

This clinical course provides the student with continued opportunities to apply learned theory, assessment and foundational ALS skills while under the direct supervision and guidance of QAEMS paramedic field evaluators. The student enters the capstone field internship which will create the necessary experiences for the student to meet the established goal of the program.

In this combined didactic/lab course the student will develop a comprehensive understanding of anatomical and physiological variations found in pregnancy, the pediatric and geriatric populations as well as a working understanding of the pathophysiology of illnesses and injuries affecting these populations and the chronically ill or specially challenged patients. The student will also develop a comprehensive understanding of the pathophysiology, assessment and management of a variety of medical conditions including anaphylaxis, toxicology, environmental emergencies, infectious diseases and psychiatric emergencies. 4.5 lecture hours, 5 lab hours

| EMS 256 | Paramedic Clinical Practice III |
| :---: | :---: |
|  | Prerequisite: EMS 161, EMS 166, EMS 171 and EMS 176 |
|  | Corequisite: EMS 251 |

3 cr . hrs. Corequisite: EMS 251
This clinical course provides the student with continued opportunities to apply learned theory, assessment and foundational ALS skills while under the direct supervision and guidance of clinical department staff in the hospital setting. The course is planned so that the assigned clinical and clinical objectives are closely aligned with theory and skills being taught in the corequisite course EMS 250 with a focus on the pediatric patient, obstetrical/labor and delivery and the patient with psychiatric or behavioral disorders. 0 lecture hours, 9 lab hours
$\begin{array}{ll}\text { EMS } 261 & \text { Paramedic IV } \\ & \text { Prerequisite: EMS 161, EMS 166, EMS 171, EMS 176, EMS } 251 \text { and EMS } \\ & 256\end{array}$ Corequisite: EMS 266
The focus of this combined didactic/lab course is integration of assessment findings with principles of epidemiology and pathophysiology to formulate field impressions and learn to develop comprehensive treatment/disposition plans for trauma patients and the development of paramedic operations skills in the areas of ambulance operations, mass casualty, rescue operations, crime scenes, introduction to ICS \& NIMS and hazardous materials. Either International Trauma Life Support or Prehospital Trauma Life Support must be successfully completed this semester. 5 lecture hours, 2 lab hours
EMS 266 Paramedic Clinical Practice IV 3 cr. hrs. Prerequisite: EMS 161, EMS 166, EMS 171, EMS 176, EMS 251 and EMS 256
Corequisite: EMS 261
This clinical course provides the student with continued opportunities to apply learned theory, assessment and foundational ALS skills while under the direct supervision and guidance of clinical department staff in the prehospital ambulance setting. 0 lecture hours, 9 lab hours

## ENGINEERING

EGR 203 Engineering Mechanics: Statics
3 cr. hrs. Prerequisite: PHY 227
This course teaches basic theory of engineering mechanics using calculus, involving the description of forces, movements, and couples acting on stationary engineering structures, equilibrium in two and three dimensions, free-body diagrams, friction, centroids, centers of gravity, and moments of inertia. IAI: EGR 942
EGR 204 Engineering Mechanics: Dynamics
3 cr. hrs. Prerequisite: EGR 203
This course teaches basic theory of engineering mechanics using calculus, involving the motion of particles, rigid bodies, and systems of particles, Newton's

Law, work and energy relationships, principles of impulse and momentum, and application of kinetics and kinematics to the solution of engineering problems. IAI: EGR 943

EGR 221 Electrical Circuit Analysis I 4 cr. hrs.
Prerequisite: MAT 222 and PHY 228; it is recommended, but not required, that students have taken MAT 251
This course is designed to teach principles of electrical circuits and systems as well as basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Other topics covered include topology of electrical networks, Kirchhoff's laws, node and mesh analysis, DC circuit analysis, operational amplifiers, transient and sinusoidal steady-state analysis, AC circuit analysis, first- and second-order circuits, Bode plots, and use of computer simulation software to solve circuit problems. 3 lecture hours, 2 lab hours

EGR 295 Advanced Special Topics in Engineering
variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in engineering not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## ENGLISH

ENG 005 English for Developmental Education*** 3 cr. hrs. This course is designed for students who need to review or develop basic English grammar and writing skills necessary to enter developmental education programs.

| ENG 080 | Basic Writing*** <br>  <br>  <br>  <br> Prerequisite: ENG 005 with a passing grade within two semesters or <br> appropriate placement score or consent of department |
| :--- | :--- | A review of basic grammar, usage, mechanics, and writing skills.

ENG 099 Writing Skills*** 3 cr. hrs. Prerequisite: ENG 080 with a grade of "C" or higher within two semesters or appropriate placement score or consent of department.
A review of grammar, punctuation, and sentence structure and an introduction to paragraph structure and essay writing. A grade of "C" or higher should be received in order to advance to ENG 101.

ENG 101 Rhetoric and Composition I 3 cr. hrs. Prerequisite: ENG 099 with a grade of "C" or above or appropriate placement score
An introductory course in writing at the college level with attention to skills needed at each stage of the writing process. Placement in ENG 101 presupposes competence in English grammar, mechanics, punctuation, and spelling. IAI: C1 900

ENG 102 | Rhetoric and Composition II |
| :--- |
| Prerequisite: completion of ENG 101 with a grade of "C" or above cr. hrs. |
| A continuation of ENG 101; provides further practice in writing at the college |
| level for a variety of purposes and audiences, using both fixed and open or |
| developing forms. Research paper required. IAI: C1 901R |

ENG 114 Fiction
3 cr. hrs.
Prerequisite: ENG 101
A study of fiction, including short stories and novels. IAI: H3 901

A survey course emphasizing elements of visual story telling, aesthetics, and differences among genres such as science fiction, westerns, war, gangster, and horror. Film criticism and interpretation, as well as models of film theory, will be discussed. The history of the motion picture industry will be presented with an emphasis on the origin and evolution of Hollywood. Students will also be instructed in both the creative and technical aspects of film making, including pictorial composition, movement, sound, lighting and editing.

ENG 191 Business Communication 3 cr. hrs. Prerequisite: ENG 099 with a grade of " $C$ " or above or appropriate placement score.
This course instructs students in the techniques of composing effective business letters, memoranda, electronic communication, resumes and cover letters, and reports. It covers introductory business communication principles including intercultural communication, teamwork strategies, business etiquette, meeting strategies, business presentations, and employment communication.

ENG 195 Special Topics in Languages/Literature*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in languages or literature not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

| ENG 231 | American Literature I <br> Prerequisite: ENG 101 or consent of department | $\mathbf{3}$ cr. hrs. |
| :--- | :--- | :--- |
|  | Major American writers, 1620-1865. IAI: H3 914 |  |

ENG 232 American Literature II
3 cr. hrs.
Prerequisite: ENG 101 or consent of department Major American writers, 1865 to present. IAI: H3 915

ENG 241 English Literature I
3 cr. hrs.
Prerequisite: ENG 101 or consent of department
British masters up to the nineteenth century. IAI: H3 912

| ENG 242 | English Literature II <br> Prerequisite: ENG 101 or consent of department | $\mathbf{3}$ cr. hrs. |
| :--- | :--- | :--- |
|  | British masters, nineteenth and twentieth centuries. IAI: H3 913 |  |

ENG 251 World Literature 3 cr. hrs.
Prerequisite: ENG 101 or consent of department
A survey of the literature of Africa, Continental Europe, the Far East, Great Britain, Latin America, Mediterranean, and North America. A variety of literary genres, including poetry, short fiction and drama, will be discussed. IAI: H3 906

ENG 295 Advanced Special Topics in Languages/Literature*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in languages or literature not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

## FIRE SCIENCE TECHNOLOGY

FSC 122 Fire Apparatus Engineer $\mathbf{3}$ cr. hrs.
Study of basic design, operating characteristics, testing, and maintenance of motorized fire apparatus. Includes purchasing contracts and specification writing. (Designed to meet certification requirement for Fire Apparatus Engineer.) 2 lecture hours, 2 lab hours

FSC 123 Pumpers and Tankers 1 cr hr. This course is designed to teach the student the basics of water supply, through hydrants, drafting and water shuttles. It is important for fire companies to be able to obtain water from sources other than hydrants at the fireground, and operate a tanker shuttle to provide adequate water supply for firefighting operations. This skill is not limited to rural applications, and may be necessary to supplement hydranted areas where there is inadequate water supply.

FSC $132 \quad$ Basic Firefighter - Module A
3 cr. hrs.
This course begins to cover the development of the knowledge needed by the firefighter on the fireground with the first of three modules. It will augment and expand upon training received from the fire department at drill sessions. It is also designed to give the fundamental training necessary to the new firefighter and the student just entering fire science who has no knowledge of tools, equipment, and strategies that are essential to the profession.

FSC $134 \quad$ Basic Firefighter - Module B
3 cr . hrs.
This course continues to cover the development of the knowledge needed by the firefighter on the fireground with the second of three modules. It will augment and expand upon training received from the fire department at drill sessions. It is also designed to give the fundamental training necessary to the new firefighter and the student just entering fire science who has no knowledge of the tools, equipment, and strategies that are essential to the profession.
FSC 136 Basic Firefighter - Module C $\mathbf{3}$ cr. hrs.
This course continues to cover the development of the knowledge needed by the firefighter on the fireground with the third of three modules. It will augment and expand upon training received from the fire department at drill sessions. It is also designed to give the fundamental training necessary to the new firefighter and the student just entering fire science who has no knowledge of tools, equipment, and strategies that are essential to the profession.

FSC 141 Skills in SCBA's
1 cr hr.
This course is designed for the beginning student firefighter to become familiar with the self contained breathing apparatus, which they will be using during firefighting operations. The course will educate the firefighter with the background, anatomy, operations and maintenance requirements of this tool. Being proficient with this tool could be the difference between life and death of the firefighter.
FSC $150 \quad$ Building Construction for the Fire Service
3 cr . hrs.
Analysis of various methods of building construction, various types of construction materials and basic principles of construction design. Also covered are the fire resistant features of materials, life safety methods of construction and an introduction to the fire codes and laws.

FSC $160 \quad$ Vehicle and Machinery Operations
3 cr. hrs.
Development of skills in the use and care of equipment needed to perform rescue, extrication, and hazardous control functions. Upon successful completion of this course, the student will be qualified for state certification as ERT. 2 lecture hours, 2 lab hours

Developed by fire fighters within the state of Illinois in conjunction with the Office of the State Fire Marshal following the guidelines of the OSFM and NFPA 1670. This course provides students a means to identify and properly react to uncommon, dangerous and difficult rescue situations in the following topics: structural collapse, rope rescue, confined space, vehicle and machinery, water, wilderness search and rescue, trench and excavation. Further training is required for actual rescue operations and practices.

## FSC 165

Confined Space Rescue Specialist
$3 \mathrm{cr} . \mathrm{hrs}$.
Throughout this class the firefighter will learn to perform rescues in confined spaces which consists of vertical and horizontal vessels and tanks in facilities with vertical and horizontal manways and a variety of obstacles commonly found in an industrial environment. This course meets certification requirements based on NFPA 1670, 1999 edition, NFPA 1006, 2000 edition.

FSC 166 Vehicle and Machinery Technician
3 cr. hrs.
This course is designed to give fire service personnel the basic knowledge and skills to safely perform vehicle and machinery rescues as defined by NFPA 1670 (2004), Operations and Training for Technical Rescue Incidents. The course teaches the skills set forth by the Illinois Office of the State Fire Marshal. 2 lecture hours, 2 lab hours

FSC 167 Rope Operations $\mathbf{3}$ cr. hrs.
This rope operations course has been developed by firefighters within the State of Illinois in conjunction with the Office of the State Fire Marshal. The members of the steering committee followed the guidelines of the OSFM and NFPA 1670, NFPA 1006 and NFPA 1983. This course is meant to provide the student a means in which to identify and properly react to uncommon, dangerous and difficult rescue situations in the area of rope operations.

FSC $170 \quad$ Aircraft Rescue Fire Fighter
3 cr. hrs.
This course concentrates on the information and skills required by the fire fighter in conducting duties related to aircraft fires and aircraft rescue.

FSC 173 Hazardous Materials Awareness 1 cr. hr.
This course educates emergency responders about the basic safeguard in responding to hazardous materials emergencies. Teaches skills necessary for detection of hazardous materials, consulting references for additional information, and implementation of the proper notification process. Meets the requirements of 29CFR1910120HAZWOPER, and NFPA 472.

FSC 174 Hazardous Materials Operations $\mathbf{3}$ cr. hrs.
Study of chemical characteristics and reactions related to storage, transportation, handling hazardous materials (i.e., flammable liquids, combustible solids, oxidizing and corrosive materials, and radioactive compounds). Emphasis on emergency situations and fire fighting and control.

FSC 180 Fire Service and the Law
3 cr . hrs.
An introduction to laws influencing the fire service. General areas include civil action; criminal actions; the judicial system; organization, authority and responsibility of fire service organizations; city liability for acts of the fire department personnel; municipal liability to members of the fire department; fire prevention bureau; laws and rules governing employment of fire fighters; duty owed to the public by members of the fire service; and liabilities of fire fighters.
FSC 184 Fire Department Safety Officer
3 cr. hrs.
This course reviews the various components of an inclusive safety program for the modern fire department and review procedures which impact personnel safety. Available via Internet only.

Deals with current topics in fire science not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.
FSC 270 Fire Fighting Tactics and Strategy I $\mathbf{3}$ cr. hrs.
Explores the company officer's role on the fire ground. Areas of study include fire behavior, truck company functions, engine company functions, safety, prefire planning and hazardous materials response. This program is part of the Illinois State Fire Marshal's Fire Officer I certification program and meets the tactics and strategy requirements of that program.
FSC 280
Fire Fighting Tactics and Strategy II
3 cr . hrs.
This course reviews the fundamentals and advanced techniques in fire suppression tactics and strategy. The content for this course is consistent with NFPA standards for fire officer training and has been validated by the Illinois State Fire Marshal's office for the tactics requirement for Fire Officer II certification in that state. Topics include relevant standards for fire tactics, scene safety, multicompany operations, scene management, response to mixed occupancies and disaster response. Students should have a firm understanding of basic fire ground operations, fire terminology and fire behavior prior to enrolling in this course.
FSC 282 Essentials for the First Responder $\mathbf{3}$ cr. hrs.
The intent of this course is to introduce you to the basic and advanced concepts inherent to the First Responder Safety, Basics of Hazardous Materials Response, Incident Command System (ICS), National Incident Management System (NIMS), and Unified Command. This is not a tactics course. Its focus is not on how to manage a particular incident but rather on the usage of a command structure at any incident. Within this course, the student will participate in the "Courage to be Safe" program from the National Fallen Firefighters; Hazardous Materials Awareness from the University of Missouri's Fire and Rescue Institute, following NFPA 472 and OSHA's 29CFR1910.120; as well as the ICS and NIMS via the FEMA Independent Study online IS-100.b, IS-200.b, IS-700.a and IS-800.b courses. The student will have to give registration information to NFFF, MU and FEMA to access these sites. These certifications are becoming required for more of us working at some level in emergency services.
FSC 290 Basic Fire Service Instructor $\mathbf{3}$ cr. hrs.
Teaches the fire officer how to be more proficient in his or her work and how to use available resources. Also covers how to develop outlines, prepare classes, evaluate students and prepare tests. The student will participate in practice teaching. This course meets the guidelines of the Illinois State Fire Marshal to qualify personnel to conduct training and education courses for fire service personnel.
FSC 292 Fire Service Management I
3 cr . hrs.
Introduces the fire officer to elementary concepts of leadership and basic management styles. Topics include human resource management, organization structure, and public relations and budget management. Satisfies the Illinois State Fire Marshal's Management I requirement for certification in the Fire Officer I program.

FSC 293 Fire Service Management II
3 cr. hrs.
This course covers the study of management principles, theories and techniques for leadership in a fire department. Topics include oral and written communications, group dynamics and safety practices relating to the fire service.
concentrates on fire inspection techniques and pre-fire planning exercises. Course is approved by the Illinois State Fire Marshal for state certification of Fire Prevention and Principles. Completion also contributes to Fire Officer I certification. Available via Internet only.
FSC 295 Advanced Fire Service Instructor
3 cr . hrs.
Introduces the fire officer to concepts and skills required in the process of course development and presentation. Emphasis is placed on identifying the curriculum, developing learning objectives and creating teaching outlines. Course is part of the Illinois State Fire Marshal's Fire Officer II certification program and meets requirements for Illinois state certification as an Instructor II.

FSC 296 Fire Service Management III 3 cr. hrs.
Course is designed to introduce students to some of the essential skills necessary to function effectively as a senior staff officer in the modern fire service. Course is based on the objectives mandated by the Illinois State Fire Marshal's Office, subject to its Fire Officer II designation. For Illinois students, completion of this program will meet the Management III course requirements for that certification. Topics covered include reports and documentation, policy and procedure promulgation, discipline, personnel evaluation, hiring practices, public relations and information management.
FSC $297 \quad$ Fire Service Management IV
3 cr . hrs.
Focus of this course allows students to consider and apply management principles in the context of the functions of senior staff within a fire department. Topics include personnel management, labor relations, health and safety and information management. Course is based on the objectives mandated by the Illinois State Fire Marshal's office, subject to its Fire Officer II designation. Completion of this course will meet the Management IV course requirements for that certification.

## FIRST YEAR EXPERIENCE

FYE 101 Blazing Your Trail
$1 \mathrm{cr} . \mathrm{hr}$.
Directed to new students, this course provides a supportive transition to the culture of higher education. Course objectives aim at preparing students for the college experience by acquiring effective learning techniques and by becoming aware of available college resources for academic and personal growth. This course also develops students' abilities, which will assist them with the complexities of college life.

## GERMAN

GER 101 German I 4 cr. hrs.
An introduction to basic German grammatical structures, pronunciation and vocabulary. The course emphasizes development of communicative competence in German; hence the focus on listening comprehension, reading, speaking and writing skills. The course also addresses various cultural aspects of the Germanspeaking countries and thus develops students' cultural awareness. 3 lecture hours, 2 lab hours

## GER 102 German II <br> 4 cr. hrs.

Prerequisite: GER 101 with a grade of " C " or above
This course is a continuation of German I, building on the skills acquired during German I - basic grammatical structures, pronunciation and vocabulary. Focus of the course will be the further development of communicative competence in German. The emphasis will be on listening comprehension, reading, speaking and writing skills. The course also addresses various cultural aspects of the German-speaking countries and continues to develop students' cultural awareness. 3 lecture hours, 2 lab hours

## HEALTH, PHYSICAL EDUCATION AND RECREATION

HPR 100 Lifetime Fitness and Wellness 2 cr. hrs.
Designed to serve as a guide to implement a complete lifetime fitness program for the student. Students will be introduced to physical activities that will maintain fitness and wellness, as well as prescriptive exercises and activities to develop and maintain a healthy lifestyle. A thorough fitness/risk factor assessment will be conducted. 1 lecture hour, 2 lab hours
HPR 101 History and Principles of Health, Physical Education $\mathbf{3}$ cr. hrs. \& Recreation
History, philosophy and function of physical education.
HPR 105 Health and Hygiene 2 cr. hrs.
A study of personal health issues with the goal of developing decision-making skills. An emphasis is placed on health behavior and health decision making dealing with consumer choices, personal habit choices, sexual choices, and chemical choices. Available via Internet only.

## PHYSICAL EDUCATION ACTIVITIES

Not more than one credit hour may be earned in any one activity. (A limit of four hours from activities in Art, Physical Education, Music and Theater Production or any other activity course may be applied toward completion of the associate in arts or the associate in science degree.)
HPR 150 Introduction to Weight Lifting*** 2 cr. hrs. Instruction in the proper use of weights to develop strength and physical conditioning, with an emphasis on safety. An individual program will be established for each student. Special lab fee. 1 lecture hour, 2 lab hours
HPR 190 Cardio Chisel*** 1 cr hr.
Prerequisite: Physician's consent recommended
This physical class includes a wide variety of muscle conditioning exercises and aerobic activities. Exercises are provided with options of intensity and impact. All students will have an opportunity to achieve a higher level of physical fitness through muscle conditioning and intervals of cardiovascular activities. 0.50 lecture hours, 1 lab hour

HPR 193 Advanced Physical Training I*** 2 cr. hrs.
Prerequisite: Consent of instructor and written medical permission
This class is designed to provide off-season and pre-season training for athletes and other individuals who desire to be in peak physical condition. Advanced strength training, Pilates, and aerobic activities will be utilized to provide the participant with development of both the aerobic and anaerobic systems. 0 lecture hours, 4 lab hours
HPR 194 Advanced Physical Training II*** 2 cr. hrs. Prerequisite: HPR 193 and written medical permission
This class is designed to provide off-season and pre-season training for athletes and others who desire to be in peak physical condition. Builds on the skills learned in Advanced Physical Training I and provides information and skills necessary for creating and implementing a conditioning program. Advanced strength training, Pilates and aerobic activities will be utilized to provide the participant with development of both aerobic and anaerobic systems. 0 lecture hours, 4 lab hours
HPR 195 Special Topics in Health, Physical Education variable 1-4 cr. hrs. \& Recreation***

## Prerequisite: Consent of department

Deals with current topics in health, physical education and recreation not covered in other courses. Topics will vary at the discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to a maximum of four credit hours. Topic to be listed on student's record.

The various aspects of the coaching career, with focus on such topics as how to become a coach, why people coach, how coaches motivate, techniques of coaching, public relations in coaching, and the coach's relationships with other members of the community and institution.

| HPR 235 | Coaching Baseball <br> Prerequisite: Consent of department |
| :--- | :--- | Prerequisite: Consent of department

The various aspects of coaching baseball will be analyzed, focusing on such areas as rules, strategies, skills, fundamentals, and techniques. Various coaching philosophies, as well as the different responsibilities of the coach, will be examined.

HPR 295 Advanced Special Topics in Health, Physical variable 1-4 cr. hrs. Education \& Recreation***

## Prerequisite: Consent of department

Deals with current topics in health, physical education and recreation not covered in other courses. Topics will vary at the discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to a maximum of four credit hours. Topic to be listed on student's record.

## HISTORY

HIS 101 Western Civilization I $\mathbf{3}$ cr. hrs.
A survey of political, social and economic history of the Western world, including the origins and development of its peoples and cultures beginning with a study of the early Middle Eastern civilizations of Mesopotamia and progressing through the civilizations of Egypt, Greece, Rome, and Europe of the Middle Ages, Renaissance, and Reformation. IAI: S2 902

HIS 102 Western Civilization II $\mathbf{3}$ cr. hrs.
A continuation of History of Western Civilization I. A survey of the political, social and economic history of the Western world, including the origins and development of its peoples and cultures beginning with the Renaissance and Reformation and progressing to the present. IAI: S2 903

HIS 111 | World History I |
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| Cultural, economic, and political developments throughout the world from ancient |
| times through the 16th century. IAI: S2 912 N |

HIS 112 World History II 3 cr. hrs.
Cultural, economic and political developments throughout the world from the 17th century to the present. IAI: S2 913N

HIS 121 U.S. History I $\mathbf{3}$ cr. hrs.
History of the United States from the early foundation of the republic to 1877. IAI: S2 900

HIS $122 \begin{aligned} & \text { U.S. History II } \\ & \text { Continuation of HIS } 121 \text { to the present. IAI: S2 } 901\end{aligned}$

## Prerequisite: Consent of department

Deals with current topics in history not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

3 cr. hrs. This course surveys the social, political, and cultural history of the United States from 1945 to the present. Using traditional secondary sources and cultural artifacts, the course encourages students to think critically about the relationship between political developments and the broader strains of a dynamic and contested American culture.

HIS 295 Advanced Special Topics in History***
variable 1-4 cr. hrs.
Prerequisite: Consent of department
Deals with current topics in history not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

## HUMANITIES

HUM 101 | Introduction to Humanities |
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| Study of human values, self-perceptions, and aspirations expressed in drama, film, |
| music, literature, painting, sculpture, and architecture with an emphasis on history, |
| techniques, meaning, and evaluation of individual works. IAI: HF 900 |

HUM 195 Special Topics in Humanities*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in humanities not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.

HUM 200 The Art of Being Human $\mathbf{3}$ cr. hrs.
An interdisciplinary course that incorporates aspects of Western European, Far Eastern and Third World art, music, philosophy, religion, drama, and literature. The humanities are treated as a process leading to the enrichment of human experience. IAI: HF 901
HUM 295 Advanced Special Topics in Humanities*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in humanities not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topic to be listed on student's permanent academic record.

## INDUSTRIAL MAINTENANCE TECHNOLOGY

## IMT 110 Industrial Wiring

2 cr . hrs
This course is designed to provide a theoretical framework for the understanding of industrial wiring and its applications with hands-on activities to reinforce the concepts introduced. Students will learn about the electrical power distribution and the installation and wiring of industrial electrical equipment. 1 lecture hour, 2 lab hours

This course is designed to provide a theoretical framework for the understanding of motors and controls and its applications with hands-on activities to reinforce the concepts introduced. Students will learn about motor control systems, devices, circuits and troubleshooting. 1.5 lecture hours, 3 lab hours
IMT 140 Pumps/Piping 2 cr. hrs.
This course is designed to provide a theoretical framework for the understanding of pump and piping operation and its applications with hands-on activities to reinforce the concepts introduced. Students will learn about maintenance tasks such as pump installation, shaft alignment, wiring, operation, inspection, piping schematics, calculation or pipe lengths, fabrication, installation, and testing of piping circuits, maintenance, troubleshooting and component replacement. 1 lecture hour, 2 lab hours
Fluid Power I (Hydraulics)
3 cr . hrs.
This course is designed to provide a theoretical framework for the understanding of hydraulics and its applications with hands-on activities to reinforce the concepts introduced. Students will learn about hydraulic fundamentals, electrical control of hydraulic systems, hydraulic applications, sensors, and troubleshooting hydraulic circuits. 1.5 lecture hours, 3 lab hours
IMT 155 Fluid Power II (Pneumatics)
2 cr. hrs.
This course is designed to provide a theoretical framework for the understanding of pneumatics and its applications with hands-on activities to reinforce the concepts introduced. Students will learn about pneumatic fundamentals, electrical control of pneumatic systems, pneumatic applications, sensors, and troubleshooting pneumatic circuits. 1 lecture hour, 2 lab hours
IMT 195 Special Topics in Industrial Maintenance variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in industrial maintenance not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.
IMT 199 Industrial Maintenance Internship variable 1-5 cr. hrs. Prerequisite: Successful completion of 16 credit hours of course work or consent of department
Students are placed in selected areas of an industrial maintenance department to learn about and become acquainted with the many different aspects of the working environment. Dual supervision is provided by college staff and the operating business. Course requires 80 hours of work experience for each credit hour.
Mechanical Systems 3 cr . hrs.
This course is designed to provide a theoretical framework for the understanding of mechanical systems and predictive maintenance and its applications with hands-on activities to reinforce the concepts introduced. Students will learn about the installation, use, predictive maintenance, and troubleshooting of mechanical drive components. 1 lecture hour, 4 lab hours
IMT 235 Mechatronics
4 cr. hrs.
Prerequisite: ELE 135
This course introduces the student to industrial robots, programmable logic controllers (PLCs), and troubleshooting integrated systems. The student will learn ladder logic operation of PLCs, programing industrial robots, and troubleshooting methods/practices. 2 lecture hours, 4 lab hours

This course is designed to provide a theoretical framework for the understanding of rigging systems and its applications with hands-on activities to reinforce the concepts introduced. Students will learn about the fundamentals of rigging practices and the techniques to move, lift and install machines.

| LEN 101 | Law Enforcement I - Overview <br> A general examination of the various aspects of police, court, probation, <br> correction, and parole practices. |
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| LEN 103 | Law Enforcement Terminology <br> A programmed course taking the student through a series of police terms, <br> emphasizing both vocabulary and spelling. |
| LEN 111 | Juvenile Justice <br> This course covers definitions of delinquent behavior; development and <br> trends in the juvenile court movement; laws and procedures; the adjudication <br> process - philosophy and practices; causation, prevention, treatment and <br> control. |
| LEN 122Police Patrol Operations and Tactics <br> Prerequisite: LEN 101 preferred <br> A variety of proven police tactics and procedures for handling situations ranging <br> from misdemeanors to felonies. | $\mathbf{3}$ cr. hrs. |

LEN 125 Law Enforcement Report Writing $\mathbf{3}$ cr. hrs. The writing of preliminary and supplementary reports typically used by law enforcement agencies. This course stresses skills involving note taking; the use of forms and formats; and the writing of narrative, analytical and descriptive paragraphs.

| LEN 130 | Probation and Parole <br> Prerequisite: LEN 101 preferred <br> A study of the probation and parole systems on a local, state, and national level <br> and expected future trends.$\quad \mathbf{3}$ cr. hrs. |
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LEN 150 Scientific Criminal Investigation $\mathbf{3}$ cr. hrs. Prerequisite: LEN 101 preferred
This course focuses on the technique of crime scene investigation. Emphasis is placed on the importance of information, interrogation, and instrumentation in the solution and preparation of criminal cases for trial.
LEN 195 Special Topics in Law Enforcement*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in law enforcement not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topic to be listed on student's permanent academic record.

## LEN 205 Adult Corrections Prerequisite: LEN 101

 3 cr. hrs.A study of the historical overview of adult corrections as well as the evaluation of the aims and goals, success and failure of the penal system and an introduction to new experiments in adult corrections. IAI: CRJ 911
LEN 212 Criminal Law $\mathbf{3}$ cr. hrs.
Study of legal terminology and definitions of crimes, criminal procedures, criminal responsibility, analysis of crimes and their proof in the context of practical fact situations.
LEN $260 \quad \begin{aligned} & \text { Criminal Justice Seminar I } \\ & \text { Prerequisite: Consent of department }\end{aligned}$
A consideration of contemporary law enforcement and criminal justice programs and problems.
$\begin{array}{lll}\text { LEN } 261 & \begin{array}{l}\text { Criminal Justice Seminar II } \\ \text { Prerequisite: LEN } 260 \text { or consent of department } \\ \text { Continuation of Criminal Justice Seminar I. }\end{array} & \mathbf{3 ~ c r . ~ h r s . ~}\end{array}$

Deals with current topics in law enforcement not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## LOGISTICS

| LOM 100 | Introduction to Logistics Management <br> This course presents an overview of logistics and supply chain management, <br> customer service, and inventory management for personnel working in retail, <br> wholesale and the manufacturing sectors. Course content is based on the |
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| LOnufacturing Skill Standards Council Certified Logistic Technician (MSSC- |  |
| CLT) curriculum. |  |
| LOM 10Transportation <br> This course presents an overview of transportation, the transportation environ- <br> ment, the basic modes of transportation, the regulatory and public policy <br> frameworks, and emerging transportation management issues. |  |

LOM 102 Supply Chain Management $\mathbf{3}$ cr. hrs.
This course introduces basic supply chain principles including warehousing, transportation and distribution.

LOM 104 Introduction to Warehouse Management $\mathbf{3}$ cr. hrs.
An examination of warehouse management related to physical layout, personnel, strategies, safety and performance and its involvement with inventory and transportation management within the supply chain.

LOM 180 Project Management 3 cr. hrs.
Prerequisite: CSC 104 and CSC 107 or consent of department
This course introduces a practical approach to managing essential resources, people and deadlines. It will address real-world challenges required to bring any project in on time, on target and on budget. Students will learn skills and concepts of essential project management processes, defining requirements, schedules, risk management assessment, change control and project management software applications. This course provides a practical approach to developing projects with opportunities to apply skills and elements by completing activities based upon real-time projects and case studies.
LOM 195 Special Topics in Logistics variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in logistics and supply chain management not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

LOM 199 Logistics Internship
variable $\mathbf{1 - 5} \mathrm{cr}$. hrs. Prerequisite: Consent of department
Students are placed in selected areas of Logistics, Operations Management or Supply Chain Management department to learn about and become acquainted with the many different aspects of the working environment. Dual supervision is provided by college staff and the operating business. Course requires 80 hours of work experience for each credit hour.

This course provides an understanding of the importance of individual components (supplies, manufacturers, distributors and customers) in the operation of a supply chain.

## MANUFACTURING TECHNOLOGY

MFG 103 Introduction to Manufacturing Maintenance 2 cr. hrs. This course provides a basic understanding of tools and equipment used in manufacturing and knowledge of how to improve productivity through predictive and preventive maintenance. Course content is based on the Manufacturing Skill Standards Council (MSSC) Certified Production Technician curriculum. Students will qualify to sit for MSSC-M4 - Maintenance Awareness Certification through the MSSC.

MFG 104 Quality/Continuous Improvement $\mathbf{3}$ cr. hrs. This course provides an introduction to controlling and improving quality in a manufacturing setting. It explores ways that manufacturers use data and analysis to improve quality and introduces students to lean manufacturing techniques. Course content is based on the Manufacturing Skill Standards Council (MSSC) Certified Production Technician curriculum. Students will qualify to sit for MSSC-M2 - Quality and Continuous Improvement Certification through the MSSC.

MFG 106 CNC Turning
3 cr . hrs. Prerequisite: MFG $\mathbf{1 1 1}$ or consent of department
Students will be provided with a blueprint and will be responsible for programming, editing, and choosing cutting tools to create a finished part on a Computer Numerical Control (CNC) turning center. Students will program, set-up and produce finished parts. The course includes programming for producing fast finished parts along with all documentations needed for the parts produced. The course is designed to meet the National Institute of Metalworking Skills (NIMS) Level 1 CNC milling certification. 2 lecture hours, 2 lab hours
$\begin{array}{lll}\text { MFG } 110 & \text { Introduction to CAD/CAM } & \mathbf{3} \mathbf{c r} . \mathrm{hrs} .\end{array}$
A continuation of the study of Computer Numerical Control (CNC) programming with emphasis on advanced milling and turning machine techniques, program set-up, carbide tooling, program input, program editing, and introductory 3-D machining techniques. Trains machine tool qualified individuals in the operation and programming of CNC machining centers interfaced with CAD/CAM software. CNC applications will be applied to the development of projects through secondary laboratory experiences. 1.5 lecture hours, 3 lab hours

## MFG 111 CNC Milling

4 cr. hrs.

## Prerequisite: MFG 135 or consent of department

Students will learn to program, edit, and produce a finished part using a Computer Numerical Control (CNC) machining center. The course will start with basic programming methods and advance to more complex programming codes. Students will be responsible for setting-up and producing finished parts within the tolerances that are specified. The course is designed to meet the National Institute of Metalworking Skills (NIMS) Level 1 CNC milling certification. 3 lecture hours, 2 lab hours

This course provides students with an introduction to the manufacturing world and provides specific instruction to facilitate safe work practices in industrial environments. It introduces manufacturing specializations such as mechatronics, precision machining and welding and covers fire safety, pressurized gases, electrical hazards, safe machine usage, and lock out tag out. Students learn concepts of industrial noise, machine guarding, electrical safety, chemical exposure, hazardous waste, Worker's Compensation laws, liability, and general safety precautions for the workplace. Students will also receive an OSHA 10 Card (Must be in class for 10 hours with an instructor to earn an OSHA card.) Course content is based on the Manufacturing Skill Standards Council (MSSC) Certified Production Technician curriculum and OSHA standards. Students will qualify to sit for MSSC-M1-Safety Certification through the MSSC.
MFG 120 Industrial Robots $\mathbf{3}$ cr. hrs.
This course introduces students to industrial robots and Programmable Logic Controllers (PLCs). Included is the operation of PLCs. Students will learn ladder diagram programming of PLCs and point-to-point programming for industrial robots. 2 lecture hours, 2 lab hours

MFG 135 Precision Machining I
3 cr. hrs. Prerequisite/Corequisite: MFG 113
This course provides an overview of machining processes. The course introduces a wide variety of skills in the planning, machining and finishing of metal products. Students develop basic skills in the use of hand tools, drill press, band saw, engine lathe, vertical milling machine and related equipment. 1.5 lecture hours, 3 lab hours

MFG 195 Special Topics in Manufacturing*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in manufacturing not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record. Possible topics include case studies, simulations, special problems or problem-solving techniques.
MFG 199 Manufacturing Internship variable 1-5 cr. hrs. Prerequisite: Successful completion of 14 credit hours of course work or consent of department
Students are placed in selected areas of a manufacturing facility to learn about and become acquainted with the many different aspects of the working environment. Dual supervision is provided by college staff and the operating business. Course requires 80 hours of work experience for each credit hour.
MFG 235 Precision Machining II 3 cr. hrs. Prerequisite: MFG 135 or consent of department
This course provides a working, hands-on of machining processes. The course introduces a wide variety of skills in the machining and finishing of metal products. Students develop basic skills in the use of hand tools, drill press, band saw, engine lathe, vertical milling machine and related equipment. Not everyone will pass the NIMS testing; this does not mean you will fail the class. 1.5 lecture hours, 3 lab hours

MFG 250 Physical Metallurgy
3 cr. hrs.
This course provides an introduction to the properties of metals, effects of metals in various forms and shapes, thermal treatments, phase diagrams, and principles concerning material science including atomic and crystal arrangements and their effect on mechanical properties. Lab work will include testing ferrous and nonferrous metals through hands-on examination. 2 lecture hours, 2 lab hours

Deals with current topics in manufacturing not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record. Possible topics include case studies, simulations, special problems or problem solving techniques.

## MATHEMATICS

MAT $010 \begin{aligned} & \text { Basic Arithmetic and Prealgebra*** } \\ & \text { This course reviews basic arithmetic skills and develops preliminary algebra }\end{aligned}$ skills. This course is a hybrid directed learning course blending lectures within an open learning web-based classroom.

## MAT 020 Elementary and Intermediate Algebra*** 3 cr. hrs. Prerequisite: MAT 010 with a grade of "C" or above within two semesters, or appropriate placement score, or consent of department

This course briefly reviews prealgebra and develops both elementary and intermediate algebra skills. Students who successfully complete this course will be prepared to enroll in MAT 113, College Algebra. This course is a hybrid directed learning course blending lectures within an open learning web-based classroom.

MAT 095 Special Topics in Developmental Education*** variable 1-4 cr. hrs. Deals with current topics in developmental education not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics will be listed on student's permanent academic record.

MAT 100 Technical Mathematics $\mathbf{3}$ cr. hrs. A course designed to cover mathematical processes and problems that relate to career, technical and workforce applications. Specific topics include fractions; decimals, ratio, proportion and percentage; measurements; and area and volume.

MAT 103 Business Computations I
3 cr. hrs.
A course designed to apply basic arithmetic skills to the areas of business. Specific topics include basic arithmetic review of whole number operations, fractions and decimals; solving percent problems; simple and compound interest; checking and savings accounts; annuities; employee wages, salaries, commissions, federal income tax and social security tax; buying and selling of stocks and bonds.

## MAT 104 Business Computations II 3 cr. hrs. Prerequisite: MAT 103 with a grade of " C " or above within two semesters or consent of department <br> A course designed to cover retail and accounting mathematics. Specific topics

 include business and consumer loans; fire, homeowner's, automobile and life insurance; property tax; income statements and balance sheets; trade and cash discounts plus inventory analysis; preparation of depreciation schedules; markup and markdown; determination of mean, median and mode of a set of data as well as the construction of bar, line and circle graphs. Available only as an Open Learning course. appropriate placement score, or consent of departmentAn introduction to fundamental concepts of mathematics applied to the social sciences. Topics include linear functions; matrices and matrix algebra; geometric and simplex methods in linear programming; annuities, amortization and sinking funds; sets and counting principles; logic; probability including Bayes' Theorem; Markov chain methods; game theory; and the basics of statistics. This course is intended for non-majors.
MAT 109 Elementary Statistics 3 cr. hrs.
Prerequisite: MAT 020 with a grade of "C" or above within two semesters, appropriate placement score, or consent of department
A study of the collection and interpretation of statistical data. Specific topics include description of sample data, probability, probability distributions, sampling, estimation, testing hypotheses, correlation, and regression. IAI: M1 902

MAT 110 Math for Elementary Teachers I $\mathbf{3}$ cr. hrs. Prerequisite: MAT 020 with a grade of "C" or above within two semesters, appropriate placement score, or consent of department
This course is intended for students pursuing a degree in elementary and/or special education. Topics include sets, functions and logic; real number system; number theory; probability and statistics; problem-solving techniques; percent applications. Emphasis will be on active participation on the part of the student in both the learning process and discussions concerning the mathematical content in the elementary school curriculum used to teach mathematics at this level.

MAT 111 | Math for Elementary Teachers II |
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| Prerequisite: MAT 020 with a grade of "C" or above within two semesters, |
| appropriate placement score, or consent of department |

MAT 113 College Algebra $\mathbf{3}$ cr. hrs. Prerequisite: MAT 020 with a grade of "C" or above within two semesters, appropriate placement score, or consent of department
This course is intended for students who plan to continue their college mathematics education or to meet college transfer requirements. Topics include advanced factoring of higher order polynomials; solving quadratic inequalities; advanced topics in relations, functions and their graphs; zeroes and graphs of polynomial and rational functions; and exponential and logarithmic functions.

MAT $114 \quad$| Trigonometry |
| :--- |
| Prerequisite: MAT 020 with a grade of "C" or above within two semesters, |
| appropriate placement score, or consent of department | This course is intended for students who plan to continue their college mathematics education or to meet college transfer requirements. It is the study and analysis of the sine, cosine, tangent, secant, cosecant, and cotangent function; show these functions are used to solve many types of problems involving the sides and angles of triangles; and how these functions are used to solve many types of problems involving cyclic patterns, some that vary with time. Topics include definitions, properties and manipulation of trigonometric functions; applications of trigonometric functions; analytic trigonometry; trigonometric form of complex numbers; and polar coordinates, equations and graphs.

Deals with current topics in mathematics not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record.

MAT $220 \quad$| Analytic Geometry and Calculus I |
| :--- |
| Prerequisite: MAT 113 and MAT 114 with grades of "C" or above within one |
| academic year, appropriate placement score, or consent of department |

MAT 221 Analytic Geometry and Calculus II
4 cr. hrs. Prerequisite: MAT 220 with a grade of "C" or above within one academic year or consent of department
A course designed to extend the concepts of derivative and integral to transcendental functions and to introduce advanced methods of integration. Specific topics include derivatives and integrals of transcendental functions; advanced integration methods; infinite series; introduction to differential equations; polar graphs and calculus of polar curves. IAI: M1 900-2, MTH 902
MAT $222 \begin{aligned} & \text { Analytic Geometry and Calculus III } \\ & \text { Prerequisite: MAT 221 with a grade of "C", or above within one academic }\end{aligned}$ Prerequisite: MAT 221 with a grade of "C" or above within one academic year or consent of department
A course designed to extend previously learned calculus concepts to threedimensional space. Topics include vectors; vector functions and motion; surfaces, coordinate systems and drawing; derivatives of functions of two or more variables; applications of partial derivatives; multiple integration and integration in vector fields. IAI: M1 900-3, MTH 903
MAT 234 Calculus for Social Scientists 4 cr. hrs. Prerequisite: MAT 113 with a grade of "C" or above within one academic year, appropriate placement score, or consent of department
A course designed to introduce the business and social science student to the concepts of derivative and integral. Applications of these concepts stress the use of calculus to solve business and social science problems. Specific topics include relations and functions; algebraic functions; exponential and logarithmic functions; derivatives; applications of derivatives; advanced derivative techniques; integrals; advanced integration techniques. IAI: M1 900
MAT 251 Differential Equations $\mathbf{3}$ cr. hrs. Prerequisite: MAT 222 with a grade of "C" or above within one academic year or consent of department
A course designed to introduce the student to solution methods for ordinary differential equations and their applications. Specific topics include ordinary differential equations of the first order; applications of first order differential equations; linear differential equations; linear differential equations with constant coefficients; applications of second order differential equations; systems of linear differential equations; Laplace transform. IAI: MTH 912
Linear Algebra $\quad 3$ cr. hrs.
Prerequisite: MAT 221 with a grade of "C" or above within one academic
year or consent of department year or consent of department
Linear algebra and matrix theory are introduced in this course. Topics considered include vector spaces, matrices, linear transformations, determinates, and the algebra of matrices. IAI: MTH 911

MUS 102 | Music Appreciation |
| :--- |
| A non technical course designed for the non music major, to develop within the |
| listener an appreciation for music. Includes brief historical background of music |
| and the leading composers of various periods. IAI: F1 900 |

MUS 121 Introduction to Music Literature $\mathbf{3}$ cr. hrs.
A study of the terminology, vocabulary and structure of music literature and style through the history and examination of selected composers and materials. IAI: F1 901

MUS 131 Music Theory/Ear Training I 4 cr. hrs.
A study of the elements of melody and harmony. Special emphasis is placed on music notation fundamentals, reading, writing, and aural skills. This course is intended for students seeking a degree in music; however, others may enroll with consent of instructor. 2 lecture hours, 4 lab hours

MUS $132 \quad$| Music Theory/Ear Training II |
| :--- |
| Prerequisite: MUS 131 |
| Continuation of Music Theory I. Study of the harmonic and melodic practices of |
| the 18th and 19th centuries. Emphasis will be placed on analysis, harmonization, |
| and aural skills. 2 lecture hours, 4 lab hours |

MUS 151-168 Music Ensemble Activities
Band, chorus, vocal show. (May be repeated for credit in the same activity.) Only four semester hours in activity courses from music, physical education, and theater production, combined, may apply toward graduation.

MUS 151 Band*** 1 cr hr.
Membership is open to all JWCC students who show sufficient experience in instrumental music. The band performs both on and off campus. 0 lecture hours, 3 lab hours

MUS 165 Chorus *** 1 cr hr.
Membership is open to all JWCC students. The chorus performs several major concerts as well as performing at selected college functions. 0 lecture hours, 3 lab hours

MUS 168 Vocal Show Ensemble *** $1 \mathrm{cr} . \mathrm{hr}$. Singers are selected from the chorus and concert choir. Instrumentalists need not be members of the aforementioned ensembles. The Vocal Show Ensemble performs a wide variety of literature ranging from Renaissance to modern jazz and pop. 0 lecture hours, 3 lab hours

## Prerequisite: Consent of department

Private music lessons are available in voice, piano, brass instruments, woodwind instruments, percussion instruments and string instruments. Each course is repeatable 1 time.
A special lab fee applies.
MUS 170 Voice I - private lessons in voice
MUS 171 Piano I - private lessons in piano
MUS 172 Organ I- private lessons in organ
MUS 175, MUS 176 Woodwinds I \& II - private lessons in woodwinds
MUS 177, MUS 178 Brass I \& II - private lessons in brass
MUS 179, MUS 180 Percussion I \& II - private lessons in percussion
MUS 181 Strings I - private lessons in strings
MUS 188 Class Piano, Level I 1 cr hr.
Beginning class piano instruction for music majors and non-majors. Assumes no previous keyboard experience. 0 lecture hours, 2 lab hours

MUS 189 Class Piano, Level II 1 cr. hr.
Prerequisite: MUS 188 or consent of department
Class piano instruction for music majors and non-majors. 0 lecture hours, 2 lab hours

MUS 195 Special Topics in Music*** variable 1-4 cr. hrs.
Prerequisite: Consent of department
Deals with current topics in music not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.
$\begin{array}{ll}\text { MUS } 231 & \begin{array}{l}\text { Music Theory/Ear Training III } \\ \text { Prerequisite: MUS 132 } \\ \text { A continuation of Music Theory II. The study of melodic and harmonic practices } \\ \text { of the 19th century. Includes emphasis on chromatic harmony and aural skills. } \\ \text { 2 lecture hours, 4 lab hours }\end{array}\end{array}$
MUS 232 Music Theory/Ear Training IV 4 cr. hrs. Prerequisite: MUS 213
A continuation of Music Theory III. The course includes the study of form and analysis, 20th century compositional techniques, and aural skills. 2 lecture hours, 4 lab hours

MUS 270-281 Applied Music*
variable 0.5-2 cr. hrs.

## Prerequisite: Consent of department

Private music lessons are available in voice, piano, brass instruments, woodwind instruments, percussion instruments and string instruments. Each course is repeatable 1 time.
A special lab fee applies.
MUS 270 Voice II - private lessons in voice
MUS 271 Piano II - private lessons in piano
MUS 272 Organ II- private lessons in organ
MUS 275, MUS 276 Woodwinds I \& II - private lessons in woodwinds
MUS 277, MUS 278 Brass I \& II - private lessons in brass
MUS 279, MUS 280 Percussion I \& II - private lessons in percussion
MUS 281 - private lessons in strings

Class piano instruction for music majors and non-majors. 0 lecture hours, 2 lab hours

MUS 289 Class Piano, Level IV
$1 \mathrm{cr} . \mathrm{hr}$.
Prerequisite: MUS 288 or consent of department
Class piano instruction for music majors and non-majors. 0 lecture hours, 2 lab hours

MUS 295 Advanced Special Topics in Music*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in music not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## NURSING

## NUR 108 Fundamentals I

4 cr . hrs.

## Prerequisite: Admission to the ADN program

Fundamentals I is a basic foundational nursing course which introduces students to the fundamental knowledge of person, health, environment and nursing. The course focuses on concepts including the nursing process, basic nursing care, therapeutic communication, collaboration, comfort, infection control, mobility, nutrition, sensory perception, diversity, spirituality and safety. Students will gain cognitive, technical and interpersonal skills in theory and lab experiences necessary for the practice of nursing. 3 lecture hours, 2 lab hours
NUR 115 Nutritional Concepts for Health $\mathbf{3}$ cr. hrs.
This course is designed to engage students in nutritional aspects that affect not only individuals but the community in which we live. Students will learn to utilize resources available in the modern world to explore nutritional concepts and trends. Students will explore resources such as Health People 2020, the Centers for Disease Control and Prevention, and the National Institute of Health to develop a basic understanding of governmental initiatives for health. By engaging in discussion and acquiring the knowledge of nutritional requirements including digestion and absorption of nutrients, the student will be able to apply this knowledge in their field of study and personal lives. Nutrition has become integral to health.

NUR $118 \quad$| Physical Assessment |
| :--- |
| Prerequisite: Admission to the ADN program |
| This course provides a systematic method for conducting a physical examination |
| of the adult client. Students are introduced to assessment methods and devices |
| used to collect data. Physiologic, social and cultural aspects of assessment are |
| also introduced. Both normal and abnormal assessment findings will be discussed. |
| Students will also learn correct documentation of findings. 0.5 lecture hours, 1 |
| lab hour |

NUR 128 Fundamentals II 5 cr. hrs. Prerequisite: Admission to the ADN Program
This course focuses on basic alterations in major body systems. Concepts covered include acid-base balance, fluid and electrolytes, oxygenation, inflammation/ infection, metabolism, perfusion, elimination, musculoskeletal function, thermoregulation, tissue integrity and cellular regulation. Students will be
introduced to related assessment findings, lab and diagnostic tests, nursing diagnoses, and nursing interventions. Theory and skills are reinforced in classroom, laboratory, and clinical experiences. Identification with the nurse's role is fostered by direct involvement and active participation in the nursing care of assigned clients. 3 lecture hours, 2 lab hours, 3 clinical hours
NUR 138 Foundation of Pharmacology and Disease Process $\quad \mathbf{4}$ cr. hrs.

| NUR 148 | Health \& Illness Concepts <br> Prerequisite: Admission to the ADN program |
| :--- | :--- |
|  | $\mathbf{5 c r}$ chrs. |

This course builds on concepts covered in NUR 128 with an emphasis on chronic illness. Material covered will include assessment and abnormal lab/diagnostic findings, nursing interventions, and medical treatments for each chronic health condition. The nursing process will be utilized to discuss appropriate nursing care. Theory and skills are reinforced in classroom, laboratory and clinical experiences. 2 lecture hours, 2 lab hours, 6 clinical hours
$\begin{array}{lll}\text { NUR } 190 & \begin{array}{l}\text { LPN Scope of Practice } \\ \text { Prerequisite: Admission to the ADN program }\end{array} & \mathbf{4 c r} \text { chrs. }\end{array}$
Provides practical nursing students the knowledge and skills necessary to effectively collaborate with interdisciplinary team members in the healthcare system. Concepts and theories of nursing care delivery models and managing client care, appropriate delegation of client care to unlicensed assistive personnel, communication, time management, conflict resolution, legal responsibilities, ethical issues, decision making, and trends in nursing will be explored. 4 lecture hours

NUR $195 \begin{aligned} & \text { Special Topics in Nursing*** } \\ & \text { Prerequisite: Consent of department }\end{aligned} \quad$ variable 1-4 cr. hrs.
Deals with current topics in nursing for the practical nurse student not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record.
NUR 248 Health \& Illness Concepts II

4 cr. hrs.
Prerequisite: Second year standing in ADN program

This course builds on concepts covered in NUR 148 with an emphasis on acute disease processes. The nursing process will be utilized to discuss related materials including assessment and recognition of complications, abnormal lab/diagnostic findings, and medical and nursing interventions for each acute health condition. Learning will be reinforced in clinical experiences. The concepts of critical thinking and decision making in the role of a registered nurse will be emphasized. 3 lecture hours, 3 clinical hours
$\begin{array}{lll}\text { NUR } 258 & \text { Family Health Concepts } & \mathbf{6} \text { cr. hrs. } \\ & \text { Prerequisite: Second year standing in ADN program } & \end{array}$
This course applies client-centered nursing to the care of children, child-bearing women, and their families. Emphasis is on the unique needs of these individuals and families along the health and developmental continuums. Students participate as a member of the multi-disciplinary health team to promote, maintain, or restore health with common, acute, and chronic health alterations with the childbearing
and childrearing experiences. The focus of clinical is the practice of these concepts in the acute care and community settings. Focus includes patient-centered care, teamwork and collaboration, evidence-based care, quality improvement, safety and informatics. Clinical also provides the opportunity to develop the professional nursing roles. 4 lecture hours, 6 clinical hours.
NUR 268 Complex Health Concepts
6 cr . hrs.
Prerequisite: Second year standing in ADN program
This course builds on concepts covered in NUR 148 and NUR 248 with an emphasis on critical and life threatening conditions and disease processes. The nursing process will be utilized to discuss related materials including assessment and recognition of complications, abnormal lab/diagnostic findings, and medical and nursing interventions for each complex health condition. Emphasis will be placed on collaboration of the interdisciplinary team. Learning will be reinforced in lab and clinical experiences. 4 lecture hours, 6 clinical hours

## NUR 278 Community Health and Mental Health Concepts 4 cr. hrs. Prerequisite: Second year standing in ADN program

This course will cover topics related to the delivery of community and mental health care. Specific health needs of individuals, families, and populations will be addressed across the lifespan. Health education, health promotion, and illness prevention are stressed as strategies for meeting the health needs of populations. Attention will be given to diverse and at-risk populations. Mental health concepts will concentrate on specific mental health disorders and adaptive/maladaptive behaviors. Community resources will be examined in relation to specific types of support offered to diverse individuals and populations. Learning will be reinforced in clinical experiences. 3 lecture hours, 3 clinical hours

NUR 289 RN Leadership 2 cr. hrs.
Prerequisite: Second year standing in ADN program
This course is designed to examine current trends and issues in the rapidly changing healthcare environment that may influence the transition of students to nursing practice. Concepts and theories of nursing care delivery models, leadership and management, delegation of patient care, communication, time management, conflict resolution, legal responsibilities, ethical issues, decision making, issues, trends in nursing, and graduate role integration and professional development will be explored. Strategies for acquiring and maintaining a RN license, planning a career in nursing, and advancing in the profession are developed within the standards set forth by the Illinois Nursing and Advanced Practice Nursing Act.

NUR 295 Advanced Special Topics in Nursing*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in nursing for ADN students not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record.

## NURSING ASSISTANT

## NUA 100 Fundamentals for the Nursing Assistant <br> 3.5 cr. hrs. Prerequisite: Admission to the CNA program; concurrent enrollment in NUA 100 and NUA 103

This course provides theoretical and clinical foundation for skills needed to practice as a nursing assistant with introduction to nutrition, anatomy and physiology, and disease processes. Skills are included to prepare students to acquire and maintain employment. Course is required for the basic nursing assistant certificate.

| NUA 102 | Basic Patient Care Skills <br> Prerequisite: Admission to the CNA program; concurrent enrollment in |
| :--- | :--- |
|  | NUA 100 and NUA 103 |

Focuses on development of basic nursing assistant skills with opportunities to practice patient care in the lab setting. Includes skills for personal care in hygiene, activity, basic assessment, safety, nutrition, elimination, and documentation. Course is required for the basic nursing assistant certificate. 3 lecture hours, 1 lab hours

| NUA 103 | $\left.\begin{array}{l}\text { Nursing Assistant Practicum } \\ \text { Prerequisite: Admission to the CNA program; concurrent enrollment in } \\ \\ \\ \\ \end{array}\right) 1 \mathrm{cr}$. hr. 100 and NUA 102 |
| :--- | :--- |

Introduces the student to the clinical setting with supervised practice of basic patient care. The focus is on application of principles of patient care skills and developing competencies in the long-term care setting. Course is required for the CNA certificate. 0 lecture hours, 3 clinical hours
$\begin{array}{lll}\text { NUA } 107 & \begin{array}{l}\text { Physical Rehabilitation Aide Training } \\ \text { Prerequisite: Certified nursing assistant or consent of department }\end{array} & \mathbf{2 c r . h r} \text {. }\end{array}$
This course will prepare the nursing assistant to provide rehabilitation services for residents living in licensed long-term care facilities. Topics include philosophy, purpose, and techniques of rehabilitation and restorative nursing; medical terminology and abbreviations used in assessment and physical rehabilitation; and normal aging and disease processes associated with aging. 0.5 lecture hours, 1 lab hour

## NUA 118 Introduction to Diagnostic Testing Prerequisite: NUA 100, NUA 102, NUA 103

$1 \mathrm{cr} . \mathrm{hr}$.
An overview of phlebotomy and other speciment collection procedures. Reviews basic information about venipuncture and capillary puncture for the collection of blood speciments, urine, stool, wound, and sputum collection for diagnostic analysis as well as hands-on practice is included. An overview of the basic non-invasive 12 lead electrocardiographic (EKG) procedure. Exploration of anatomy, physiology, and electrical activity of the heart included. Classes will be conducted in the skills lab, offering both theoretical instruction and technical practice. 0 lecture hours, 2 lab hours

## NUA 120 Practicum for the Health Care Assistant Prerequisite: NUA 100, NUA 102, NUA 103 Corequisite: NUA 118

This practicum course provides the student with 60 hours of clinical/practical experience in an ambulatory facility. There will be guided, evaluated opportunities to perform the various clinical, laboratory, and administrative skills of the health care assistant. Students will be able to demonstrate the competencies learned in the classroom and skills lab in the practical setting. Incorporated into this course are regularly scheduled meetings to review what externs have learned, as well as discuss concerns and successes. This will give students an opportunity to learn from one another and strengthen their soft skills.

[^5]
## Advanced Special Topics in Nursing Assistant***

 Prerequisite: Consent of departmentDeals with current topics for nursing assistant not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics to a maximum of four credit hours. Topics to be listed on student's permanent academic record.

## OFFICE TECHNOLOGY

OFT 101 Beginning Keyboarding 2 cr. hrs.
This course is intended to provide students with the ability to operate a standard keyboard rapidly and accurately using the touch method and build basic key boarding skill.
OFT 102 Keyboarding I 2 cr. hrs. Prerequisite: OFT 101 with a grade of "C" or above or consent of department
This course teaches major business document formats, such as memos, letters, reports and tables.
OFT 170 Introduction to the Medical Office 4 cr. hrs.
This course is designed to teach the concepts and procedures associated with entry-level medical office administrative positions. Students will learn basic medical terms, customer service techniques, Microsoft Office tasks, Electronic Health Record (EHR) system functionality and data privacy requirements.
OFT 195 Special Topics in Office Technology*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in office technology not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. (Topics to be listed on student's permanent academic record.)

OFT 211 Keyboarding Speed and Accuracy 1 cr. hr. Prerequisite: OFT 102
This course is designed to help the student increase his or her keyboarding speed and accuracy. Available only as an Open Learning course.
OFT 212 Keyboarding Document Production 3 cr. hrs. Prerequisite: OFT 102 with a grade of "C" or above
This course is designed to help the student develop the strong keyboarding, word processing, and formatting skills that will be needed for communicating and working.
OFT 260 Customer Service 3 cr. hrs.
This course prepares students to meet and exceed customer service expectations of both internal and external customers. The course addresses attitude and personal approach with customers; resolution of customer conflicts and complaints; importance of nonverbal communication and listening skills; appropriate telephone, online and written communication; professionalism; and stress and time management.

OFT 270 Electronic Health Records
3 cr. hrs.
An overview course that focuses on the fundamental concepts, terminology and functions of the electronic health record (EHR). The course will emphasize the principles of creating and maintaining electronic health records in acute and ambulatory health settings. EHR history, benefits, standards, functionality, security, and confidentiality in a variety of healthcare settings will be examined. Students will have hands-on training using the common functions of an electronic health record system.

Teaches medical language of prefixes, suffixes, and combining forms. Students will learn to pronounce and spell medical terms and also learn how to combine prefixes, suffixes, and combining forms to describe a medical term. Course utilizes a body system approach focusing upon specific body systems and providing a brief overview of anatomy and physiology, pathology, word roots, related terms, and special procedures with emphasis on building a working medical vocabulary based on body systems.

## OFT 282 Medical Transcription <br> 3 cr . hrs.

## Prerequisite: OFT 102 and OFT 281

Transcription of authentic physician-dictated reports organized by body systems of medical specialties. Emphasis is on development of accuracy, speed, and medical knowledge for transcription of letters, chart notes, history and physical examination reports, discharge summaries, laboratory reports, diagnostic studies, radiology and pathology reports; using reference materials and other resources efficiently; editing and proofreading techniques; and grammar and punctuation review. Available only as an Open Learning course.

OFT 283 Pharmacology for the Medical Office
2 cr. hrs. Prerequisite: OFT 281
Students are introduced to the mechanisms of actions of drugs so that there is an understanding of why drugs must be dispensed in certain ways. Groupings of most-used drugs into categories provide a basis for understanding basic pharmaceutical concepts. Available only as an Open Learning course.

OFT 284 Medical Coding - ICD
2 cr. hrs.

## Prerequisite: BIO 275 and OFT 281

This is a fundamental course which deals with the International Classification of Diseases (ICD). ICD is designed for the classification of patient morbidity (sickness) and mortality (death) information for statistical purposes. Available only as an Open Learning course.

OFT 285 Medical Coding-CPT
2 cr. hrs.

## Prerequisite: BIO 275 and OFT 281

This is a fundamental course which deals with the Current Procedural Terminology (CPT). CPT is designed for communicating information about clinical services to address the needs of health care professionals, patients, accreditation organizations, and payers for administrative, financial, and analytical purposes. Available only as an Open Learning course.

OFT 286 Patient Billing
3 cr . hrs.
Designed to introduce the concepts and skills needed for a career in the medical office billing field. Students will work with a patient billing and accounting software program to complete assignments and a simulation project. Available only as an Open Learning course.

OFT 299 Office Internship variable 1-5 cr. hrs. Prerequisite: Successful completion of program requirements leading to internship experience and consent of department
The internship program is designed to provide practical "real world" experience in a carefully designed and structured program. The student is given an opportunity to apply skills learned during formal training, as well as learn new skills, by the use of on-the-job experience. Students learn office procedures and develop responsibility and professionalism. Eighty hours of on-the-site work equals one credit hour. Students may enroll for up to five credit hours. 0 lecture hours, 25 lab hours

## PARAMEDICINE (SEE EMERGENCY SERVICES) PHILOSOPHY

| PHL 101 | , |
| :---: | :---: |
|  | Introduction to basic problems, procedures, and systems of philosophy and the development of powers over independent analysis on the student with a constructive attitude toward knowledge. IAI: H4 900 |
| PHL 111 | Logic/Critical Thinking <br> 3 cr . hrs. <br> This course covers inductive and deductive methods in logic. It is designed to assist students in methods of logical analysis and reasoning. IAI: H4 906 |
| PHL 121 | Ethics <br> A study of values. This course is designed to assist students in the development of a philosophic understanding of human nature, moral philosophy, and principles of ethics that will help them assume individualized responsibility in a democratic society. IAI: H4 904 |
| PHL 195 | Special Topics in Philosophy*** <br> variable 1-4 cr. hrs. <br> Prerequisite: Consent of department <br> Deals with current topics in philosophy not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record. |
| PHL 201 | Major World Religions <br> 3 cr. hrs. A study of the great religions of the world today. IAI: H5 904N |
| PHL 211 | Philosophy of Religion <br> A philosophical approach to a study of one's religious experience. IAI: H4 905 |
| PHL 295 | Advanced Special Topics in Philosophy*** <br> variable 1-4 cr. hrs. <br> Prerequisite: Consent of department <br> Deals with current topics in philosophy not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record. |

## PHYSICS

PHY 103 Fundamentals of Physics I 4 cr. hrs.
Prerequisite: MAT 113; MAT 114 is highly recommended and may be taken concurrently; high school physics
General survey of various aspects of mechanics, heat, sound, electricity, magnetism, modern physics optics, and relativity. (Will not transfer for engineering or physics major.) 3 lecture hours, 2 lab hours; IAI: P1 900L

| PHY 104 | Fundamentals of Physics II | $\mathbf{4} \mathbf{c r}$. hrs. |
| :--- | :--- | :--- |
|  | Prerequisite: PHY 103 |  |
|  | A continuation of Physics I. 3 lecture hours, 2 lab hours |  |

PHY 195 Special Topics in Physics*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in physics not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record. engineering and science majors. A thorough coverage of the fundamental principles of physics, including conservation of momentum, energy and angular momentum, Newton's Laws of motion, oscillatory, motion, planetary motion, and special relativity. 4 lecture hours, 2 lab hours; IAI: PHY 911
PHY 228 Principles of Physics II 5 cr. hrs.

Prerequisite: MAT 221, PHY 227
Continuation of the two-semester calculus-based physics sequence. This course is for engineering and science majors. A thorough coverage of the fundamental principles of physics, including electricity, circuits, magnetism, thermodynamics, waves, optics, quantum physics, and atomic and nuclear physics. 4 lecture hours, 2 lab hours; IAI: PHY 912

PHY 295 Advanced Special Topics in Physics*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in physics not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record.

## POLITICAL SCIENCE

| PSC 101 | American Government <br> Fundamentals of federal, state and local governments with emphasis on national <br> government, including the Constitution of the United States. IAI: S5 900 |
| :--- | :--- |

PSC 110 Introduction to Political Science
3 cr. hrs. Survey of major concepts and approaches employed in political science. IAI: S5 903

PSC 131 State and Local Government $\mathbf{3}$ cr. hrs. Comparative analysis of state political systems with emphasis on the executive, the bureaucracy under the executive, state legislatures and county boards. IAI: S5 902

PSC 195 Special Topics in Political Science*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in political science not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

PSC 295 Advanced Special Topics in Political Science*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in political science not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## PSYCHOLOGY

PSY 101 | Introduction to Psychology |
| :--- |
| Basic introduction to the major areas of psychology--the study of behavior and |
| the mind. Areas of emphasis include human development, personality theory, |
| learning, thinking, stress and motivation, mental illnesses, and biological and |
| social aspects of behavior. Course will combine research with real life application |
| throughout. IAI: S6 900 |

PSY 108 Applied Psychology 3 cr. hrs.
Practical applications of the psychological principles that lead to learning efficiency, social adjustment, motivation, interpersonal skills, and successoriented attitudes.

PSY 123 Career Management $1 \mathbf{c r} . \mathrm{hr}$.
Strategy and skills for developing a career management program, particularly self-assessment, decision making, life planning, and communication skills, for the individual entering or re entering the job market, moving within occupations, or changing occupations.

PSY 145 Human Relations in the Workplace 3 cr. hrs. Introduction to the application of guidelines for the field of human relationships in the workplace. The course will examine the information and guidelines to promote effective functioning in the workplace. Topics covered will include diversity in the workplace, groups and organizations, ethics, productivity, teamwork communication, and motivation. Also emphasized will be workplace attitudes for job satisfaction, interpersonal relations, dealing with stress and discrimination, and career choice planning.

PSY 195 Special Topics in Psychology*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in psychology not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

PSY 201 Educational Psychology 3 cr. hrs. Prerequisite: PSY 101
A study of the application of the principles of psychology to the field of education and a review of educational research in the areas of motivation, intelligence, measurement, evaluation, the learning process, learning styles, and the impact of culture in education. Observational experiences may be included. (Same as EDU 201.)

A psychological examination of human development from conception through adolescence. Topics include interaction of diverse influences of biological factors, individual characteristics, and the environment in relation to human growth and development. IAI: S6 903

This course provides a detailed examination of the developmental period of adolescence, including cognitive, social, personality and psychosocial developmental milestones. Physical maturation and the emergence of new social references are discussed. IAI: S6 904

| PSY 212 | Human Sexuality <br> This class will examine the social psychological and sociological aspects <br> of human sexuality. Theories, perspectives and data from the scientific field of <br> sexuality will be discussed. The major goal is for students to gain a greater <br> understanding or their own bodies and arousal, sexual orientation and sexual <br> thoughts, feelings, beliefs and behaviors, which will benefit them in their lives <br> and decision making. (Same as SOC 212) |
| :--- | :--- |
| PSY 221 | Social Psychology <br> Prerequisite: PSY 101 or SOC 101 <br> A study of the impact of social factors on individual and group behavior, including <br> attitudes, behavior, and motivation. (Same as SOC 221.) IAI: S8 900 |

A study of human development from conception across the life span to death. Attention will be given to physical, cognitive, emotional and social aspects of development. IAI: S6 902

PSY 238 Abnormal Psychology
3 cr. hrs. Prerequisite: PSY 101
A study of mental illness including the causes, characteristics, progression and treatment of mental illness. IAI: PSY 905

PSY $250 \quad$ Psychology of Personality
3 cr. hrs. Prerequisite: PSY 101
A study of the major theories, schools, and systems of psychology relating to the growth and structure of individual human personality.

PSY 295 Advanced Special Topics in Psychology**** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in psychology not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## READING (SEE COMMUNICATIONS) RELIGIOUS STUDIES

RST 101 Introduction to the Bible $\mathbf{3}$ cr. hrs.
A study of Jewish and Christian scriptures from a historical viewpoint with emphasis on literary genres in the Bible and the relationship to Western culture. Students enrolled in this course may not enroll in RST 111 or RST 112. IAI: H5 901

[^6]enrolled in this course may not enroll in RST 101. IAI: H5 901

RST 175 Foundational Religious Texts 3 cr. hrs.
The humanistic study of the foundational documents of Judaism, Christianity, and Islam. Course looks at the Hebrew Bible, the New Testament, and the Qur'an, as well as secondary sacred texts that are used by each tradition to explain the meaning of these primary texts. IAI: H5 901

RST 195 Special Topics in Religious Studies*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in religious studies not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

RST 295 Advanced Special Topics in Religious Studies*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in religious studies not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## SCIENCE

SCI 100 Environmental Geology 4 cr. hrs.
An introductory study of forces that continually shape the surface of the earth, including examination of geological formation processes and our impact on the environment. 3 lecture hours, 2 lab hours. IAI: P1 905L

SCI 105 Weather and Climate 4 cr. hrs.
An elementary survey of the properties of the atmosphere and the principles that govern weather and climate change. Real-time weather data will be used to predict weather and historical data archives to study climate. 3 lecture hours, 2 lab hours
SCI 195 Special Topics in Science*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in science not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record.

SCI 295
Advanced Special Topics in Science*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in science not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## SOCIOLOGY

## SOC 101 Introduction to Sociology

3 cr. hrs.
This course is an introduction to sociology as a way of understanding the world and how it applies to everyday life. Major theoretical perspectives and concepts are presented including socialization, culture, the social construction of knowledge, social control and deviance, inequality, race and ethnic relations, poverty, and the sociological imagination. IAI: S7 900
SOC 111 Social Problems $\mathbf{3}$ cr. hrs.
This course describes social problems facing the United States today and identifies how these problems impact and are impacted by our institutions and culture. Students will learn how to interpret social problems by looking at them through the lens of sociological theory. The course examines the causes of various social problems, the effects of these problems on society and possible remedies or policies. IAI: S7 901
SOC 195 Special Topics in Social Science*** variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in social science not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record.

SOC 212 Human Sexuality 3 cr. hrs.
This class will examine the social psychological and sociological aspects of human sexuality. Theories, perspectives and data from the scientific field of sexuality will be discussed. The major goal is for students to gain a greater understanding or their own bodies and arousal, sexual orientation and sexual thoughts, feelings, beliefs and behaviors, which will benefit them in their lives and decision making. (Same as PSY 212)
SOC 221 Social Psychology
$3 \mathrm{cr} . \mathrm{hrs}$. Prerequisite: PSY 101 or SOC 101
A study of social factors in individual and group behavior including social perceptions; motivation and learning; attitudes, conformity and social influences process; and the development of group performances. (Same as PSY 221.) IAI: S8 900

SOC 222 Sociology of Diversity
3 cr. hrs.
This course will focus on the social construction of race and its impact on racial identities and relations. The historical structural foundations of racial inequality in contemporary society will be addressed as well as group relations of other minority groups, including religious and sexual minorities. Students will explore the social implications of difference with particular reference to issues of race, ethnicity, religion, class and gender. Key components of cross-cultural theories, methods and research as they relate to living and working in a multicultural society will also be examined. IAI: S7 903D

SOC 224 Marriage and the Family
3 cr . hrs. The social context of marriage and family patterns in the current American society; nature, purpose and obligations of marriage and family. IAI: S7 902

SOC 243 Introduction to Social Work
3 cr. hrs. Introduction to basic methodologies of social work intervention in problem situations at individual, group and community levels. Prerequisite: Consent of department
Deals with current topics in social science not covered in other courses. Topics will vary at discretion of the instructor. No topic will be offered more than twice within three years. May be repeated with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

## SPANISH

SPN 101 Elementary Spanish I 4 cr. hrs.
Fundamentals of grammar and pronunciation, with emphasis on reading, writing, and conversation. Also incorporates geography, customs, and cultures of the Spanish-speaking world. 3 lecture hours, 2 lab hours
SPN 102 Elementary Spanish II
4 cr. hrs.
Prerequisite: SPN 101 with a grade of "C" or better
Continuation of Elementary Spanish I, continuing to emphasize development of proficiency in the language in five areas: listening, speaking, reading, writing, and cultural understanding. In class, students will be actively engaged in communicating in Spanish and learning about the Spanish-speaking world. 3 lecture hours, 2 lab hours

Prerequisite: SPN 102, appropriate placement score or consent of department
This course focuses on the development of both receptive and communicative competence in oral and written expression through conversations, listening comprehension, videos, and written activities. Grammar includes past, present, future tenses and the subjunctive mood. Cultural concepts and current events from the spanish-speaking world are examined. 3 lecture hours, 2 lab hours

## SURGICAL TECHNOLOGY

SUR 100 Professional Issues for the Surgical Technologist $1 \mathbf{c r}$. hr. This course encompasses professional, self, and workplace management skills for the surgical technologist. Credentialing, communication, professionalism, affective behaviors, standards of conduct, employability skills, hospital organization, the surgical environment and the scope of practice are included.

SUR 110 Introduction to Surgical Technology 8 cr. hrs.
This course introduces the learner to the basic skills and concepts necessary to build a knowledge base for surgical technology. Emphasis is placed on the surgical team and the role of the surgical technologist, asepsis, sterile technique, preparing the patient for surgery and providing a safe surgical environment. Also included are wound closure, hemostasis, surgical pharmacology, instrumentation, and surgical routines and emergencies. Lab and clinical components are included to provide hands-on experiences. 5 lecture hours, 6 lab hours

[^7]This course is designed to provide not only instruction regarding specific surgical procedures, but also to provide actual surgical experience in the operating room. Emphasis is on the role of the surgical technologist in preparing for and participating in general surgeries, minimal access surgeries, obstetric and gynecologic surgery, neurosurgery, peripheral vascular surgical procedures and cardiothoracic surgical procedures. Hands-on experience will be provided at surrounding area hospitals and surgical clinics to allow the student to perfect the skills learned in the classroom and laboratory. 3 lecture hours, 24 clinical hours
SUR 140 Surgical Technology II 9 cr. hrs. Prerequisite: SUR 120
This course is designed to provide the student with the instruction and actual hands-on clinical experience in the operating room for specialty surgeries. The emphasis is placed on the role of the surgical technologist in preparing for and participating in surgeries relating to urogenital procedures, orthopedic procedures, eye procedures, ear, nose throat, and mouth procedures, and plastics and reconstructive surgery. Clinical experience will be provided at surrounding area hospitals and surgical clinics. 3 lecture hours, 24 clinical hours

## Course Descriptions

## SWINE MANAGEMENT (SEE AGRICULTURE) TRUCK DRIVER TRAINING


#### Abstract

TRK 150 Introduction to Truck Driver Training $1 \mathrm{cr} . \mathrm{hr}$. Prerequisite: LOM 100 and LOM 102 or consent of department; Minimum of 21 years of age (or waiver by the Dean of CTHE), certification that medical requirements of Federal Motor Carrier Safety Regulations are met, certification of driving privileges are current with no serious driving violations within the past three years. This course is designed to provide basic information needed by a truck driver. An overview of vehicle braking and electrical, mechanical, and air systems will be covered, as well as Department of Transportation's (D.O.T.) rules and regulations. Successful completion of this course will prepare the student to obtain a Commercial Driver's License (CDL) Learner's Permit.


TRK 180 Truck Driver Training: Fundamentals 4 cr. hrs. Corequisite: TRK 181
Prerequisite: TRK 150
This course is designed to provide basic information needed by an entry-level truck driver. Presents an overview of truck transportation, a description of truck systems and how they work, and basic defensive driving skills. Vehicle braking and electrical, mechanical, and air systems will be emphasized, as well as Department of Transportation's (D.O.T.) rules and regulations, logs and legal topics of interest to trucking and transportation. Additional topics include defensive driving, cargo handling, hazardous materials, and other closely related topics as required by Professional Truck Driver Institute.

## TRK 181 Truck Driver Training: Operations <br> 5 cr. hrs. Corequisite: TRK 180 <br> Prerequisite: TRK 150; Students must possess a valid Illinois, Missouri or Iowa State CDL Learner's Permit

This course is designed to develop the basic skills needed by an entry-level truck driver. Provides extensive hands-on experience in backing, parking, start-up, preventive maintenance, and over the road driving. The hours of training will meet all of the requirements for the student to receive a Professional Truck Driver Institute certificate. Successful completion of this course will require the student to take the necessary exams to obtain a Class A Commercial Driver's License (CDL).

## VETERINARY ASSISTANT


#### Abstract

VET 101 Veterinary Assistant I 3 cr. hrs. This class prepares students to work in the animal care field. Class consists of 30 classroom hours and a minimum of 25 lab hours actually observing and practicing veterinary assistant skills learned from content instruction. Trained assistants support veterinary technicians and veterinarians in a variety of inpatient and outpatient activities. Available during the fall semester only. 2 lecture hours, 2 lab hours

VET 102 Veterinary Assistant II 3 cr. hrs. Prerequisite: VET 101 This class is an extension of VET 101 to further prepare students to work in the animal care field. Students will gain in-depth knowledge in anatomy, pathophysiology of animal diseases, emergency care and anesthesia/surgery protocols. Class consists of 30 online hours and a minimum of 25 hours actually observing and practicing intermediate veterinary assistant skills learned in the classroom setting. Trained assistants support veterinary technicians and veterinarians in a variety of inpatient and outpatient activities. Available during the spring semester only. 2 lecture hours, 2 lab hours


## WELDING

WLD 121 \begin{tabular}{l}
MIG Welding Short Circuit <br>

| Prerequisites: MFG 113 (can be taken concurrently), WLD 180 or consent |
| :--- |
| of department |

\end{tabular}

Learn machine setup and welding techniques of Gas Metal Arc Welding ShortCircuit Transfer. Perform AWS D1.1 Structural Welding Code-Steel code compliant welds on carbon steel in the flat, horizontal, vertical and overhead positions. This course aligns with AWS SENSE 1 Module 5 - Key Indicators 1-7, as well as Module 2 - Key Indicator 7, Module 3 - Key Indicator 3, and Module 9 - Key Indicator 2. Imbedded credential: AWS welder certification. 0.5 lecture hours, 5 lab hours

WLD 122 | Flux Core Inner Shield Welding |
| :--- |
| Corequisites: WLD 123, WLD 124, WLD 180 or consent of department chair. |
| Perform proper weld safety, machine setup and welding techniques for Flux Cored |
| Arc Welding Self-Shielded. Produce AWS D1.1 Structural Welding Code-Steel |
| compliant welds on carbon steel in the flat, horizontal, vertical and overhead |
| positions. This course aligns to SENSE 1 Module $6-$ Key Indicators 1, 2 and |
| 8-12, as well as Module 2-Key Indicator 7, Module 3-Key Indicator 3, and |
| Module $9-$ Key Indicator 2. 0.5 lecture hours, 1 lab hour |

WLD 123 Flux Core Dual Shield Welding 1 cr. hr. Corequisites: WLD 122, WLD 124, WLD 180 or consent of department chair. Students learn proper weld safety, machine setup and welding techniques for Flux Cored Arc Welding (Gas Shielded). Produce AWS D1.1 Structural Welding CodeSteel compliant welds on carbon steel in flat, horizontal, vertical and overhead positions. This course aligns to AWS SENSE 1, Module 2 - Key Indicator 7, Module 3 - Key Indicator 3, Module 6 - Key Indicators 1-7, and Module 9 - Key Indicator 2. 0 lecture hours, 2 lab hours

| WLD 124 | MIG Welding Spray Transfer |
| :--- | :--- |
| Corequisites: WLD 122, WLD 123, WLD 180, consent of department |  |
| This course focuses on proper weld safety, machine setup and welding techniques |  |
| of Gas Metal Arc Welding Spray Transfer. Perform AWS D1.1 Structural Welding |  |
|  | Code-Steel compliant welds on carbon steel in flat and horizontal positions. This |
| course aligns with AWS SENSE 1 Module 2 - Indicator 7, Module 3-Key |  |
| Indicator 3, Module 5-Key Indicators 1, 2 and 8-12, and Module $9-$ Key |  |

$\left.\begin{array}{ll}\text { WLD } 125 & \begin{array}{l}\text { Stick Welding I } \\ \text { Prerequisites: MFG 113 (may be taken concurrently) and WLD } \mathbf{1 8 0} \text { or }\end{array} \\ \text { consent of department } \\ \text { This course focuses on safety, amperage settings, polarity and the proper selection } \\ \text { of electrodes for the shielded metal arc welding process. Students perform AWS }\end{array}\right\}$

WLD 128 TIG Welding Aluminum $1 \mathrm{cr} . \mathrm{hr}$. Prerequisites: MFG 113 and WLD 180
Corequisites: WLD 125, WLD 126, WLD 127, WLD 129, WLD 130, or consent of department
This course focuses on proper weld safety, machine setup and welding techniques for gas tungsten arc welding. Perform AWS D1.2 Structural Welding CodeAluminum compliant welds on aluminum in the flat and horizontal positions. This course aligns to AWS SENSE I, Module 2 - Key Indicator 7, Module 3 Key Indicator 3, Module 7 Key Indicators 1, 2 and 13 - 17, and Module 9 - Key Indicator 2. 0 lecture hours, 2 lab hours

| WLD 129 | TIG Welding Stainless Steel |
| :--- | :--- |
| Prerequisites: MFG 113 and WLD 180 |  |
| Corequisites: WLD 125, WLD 126, WLD 127, WLD 128, WLD 130, or |  |
| consent of department |  |
| Learn weld safety, machine setup and proper welding techniques for Gas Tungsten |  |
| Arc Welding. Produce AWS D1.6 Structural Welding Code-Stainless Steel |  |
| compliant welds on austenitic stainless steel in flat, horizontal, and vertical |  |
| positions. This course aligns to AWS SENSE I, Module 2 - Key Indicator 7, |  |
| Module 3 - Key Indicator 3, Module 7 Key Indicators 1, 2 and 8-12, and Module |  |
| 9- Key Indicator 2. 0 lecture hours, 2 lab hours |  |consent of department

Visually examine and test various weldments and thermally cut surfaces per multiple welding codes, standards, and specifications. This course aligns to AWS SENSE I, Module 9: Welding Inspection and Testing Principles.


#### Abstract

WLD 161 Interpreting Welding Prints $\mathbf{3}$ cr. hrs. Students interpret welding prints and sketches focusing on English/Metric measurements, AWS welding symbols, and fabrication requirements. Learn to prepare, assemble and tack weld parts together complying to a print using proper materials and tools. This course aligns to SENSE 1 Module 3: Drawing and Welding Symbol Interpretation, Key Indicators 1 and 2.


WLD 180 | Thermal Cutting Processes |
| :--- |
| Corequisite: MFG 113 |
| Practice proper safety, equipment setup and cutting techniques for manual and |
| mechanized OxyFuel, Plasma and Air Arc cutting, scarfing and gouging on carbon |
|  |
| steel, aluminum and stainless steel in the flat and horizontal positions conforming |
| to AWS C4.1. This course aligns to AWS SENSE 1 Module 2-Key Indicator 7, |
|  |
| Module 8 Units 1-4, and Module 9-Key Indicator 1. 0.5 lecture hours, 3 lab |
| hours |

| WLD 194 | Capstone Project |
| :--- | :--- | :--- |
|  | Prerequisites: MFG 113 and WLD 180 |
|  | Corequisites: WLD 125, WLD 126, WLD 127, WLD 128, WLD 129, and |
|  | WLD 130 |

Design, fabricate, weld to an appropriate welding code, and finish assemble a quality manufactured product using layout tools, saws, grinders, drills, Oxyfuel, Plasma, Air Carbon Arc and multiple welding processes. 0 lecture hours, 2 lab hours

WLD 195 Special Topics in Welding***
variable 1-4 cr. hrs. Prerequisite: Consent of department
Deals with current topics in welding not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics. Topics to be listed on student's permanent academic record.

WLD 199
Welding Internship
variable $1-5 \mathrm{cr}$. hrs.
Prerequisite: WLD 185 or consent of department
Students are placed in selected areas of manufacturing and production using proper welding techniques to learn about and become acquainted with the many different aspects of the working environment. Dual supervision is provided by college staff and the operating business. Course requires 80 hours of work experience for each credit hour.

## II. ADULT EDUCATION COURSES

Courses in this section are designed to improve basic skills, meet secondary equivalency requirements, meet U.S. citizenship and Senate Bill 195 requirements, assist non-native speakers of English, and provide pre-employment skills. They do not apply to AA, AS, AES, AFA, or AAS degrees or certificates. Each course is repeatable 3 times.

[^8] Courses that include basic skills, such as literacy, reading, communication and computational skills; library and study skills; and family education skills.

## ABE 020 Bridge to Manufacturing $3 \mathrm{cr} . \mathrm{hrs}$. Prerequisite: TABE reading (grade) level of 6.0 or higher or consent of instructor

This course is designed to educate and train workers for sustainable employment or post-secondary education in the field of Manufacturing. The course combines adult education academics with the skills needed in the workplace through contextualized instruction in reading, writing, math, science and social studies. The course includes a combination of identified workplace competencies, career exploration and basic skills presented in an occupational context.
ABE 030 Bridge to Healthcare $\mathbf{3}$ cr. hrs. Prerequisite: TABE reading (grade) level of 6.0 or higher or consent of instructor
This course is designed to educate and train workers for sustainable employment or post-secondary education in the Healthcare field. The course combines adult education academics with the skills needed in the workplace through contextualized instruction in reading, writing, and math. The course includes a combination of identified workplace competencies, career exploration, and basic skills presented in an occupational context.
ASE 001 Advanced Skills-General $\mathbf{3}$ cr. hrs. Prerequisite: TABE reading (grade) level of 9.0-12.9
Courses that include instruction in reading, writing, literature, mathematics, science and social studies in preparation for the GED examination. Includes study skills and test preparation skills.

ASE 020 Bridge to Manufacturing $\mathbf{3}$ cr. hrs. This course is designed to educate and train workers for sustainable employment or post-secondary education in the field of Manufacturing. The course combines adult education academics with the skills needed in the workplace through contextualized instruction in reading, writing, math, science and social studies. The course includes a combination of identified workplace competencies, career exploration and basic skills presented in an occupational context.
ASE $030 \quad$ Bridge to Healthcare
3 cr. hrs.
This course is designed to educate and train workers for sustainable employment or post-secondary education in the Healthcare field. The course combines adult education academics with the skills needed in the workplace through contextualized instruction in reading, writing, and math. The course includes a combination of identified workplace competencies, career exploration, and basic skills presented in an occupational context.
ESL 001 Beginning ESL (English as a Second Language)
3 cr . hrs.
Course designed for beginning ESL (English as a Second Language) students who need a thorough review of basic English language structures and vocabulary. The course covers the four skills of listening, speaking, reading, and writing. The goal of the course is to improve the student's English communication skills so he or she can use English more successfully in daily life and in the workplace.
ESL 002 Intermediate ESL (English as a Second Language)
3 cr. hrs.
Course designed for ESL (English as a Second Language) students who have completed the beginning level. The course covers the four skills of listening, speaking, reading, and writing at an intermediate level. The goal of the course is to improve the student's English communication skills so he or she can use English more successfully in daily life and in the workplace. course covers the four skills of listening, speaking, reading, and writing at an advanced level. The goal of the course is to improve the student's English communication skills so he or she can use English more successfully in daily life and in the workplace.

## ESL 020 Bridge to Manufacturing $\mathbf{3}$ cr. hrs. Prerequisite: English language proficiency at the low-intermediate ESL level or above

This course is designed to educate and train workers for sustainable employment or post-secondary education in the field of Manufacturing. The course combines adult education academics with the skills needed in the workplace through contextualized instruction in reading, writing, math, science and social studies. The course includes a combination of identified workplace competencies, career exploration and basic skills presented in an occupational context.
ESL 030 Bridge to Healthcare 3 cr. hrs. Prerequisite: English language proficiency at the low-intermediate ESL level or above
This course is designed to educate and train workers for sustainable employment or post-secondary education in the Healthcare field. The course combines adult education academics with the skills needed in the workplace through contextualized instruction in reading, writing, and math. The course includes a combination of identified workplace competencies, career exploration, and basic skills presented in an occupational context.
JSK 001 Workforce Skills 2 cr. hrs.
This course focuses on the development of skills related to job searches, creating a resume, writing a letter of application, interviewing, and the post-interview follow-up. This course is designed for students at various levels of ability.

# FACULTY AND STAFF <br> PRESIDENT'S OFFICE 

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Manager, Manufacturing Tech Programs Jim Fuhrman
Coordinator, Student Navigation
Kristen Johnson
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Transition Advisor
Debra Coet-Hanna
Adult Education, Transition Coordinator Vacant

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Welding Instructor
Ron Kraft
Certificate, Quincy Technical School

| INSTRUCTIONAL SUPPORT AND | Steven E. Soebbing |
| :---: | :---: |
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| Director of Instructional Support and Distance | M.Mus., University of Nebraska-Lincoln |
| Learning | D.M.A., University of Nebraska-Lincoln |
| Stephanie Phillips | Languages \& Communication Instructor |
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| Coordinator, Instructional Technology and | M.A., Eastern Illinois University |
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| HUMANITIES, AND FINE ARTS | B.A., Quincy University |
| Co-Department Chair and Dean of Arts and | B.S., Quincy University |
| Sciences | MSLIS, Dominican University |
| Mike Terry (Interim) | Manager of Learning Resources Center |
| B.S., Truman State University | Erin Ealy |
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| Co-Department Chair and Professor of | MSLIS, University of South Carolina |
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| Christina Farwell | Sharon Labroo |
| B.A., Iowa Wesleyan | Anne Scott |
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The Official Seal of John Wood Community College depicts John Wood, pioneer and trailblazer, standing tall and strong, looking to a future filled with opportunity. The plat map he holds in his hands reflects planning and the pursuit of knowledge, while the cornstalk rising from the fertile field is at once a representation of agriculture as well as a metaphor for the seed of knowledge planted in the mind of the student, carefully cultivated, and maturing to benefit many. The bluffs and tree line of the Mississippi River Valley are enduring landmarks, while the bridge and roads identify strengths in industry, transportation, and technology. Finally, the cog border symbolizes John Wood Community College as an important part of a greater mechanism. Like John Wood the man, John Wood Community College is a pioneer of innovation helping to build a better future.

[^9]
[^0]:    ${ }^{1}$ Prerequisite required
    ${ }^{2}$ Does not meet IAI GECC
    ${ }^{3}$ Effective May 1999, the Illinois Articulation Initiative requires a "C" grade or higher in order for transfer Students to get general education credit for the writing courses.
    ${ }^{4}$ AAS degree only

[^1]:    *Or 3 hrs. Social \& Behavioral Sciences
    ${ }^{1}$ Prerequisite required
    ${ }^{2}$ Does not meet IAI GECC
    ${ }^{5}$ Meets international awareness requirement

[^2]:    ${ }^{1}$ Prerequisite required
    ${ }^{2}$ Does not meet IAI GECC
    ${ }^{7}$ Includes a laboratory
    ${ }^{\mathbf{8}}$ Meets IAI only when both MAT 110 and MAT 111 are taken
    ${ }^{9}$ May be used only as the 2nd math course in the AS degree

[^3]:    NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete. General education courses (up to 10 credit hours) are acceptable, and encouraged, as electives for students intending to transfer their credit hours to a four-year university.

[^4]:    NOTE: Only students who do not need additional coursework and who take the number of credits or courses as listed each semester can complete the program in the time given. Others will take longer to complete. If a student's progression is interrupted, re-entry into the program will require Department Chair approval, and a repeat of previous coursework or remediation on material previously learned may be required.

[^5]:    NUA 195 Special Topics in Nursing Assistant*** variable 1-4 cr. hrs. Prerequisite: Consent of department
    Deals with current topics for nursing assistant not covered in other courses. Topics will vary with needs, interests, and goals of the student and instructor. No topic will be offered more than twice within three years. May be repeated three times with different topics to a maximum of four credit hours. Topics to be listed on student's permanent academic record.

[^6]:    RST 111

[^7]:    SUR 114 Surgical Pharmacology
    2 cr. hrs.

    ## Prerequisite: Admission to the Surgical Technology AAS Degree

    This course is designed to enhance pharmacology information the student has already covered in prior coursework. It will further prepare the surgical technologist to safely handle those medications required for surgical cases. The emphasis is on reviewing drug sources, forms, actions and effects, routes of administration, classifications, and names; a more in-depth review of math, units of measures and conversions, drug handling techniques, and commonly used medications in the operating room. Methods and techniques of anesthetic administration are also included.

[^8]:    ABE 001 Beginning Skills-General 3 cr. hrs. Prerequisite: TABE reading (grade) level of 0-3.9 or consent of instructor Courses that include basic skills, such as literacy, reading, communication and computational skills; library and study skills; and family education skills.

[^9]:    - Unanimously adopted by the JWCC Board of Trustees on January 21, 2009
    - Seal design by William Beard, JWCC student 2008-09 and current JWCC staff member
    - Narrative description by James Huber, JWCC student 2008-09

