JOHN WOOD COMMUNITY COLLEGE
2022-2023 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 641.4337
Adult Education/Literacy 641.4962
Agricultural Sciences Office 641.4558
Athletics...641.4976
Bookstore...641.4230
Business Office 641.4211
Campus Police Department ....641.4291 (non-emergency)
.... OR 641.4949 (emergency)
Career Services Center 641.4152
Community-Based Outreach/Continuing Education........................641.4941
Academic Talent Search/Upward Bound 641.4383
Financial Aid Office 641.4333
Health Sciences 641.4551
Help Desk 641.4325
Instruction 641.4182
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
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, gender, 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): Rob Hodgson, ADA/504 Compliance Officer, 217.641.4349; Dana Keppner, Affirmative Action Office and Title IX Deputy Coordinator, 217.641.4241; or Tracy Orne, Title VI Coordinator and Title IX Co-ordinator, 217.641.4300.

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 6:00 p.m. at one of JWCC's educational facilities. Board meetings are open to the public. Board members as of January 2020 included the following:

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 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 was 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.

BOB 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 Illinois FBFM program since July 1, 1984 and was named CEO in December 2019. 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. He serves as a director for United Community Bank. He is past chairman of the Panther Pride Foundation for Central Schools. He was selected to the Illinois Agricultural Leadership Program Class of 1990. Bob was the 2018 recipient of the the John Wood Community College distinguished alumnus award.

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 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-Scott 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 is actively serving at Columbus Road Baptist Church Worship Ministries.

LARRY L. FISCHER of Quincy was elected to the Board in 2011. 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.

PAULA HAWLEY of Griggsville was elected to the JWCC Board in 2021. She is a native of Pike County and has lived there for over 50 years, having attended her first college classes at the John Wood Community College Old East School site in Pittsfield. Paula currently serves on the finance and audit committee. Paula is newly retired from K-12 education and worked for 33 years in the Pikeland School District as a teacher, assistant principal, assistant superintendent, and superintendent. She served as the district's superintendent for 15 years. In her tenure as superintendent, she served on various education boards and committees including the West Central Region Vocational Board and the Illinois Association of School Administrators Board of Directors (IASA) where she servied as President of the organization for the 2020-2021 school year. Paula holds a B.A. in Education from Stetson University, an M.A. in Educational Administration from the University of Illinois at Springfield, and an Ed.S. in Education Leadership from Western Illinois University. She is an Illinois licensed K-12 teacher, principal, and administrator and a graduate of the National Institute for School Leadership (NISL) sponsored by the Tracy Family Foundation.

RANDY G. GREENWELL of Quincy was elected to the Board in 2019. Dr. Greenwell retired from Spoon River College after serving as Vice President for Instruction and Student Services for six years. Prior to that, he was at John Wood Community College for 23 years where he served in various positions including a tenured faculty member and Chair of Business Programs as well as both Dean of Career and Technical Programs and Dean of Transfer Programs for twelve years. Dr. Greenwell holds a Ph.D. in Workforce Education from SIU Carbondale, a master's degree from Western Illinois University, a bachelor's degree from Quincy College and an associate's degree from John Wood Community College. Dr. Greenwell has served on several advisory boards and State Wide Illinois Community College panels.

DON 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.

NOAH GAY is a 2020 Pittsfield High School graduate. Noah is a member of the Student Government Association at John Wood and was elected as an officer for the 2021-2022 school year. He is active in Phi Theta Kappa and works part-time at Farmers State Bank. Following his graduation from John Wood, he is planning on transferring to the University of Illinois at Urbana-Champaign to study Finance.

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
   - To ensure all John Wood Community College students identify and reach their educational goal.

2. Excellence - In Programs, Services, and Employees
   - To provide academically rigorous, innovative, and relevant programs.
   - To deliver exceptional student-focused services.
   - To hire, train, and retain employees dedicated to student success.

3. Enrollment Growth and Stability
   - To engage the College and community partners to attract, enroll, and retain students.

4. Leadership and Partnerships
   - To be the community's leader for innovative education programs.
   - To build and maintain strategic partnerships needed to fulfill our mission.

5. Responsible Management of Resources
   - To have the financial resources to provide first-class facilities and technology to support student success.

Adopted June 13, 2018
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 Carl Sandburg's Admissions Office.
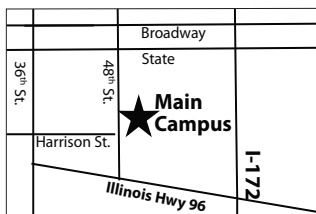
Quincy locations:

Main Campus
1301 S. 48th Street
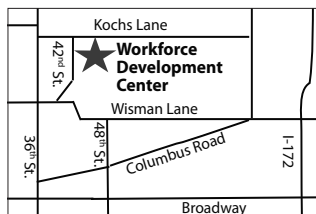217.224.6500
Located at 48th & Harrison

		Broadway	
		State	
36th St.	48th St.	**Main Campus**	I-172
	Harrison St.		
		Illinois Hwy 96	

Workforce Development Center
4220 Kochs Lane
217.641.4971
Northeastern Quincy at corner of 42nd & Kochs Lane

Kochs Lane
42nd St.
Workforce Development Center
Wisman Lane
36th St.
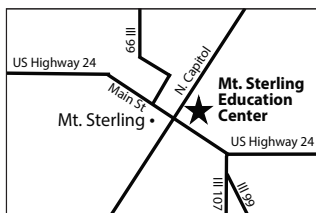48th St.
Columbus Road
I-172
Broadway

Mt. Sterling location:

Mt. Sterling Education Center
108 N. Capitol
217.641.4144
Located in Uptown Mt. Sterling in the back of Brown County State Bank

US Highway 24
Ill 99
N. Capitol
Main St.
Mt. Sterling Education Center
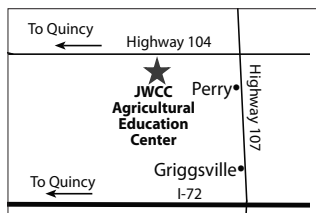Mt. Sterling •
US Highway 24
Ill 107
Ill 99

Baylis location:

Agricultural Education Center
39637 260th Ave., Baylis, IL 62314
217.641.4558 or 217.236.4711
North of I-72, four miles west of Illinois Highway Junction 107 & 104

To Quincy
Highway 104
JWCC Agricultural Education Center
Perry•
Highway 107
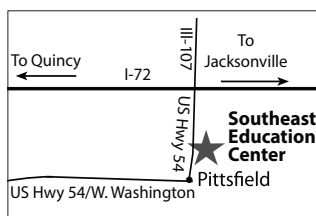Griggsville•
To Quincy
I-72

Pittsfield 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

To Quincy
I-72
Ill-107
To Jacksonville
US Hwy 54
Southeast Education Center
Pittsfield
US Hwy 54/W. Washington

COLLEGE TERMINOLOGY

ACT/SAT – a national test used for academic advising and placement.

Add/Drop Period – a designated period based on course length that a student can drop a class from their schedule and/or add new courses without penalty. The addition of a new course will depend on how many times that course has already met and may be limited.

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 (Canvas), Student Online 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 primarily 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 – 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 0 (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 – alternative to the GED test, 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 website, www.iTransfer.org.

Late Registration – the period of time (two weeks prior to the fall semester and one week prior to the spring semester) before courses begin when students may still register but will be required to have payment arrangement in place.

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 Assessment – a computer-adapted assessment given to students to assist with 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 withdrawn from classes.

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 Online 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 – 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 success.

Term – time period in which the student is enrolled (i.e., fall term and 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 – 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 is ranked as the best online community college in Illinois; has 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 2021, nearly 1,729 students were enrolled in credit classes. These students ranged in age from 14 to 75, with 31 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 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, interactive 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, adult education/literacy programs, fine arts programs, a 293 seat theater, the Advancement Office and Retired and Senior Volunteer Program of Adams County.

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, trails and arboretum. 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, HVAC, customized training 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, Animal Science and A.A. & A.S. Ag Transfer. The center also features a shop/welding lab. The Ag Center has been recognized nationally for high quality educational programs. The nearby adjoining University of Illinois Orr 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 a Livestock Evaluation Club which allow students a superb learning, leadership and growth experience. The Ag Center also hosts the Agriculture Alumni Association, an active organization which works to support Agricultural Education through fundraisers and support of promotional and education activities. 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 preparatory classes, 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.

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 which support the curricula of the College in both credit and noncredit courses. 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 maintains a program-specific collection that support the courses at that location. 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), a consortium of over 80 Illinois academic libraries. CARLI uses the Ex Libris Alma/Primo integrated library services platform to provide an online catalog, discovery service, circulation and cataloging functions to its member libraries.

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.

The library is open to the public and district residents may check out certain materials after presenting appropriate identification.

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 750 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, 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 website** 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.

Program	Areas of Concentration			
	Associate in Arts	Associate in Science	Associate in Fine Arts	Associate in Engineering Science
Accounting	X			
Agriculture	X	X		
Art	X			
Biology		X		
Business (Mkt/Mgmt Emphasis)	X			
Chemistry		X		
Communications	X			
Computer Science	X			
Economics	X			
Education	X			
Engineering				X
English	X			
Fine Arts: 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			
Sport Management		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	Agriculture	Ag Business Mgmt. Animal Science	Ag Applications Beef Specialist Conservation Certificate Swine Specialist	
Business	Business (Mkt/ Mgmt. Emphasis) Supply Chain Mgmt.		Computer Info Systems Option Info. Mgmt. Option Management Option	Business Mgmt. Information Mgmt.	
Computer-Aided Design			Computer-Aided Design	Engineering Design- SolidWorks	
Computer Science	Computer Science		Graphic Design Web Development	Computer Network Support Desktop Publishing Web Design Web Development	
Diesel Technology				Diesel Technology	
Education			Early Childhood Education	Early Childhood Gateways-Level 2 Early Childhood Gateways-Level 3	
Electrical Tech.			Electrical Tech.	Electrician	
Emergency Services	Law Enforcement		Law Enforcement Fire Science Paramedicine	Paramedicine	EMT
Health Sciences			Assoc. Degree Nursing Medical Lab. Tech. Surgical Tech.	Nursing Assistant Practical Nursing Medical Assistant	RN/LPN CNA CST
Heating, Ventilation, & Air Conditioning (HVAC)				HVAC & Refrigeration Service Technician	
Industrial Maintenance			Industrial Tech.	Industrial Tech.- Electrical Industrial Tech.- Mechanical	
Logistics			Logistics & Operations Mgmt.	Truck Driver Training Logistics	CDL
Manufacturing			Manufacturing Tech.	Automation & Robotics Tech. Certified Prod. Tech. Precision Machining 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 studies 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 for personal and professional development. Topics offered include computers and technology, one-on-one training opportunities, language and communication, culinary arts, personal enrichment, photography and personal finance. Community-Based Outreach courses are listed on the John Wood Community College website at www.jwcc.edu/programs/cbo/. Online registration is available.

College for Life: This program is intended for students with intellectual/developmental disabilities or similar learning challenges considered eligible for special education services under IDEA (Individuals with Disabilities Education Act).

College for Life courses are designed to prepare students for successful adult life with greater participation in competitive integrated employment, valued community membership, and independent living. College for Life courses are non-credit community education courses addressing a variety of topics. Flexibility in elective courses allows students to pursue an individualized course of study based on personal interests and goals with opportunity for maximum participation with the general student body.

A College for Life Certificate may be earned through a combination of non-credit, developmental, or regular college courses. The College for Life Certificate demonstrates that students show independence, self-advocacy, and work readiness skills in preparation for adult citizenship in the community.

The College for Life program extends John Wood Community College's mission and vision to students with intellectual/developmental disabilities, allowing John Wood Community College to better reach the community as a whole blazing the trail to post-secondary education, workforce development and lifelong learning for students with intellectual/developmental disabilities.

For more information about College for Life, contact the College for Life Coordinator at 217-641-4941.

JDub Academy, offered each summer, is designed to provide hands-on learning opportunities for area children in Kindergarten through 12th grades. The classes provide children with unique and enjoyable educational activities different in form and content from regular classroom activities. Recent classes have included art, baking, cooking, German, Theatre, outdoor adventures and various STEAM classes.

Noncredit Online Programs: Community-Based Outreach offers non-credit online programs. These open enrollment programs are designed to provide the skills necessary to acquire professional level positions for many in-demand occupations. Course descriptions and registration can be found on our website.

Business and Industry Customized Training

Consistent with the college's vision statement of being the community's partner and leader in education, workforce training, and lifelong learning, John Wood Community College offers our business and industry partners customized training.

Local businesses are a vital part of our community and we are proud to provide the training and education needed to improve performance, employee knowledge, addressing skill gaps, and short-term training for entry-level workers. Courses are non-credit courses and can be held at John Wood Community College, the business's facility or many can also be offered online. More information can be found at www.jwcc.edu/programs/workforce, by email at wdc@jwcc.edu or by calling 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

- **Externships** provide short term job shadowing for students. Local employers partner with Career Services to help provide students with an opportunity to learn about potential career pathways. The typical externship lasts half or all of a workday.
- **Internships** provide students with supervised practical, on-the-job training. Internships can be paid or unpaid and are supervised by a JWCC faculty or staff advisor. Program-based Internships are typically taken for credit to meet either certificate or degree requirements.
- **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 un-paid 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, Baylis, 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 sem-

ester 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 website www.jwcc.edu/course-schedules or email the Instructional Support and Distance Learning Department at connected@jwcc.edu.

Online learning opportunities also exist in hundreds of noncredit courses through our online partners. Visit our website to view a complete list of courses: jwcc.edu/professional. For additional information, contact the Community-Based Outreach Office at 217.641.4941.

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.

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.

*Health, safety, or other circumstances may warrant schedule or class modalty changes. John Wood Community College reserves the right to provide alternative course arrangements including, but not limited, to online classes and to revise class schedules to maintain safety of our students and campuses. Students may experience fee changes due to schedule modification which is the responsibility of the student to pay.

ADMISSIONS AND REGISTRATION INFORMATION

Admissions Policy

JWCC maintains an open enrollment admission policy. Classes and programs are available to all members of the community. Students may seek general admission to the College and be considered degree seeking. 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 wishes to seek a degree or certificate 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, an Enrollment Appeal form, and submitting a letter of support from a principal or designated official. Following receipt of all items, the prospective student and guardian must meet with the Dean of Students to discuss courses and content. After reviewing all documentation and completing the interview, the Dean of Students will determine admittance and the prospective student will be notified of the decision in writing.

Admission to the College does not ensure entrance into a specialized 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.

Students should self-identify any previous disciplinary records from other post-secondary institutions. 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. All decisions are final.

Admissions Procedure – Degree Seeking

STEP 1 - Complete a JWCC Admissions Application. 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 - Submit Transcripts. Have official records of any prior high school or college-level education sent to transcripts@jwcc.edu. These records may include one or a combination of the following:

High school transcript - Contact the high school from which you graduated or will graduate and request a current or final transcript. A current high school transcript may be used to determine course placement; however, a final high school transcript with final grades and graduation date is required to become fully admitted and to receive federal financial aid.

<u>Home school transcript</u> - Homeschool transcripts must include detailed coursework completed for all high school credits. The transcript should indicate grades and points received for each year completed starting freshmen to senior year. The transcript should provide a key for grading scale used and credit awarded. The college can use a current transcript to assess placement for courses if a final is not yet available. A final high school transcript with graduation date must be presented to the College for final admissions processing. Final homeschool transcripts if issued by parent as the administrator must be signed and have signature notarized.

<u>High school equivalency exam scores</u> - Contact the Regional Superintendent of Schools from your school district to request test scores.

<u>College transcripts</u> - Have an official copy of your academic transcript sent directly to the Registrar's Office from each college you have attended. College transcripts can be received from via email, third party system, or in a sealed, unopened envelope. Please see section on Policy on Accepting Credit in Transfer or Credit for Previous Education.

<u>Military service or training</u> - 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, it has the right to request additional information, or to require additional steps to gain admission.

Transfer Admission Requirements

Those students seeking direct admission to an Associate in Arts (AA), Associate in Science (AS) or Associate in Fine Arts (AFA), or an Associate in Engineering Science (AES) degree program must have completed at least 15 units of high school coursework in the following subjects:

- Four years of English (emphasizing written and oral communication and literature)
- Three years of social studies (emphasizing history and government)
- Three years of mathematics (introductory through advanced algebra, geometry, trigonometry or fundamentals of computer programming)
- Three years of science (laboratory sciences)
- Two years of electives in foreign language, music, vocational education or art

Applicants who do not meet these requirements will still be accepted. Deficiency can be satisfied through placement assessment or by successful completion of specified high school or college preparatory courses in the necessary subject area(s).

International Degree Seeking Students

JWCC welcomes qualified international students currently living outside of the US or transfer international students currently in the US on an F1 Visa. The procedures outlined below are required for new and transfer international student admissions process and issuance of the Certificate of Eligibility- Form I-20.

Application Deadlines:

Student Application and ALL required documents must be submitted to International Admissions (international@jwcc.edu) by the following deadlines:

New Applicants Outside of the US	Transfer F-1 Students
Fall Semester: July 1	Fall Semester: August 1
Spring Semester: December 1	Spring Semester: January 1

International Admission - Required Documentation:

1. APPLY: Complete a JWCC International Application for Admission.
2. INTERNATIONAL APPLICATION FEE: $150 - Pay via FlyWire or contact the JWCC Business Office to pay over the phone (217.641.4211).
3. PASSPORT: Provide a copy of your passport.
4. FINANCIAL SUPPORT: Provide a bank statement with a balance of at least $19,640 (USD) which estimates one full year of study and living expenses while attending JWCC. Submit a completed Affidavit of Financial Support with bank statements. Scholarships may be deducted from the $19,640.
5. TRANSCRIPTS: Send transcripts which document equivalent high school (secondary) diploma in your home country. Transcripts should include courses with grades/scores and graduation or completion date.

Post-Secondary Transcripts: Include official transcripts of any colleges or universities previously attended. (If international college credits are requested to transfer-in, a 3rd party international credit evaluation will be required- wes.org.) ALL transcripts should be translated to English.

6. ENGLISH PROFICIENCY: Provide evidence of English proficiency by submitting ONE of the following:
    - Submit English test scores to JWCC Admissions. English tests accepted: TOEFL iBT-65, IELTS-6, or Duolingo-90.
    - Submit official transcripts from an accredited US college or university showing successful completion of a course in the English language.
    - Completion of three years of high school English credit from a US high school.
    - Request English Proficiency waiver if you live in a primary English-speaking country and English is the first language spoken in your home.

Students will receive a Certificate of Eligibility- Form I-20 and acceptance letter from the Director of Admissions/DSO when all of the requirements have been met. After being fully admitted to JWCC, the student is solely responsible for applying for an F-1 visa, change of status with the U.S. government, and/or transferring their SEVIS record from a previous institution. Please refer to https://studyinthestates.dhs.gov/students for guidelines for each type of applicant.

Non-U.S. Citizen Student – Undocumented Students
All students are welcome to apply for admission to John Wood Community College regardless of citizenship or residency status. A student's legal status does not impact the admissions decision. They must follow the regular admissions procedures. If the student possesses a permanent resident card (green card) they should provide a copy at the time of admission. Tuition rates differ for in-district, out-of-district, and out-of-state. Students should review residency information for more information about residency requirements.

Non-Degree Seeking Students

Students with a high school diploma or equivalent that do not wish to complete a degree or certificate may be allowed to take coursework under the College's Quick Admit registration. Quick Admit students take no more than two or three classes, are not pursuing a degree or certificate, and do not plan to use financial aid. Quick Admit students must provide all biographical, demographic, contact information and copy of state issued ID in order to become a student. Official transcripts are not required to register. Quick Admit students are not eligible for financial aid and will not be able to receive a degree or certificate from JWCC. Even if the student completes all the required coursework, the student will not receive the completed degree until the regular admissions process is completed as a degree-seeking student.

The College's assessment testing may still be required depending on coursework taken and transcripts may be required for the purpose of placement.

Students who do not have a high school diploma or equivalent may enroll for a maximum of two classes (6-7 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.

High School Smart Start (Concurrent Enrollment) Program

Concurrent enrollment provides qualified high school students the opportunity to take college-credit bearing courses. Course work 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. Receiving high school credit is based on the decision of the student's high school administration.

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 and taught by a qualified JWCC instructor;
- At one of the JWCC campus locations by a JWCC instructor.

Student Eligibility

Student participation is based on appropriate academic qualification, a high level of motivation, and adequate time to devote to studying a college-level course. High school students, grades 9–12, who demonstrate readiness for college level work and meet placement standards and course pre-requisites are eligible to enroll in a college level course. All courses must be made in consultations with high school counselors and/or principals. The high school student will also agree to pay appropriate tuition, fee and book cost.

Academic qualification per grade:

Students in the 9th grade must complete the ACT or SAT, or Accuplacer Placement Testing. Specific requirements must be met within Math, Reading, and Writing.

Students in the **10th, 11th and 12th grades** must have met Multiple Measures within the high school transcript. If the student does not qualify through the high school transcript, ACT or SAT or Accuplacer scores are required.

Transferability

When taking Smart Start (concurrent enrollment) courses, students are encouraged to contact a JWCC academic advisor or the intended college of interest to discuss transferability of course work. Please refer to the Transferring to Other College section.

How to Enroll

Students should:

1. Meet with the high school counselor to determine which college courses are available;
2. Complete the registration form, which can be found online at www.jwcc.edu/smartstart or with the high school counselor;
3. Have a parent/guardian and school counselor or principal sign the form.
4. Students will need to submit the high school transcript along with any ACT/SAT scores to the Coordinator of Concurrent Enrollment. Students who have not taken the ACT/SAT and do not meet requirements via the high school transcript may take the Accuplacer assessment at JWCC. Students must meet JWCC admission and course requirements.
5. Attend a Smart Start Orientation session or meet individually with the Coordinator of Concurrent Enrollment at the designated high school or JWCC campus.
6. Access their BlazerNet account (www.jwcc.edu/blazernet) to view course schedule through SOLAR and JWCC student email. Students will receive documentation in the mail confirming the course registration and other important information.

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 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 selective admissions processes include associate degree nursing (ADN), nursing assistant, paramedicine, practical nursing (LPN), and surgical technology. This list may change without notice. For equally qualified applicants, preference will be given to in-district residents.

Credit Acceptance

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. Remedial coursework will be evaluated for the purposes of student placement. While credit will not be given in transfer, remedial coursework will be evaluated to ensure students are placed in the highest level possible according to completed coursework.

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:

1. 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.

2. 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.*

3. 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 Academic Standing 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.

Credit for Prior Learning

John Wood Community College recognizes that students may acquire knowledge and competencies through activities and experiences outside of John Wood's educational offerings. Because each student has their own life experiences, all assessments for academic Credit for Prior Learning are evaluated individually to ensure a student's specialties are compared to other students' experiences.

A student seeking these credits must be fully admitted to the program in which the credit is being sought. A minimum of twenty-five percent of a certificate and fifty percent of a degree must be earned at the College. Students with military credit for previous experience may exceed this policy. Students should be aware that transferability of credit awarded through these criteria is not guaranteed and is subject to review by other institutions of higher education.

Such types of credit may include:

1. Military training credit – credit for military service, both active and reserve, based on recommendations of the American Council on Education. Subject on a case-by-case review taking in to account current educational goals. Student must present a copy of DD 214 (Separation from Military Service) or Joint Services transcript or other proof deemed to be acceptable by the Registrar. Additional information located at www.jwcc.edu/military.

2. Standardized tests such as CLEP (College-Level Examination Program), DANTES (Defense Activity for Nontraditional Educational Support, AP (Advanced Placement), and IB (International Baccalaureate) – A per credit hour fee will be charged for each unit of credit awarded. Students taking the CLEP exams 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 are made through the College Board website (www.collegeboard.com). For additional CLEP information contact the JWCC Admission Office.

3. College examinations such as institutional approved proficiency tests and performances. 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.

4. Published guides and other nationally recognized credentials such as ACE (American Council on Education) approved coursework, state and federal licensure that align with college program curriculum, and industry recognized certifications.

5. Portfolio assessment by subject matter expert in conjunction with appropriate academic administrator that demonstrate course equivalency. Applications for Assessment should be submitted a minimum of four weeks prior to the start of semester. This ensures sufficient time for a portfolio be reviewed by personnel, licensure to be reviewed, etc. Applications will normally be assessed within 20 working days with results communicated to the student.

   Students seeking credit through proficiency examination or demonstration should first visit with their academic advisor. The student and advisor will work together to contact the appropriate faculty member or academic administrator to determine if such mechanism exists for the course requested. If so, the student will initiate the process with the advisor as outlined on college forms.

6. Other sources deemed appropriate by the Vice President of Instruction in conjunction with the Registrar.

Students seeking to obtain Credit for Prior Learning via military credit, standardized tests, licensure or published guides should submit appropriate documentation directly to the Office of the Registrar. Submissions will be reviewed by appropriate office staff and credit will be awarded to a student's academic record in accordance with predetermined standards, equivalencies, and cut scores.

For students wishing to have work or life experiences evaluated for credit that are not documented through one of the previous areas should submit sufficient evidence to the Registrar's Office. The Registrar's Office will route evidence to the appropriate faculty member or academic administrator and begin the appropriate college forms with the student. Submitted materials will be assessed using the following criteria:

• Detailed resume with job titles, descriptions of major responsibilities, and time-lines for each position.

• Letters of reference for confirmation with details included.

• Potential interview with relevant academic faculty/dean.

• Appropriate unit exam/test equivalent to the comprehensive final exam.

• Original or certified documents demonstrating completion of any professional development courses and results.

• Portfolios. Portfolios for major courses are evaluated by the department responsible for the course. For general education, the portfolios are evaluated by a committee consisting of: an expert in the discipline; a member of the Curriculum Committee, and an instructional dean.

Appropriate fees, based on type of prior learning credit being requested and as established by the Board of Trustees, must be paid prior to reviewing student submissions. Fees are non-refundable based on outcome of review. These fees are established to cover the administrative time commitment needed to appropriately assess and review student materials.

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.

Admitted Students
Admitted students will be sent a JWCC username and password. The login allows access to JWCC computers and students' emails and SOLAR accounts.

SOLAR (Student Online Access to Records)
Web access to student records is available through the student portal, BlazerNet, at www.jwcc.edu/blazernet. 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.

Online Registration
Currently enrolled students with an approved academic plan are encouraged to register for classes using SOLAR. Students may contact Instructional Support for assistance.

Student Email Accounts
JWCC students are eligible for a student email account. A student's JWCC email account serves as the primary contact and should be monitored by the student regularly. Students are notified via personal email or mail of their username and password; however, this can also be obtained from the Help Desk, ext. 4325, in Information Services (B024) with a photo ID.

Student Identification Cards
Student identification cards are issued through the Admissions/Advising Office. 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. ID cards may be obtained during regular business hours. Students attending a center outside Quincy may contact personnel at that location for more information.

Residency Status
Information from the Admissions Application 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.

To be eligible for in-district residency, 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 move into the JWCC District will be required to complete a Residency Questionnaire to prove in-district residency. Residency Questionnaires and further information are available from the Dean of Students Office or at www.jwcc.edu/admissions.

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 a Work In-District Waiver form that is available from the Dean of Students Office. A new Work In-District Waiver form must be completed and on file with the Dean of Students office each semester you enroll in JWCC classes.

(C) Attending a secondary educational institution within the JWCC District.

(D) Utilize Federal Post 9-11 Benefits under the Veteran's Educational Assistance Act of 2008 in accordance with House Bill 2353.

New Students to JWCC - To Qualify for Registration

An early or final high school transcript must be submitted to JWCC for the College to determine course placement. Upon receiving the student's high school transcript, staff will evaluate for college-level English and math placement through a variety of pre-determined measures. *Please be aware that even if an early transcript is used for placement evaluation, a valid final high school transcript is required to become fully admitted and to receive federal financial aid.*

In the event that the evaluation of the high school transcript does not result in the ability to place a student into college-level English and math, students will be asked to take a placement assessment. Placement testing is an untimed, computer-based assessment in writing, reading, and mathematics which will be the final determining factor if a student places into college-level English and math or whether proper remediation work is required.

The first placement test as part of initial registration 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 five years or re-testing may be necessary.

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

It is the responsibility of the student to maintain their academic success. This includes, but is not limited to, scheduling appointments with their advisor during registration periods, if they wish to change their program of study, and ensure the academic record is accurate. 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 and 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 internship, externship and job shadowing experiences, 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), Academic Talent Search (pre-college students), and Upward Bound (pre-college students). In addition, Support Services houses the Offices of Disability Services and Counseling Services. For more information, visit Support Services 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 a student's 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.

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. Students should never assume their problems are insignificant.

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** (Academic Talent Search and Upward Bound) 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.

Academic Talent Search (ATS) 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, college selection and campus visits, scholarship searches, 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 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.

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.

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 at www.jwcc.edu/tutoring.

Individual Tutoring Services provides peer or professional tutors in a wide variety of subjects and courses. Tutors are knowledgeable in their subject areas. Individual tutoring services are available in the Academic Support Center rooms. Check with the Dean of Arts and Sciences for location/s. A schedule of hours is available online at www.jwcc.edu/tutoring.

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 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 requested through the online transcript process. JWCC has authoriazed the National Student Clearinghouse to provide transcript ordering via the web using a credit or debit card. If students do not have a credit or debit card, they can use a prepaid Visa Card or gift card to place their orders. Students can access either through the regular JWCC website or through their SOLAR access portal.

Unofficial student copies of transcripts are only available through the Registrar's Office or by printing directly from the SOLAR system.

Official transcript requests processed through the Clearinghouse for mail are normally completed by the next business day when the request has been received by the Registrar's Office 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. Only transcripts requested through the Clearinghouse electronic services will be emailed.

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, email 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 witholding 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 committees 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: Beyond the Classroom, Green and Gold Club, John Wood Way, and Trail Blazers Live!.

Executive Officer Team

The Executive Officer Team is composed of 5 student positions (president, student trustee, vice president, secretary and treasurer) and overseen by the Coordinator of Student Life. Additional positions may be created if necessary. These positions are elected by the student body during the spring semester and meet regularly to develop the SGA budget, establish agendas and discuss student-related 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 eight competitive intercollegiate sports, including Esports, 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.

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 course-related 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 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.

Website: For more information on Campus Police services and programs, log onto the website at www.jwcc.edu/student-resources/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

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 (Board Policy 423). More information may be found on our website at www.jwcc.edu/student-resources/grievances 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: Tracy Orne, Title IX Coordinator, 217.641.4300; Rob Hodgson, ADA/504 Compliance Officer, 217.641.4110; Dana Keppner, Affirmative Action Officer/Deputy Title IX Coordinator, 217.641.4241.

The college has an approved Equal Opportunity, Harassment, and Nondiscrimination Policy and Procedure for Equity Resolution. Upon receipt of a report, the Title IX Coordinator will analyze the report to determine the appropriate method for processing and reviewing. For any report alleging sexual harassment, as defined under Title IX, and/or alleging sexual violence, domestic violence, dating violence or stalking pursuant to the Preventing Sexual Violence in Higher Education Act, the Title IX Coordinator will promptly contact the person alleged to be the complainant to:

1. Discuss the availability of supportive measures.
2. Consider the complainant's wishes with respect to supportive measures.
3. Inform the complainant of the availability of supportive measures with or without the filing of a formal complaint.
4. Explain the process for filing a formal complaint.

FINANCIAL INFORMATION
AND FINANCIAL AID

Tuition and Fees*

Tuition for in-district students for 2021-2022 was $163 per semester credit hour, which includes a universally assessed fee of $16/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 full-time student for nine months usually range from $3,912 to $4,890 depending on how many semester hours a student takes. Additional course fees and program fees may apply.

Health, safety, or other circumstances may warrant schedule or class modalty changes. John Wood Community College reserves the right to provide alterna tive course arrangements including, but not limited, to online classes and to revise class schedules to maintain safety of our students and campuses. Students may experience fee changes due to schedule modification which is the responsibility of the student to pay.

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, Griggsville-Perry, Liberty, Meredosia-Chambersburg, Payson, Pikeland, Pleasant Hill, Quincy, Southeastern+, Unity or Western.

Out-of-District Residents: The John Wood Community College Board of Trustees has established a tuition rate for out-of-district residents. Tuition for 2021-2022 was $273 per semester credit hour, which includes a universally assessed fee of $16/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 will waive tuition for JWCC District students 65 years of age or older enrolling in credit courses who prove age with photo ID and 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. Requests for a waiver must be made to the Dean of Students prior to the start of classes. For the purpose of this waiver, age shall be determined as of the date of the first day of scheduled classes for the course.

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 2021-2022 was $30 per credit hour.

+Residents of the former Plymouth School District reside in the Carl Sandburg College District.

*NOTE: TUITION RATES AND FEES ARE SUBJECT TO CHANGE WITHOUT NOTICE. FOR A CURRENT LIST OF TUITION AND UNIVERSAL FEES, PLEASE REFER TO THE JWCC WEB PAGE OR CURRENT CLASS SCHEDULE.

Institutional and Administrative Fees (2021-2022)

CLEP Test	CLEP fee plus $30 admin. fee
CNA Program Fee	$100
Credit for Prior Learning Fee	$35 per credit hour
Diesel Technology Program Fee	$250 per semester
Placement Testing Fee	$15
Graduation Fee	$35
Institutional Services Fee	$16 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 $1,322-$1,663 by term
Nursing Program Admission Assessment Exams:	
HESI A2 Exam	HESI fee plus $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	$500 per semester
Technology Fee	$5 per credit hour
Transcript Fee (in-person request for 24 hour pick-up)	$10 per transcript
Transcript Fee (online)	$7 each (plus any additional Clearinghouse processing fees for special request)
Transcript Rush Fee (Rush Process or when mailed outside continental U.S.)	$15 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 universal fees, please refer to the college website or current class schedule.** *Veterans, see Financial Aid Section III E regarding payment.*

Beginning August 1, 2019, John Wood Community College will not take any of the four following actions towards any student using U.S. Department of Veterans Affairs (VA) Post 9/11 G.I. Bill (Ch. 33) or Vocational Rehabilitation and Employment (Ch. 31) benefits, while their payment from the United States Department of Veterans Affairs is pending to the educational institution:

- Prevent their enrollment;
- Assess a late penalty fee;
- Require they secure alternative or additional funding;
- Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for this provision, such students **will be required to**:

- Produce the VA's Certificate of Eligibility by the first day of class;
- Provide written request to be certified;
- Provide additional information needed to properly certify the enrollment as described in other institutional policies (see our VA School Certifying Official for all requirements).

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. In addition, no diplomas, official statements, or transcripts of credits will be released 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 greater than 2 days	2 days or less
Refund*	2 weeks	1 week	5 business days prior to start
Withdrawal (W or WI)^	by 75% of course	by 75% of course	N/A

*Not included on permanent academic record. Allow three weeks for a refund to be issued.
^Included on permanent record but not calculated into GPA.

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
2022-2023	fall 2022 spring 2023 summer 2023	October 1, 2021	2020 Tax Information
2023-2024	fall 2023 spring 2024 summer 2024	October 1, 2022	2021 Tax Information

The application is available online at https://studentaid.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 Direct 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 Direct Loan, students should follow our online loan process at the financial aid section of the College's Website. Applicants must have FAFSA results on file in the Financial Aid Office to apply for a Direct 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.

Since all loans must be repaid, students are urged to approach borrowing with extreme caution. The Federal Direct 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 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 post-withdraw disbursement. Earned grant funds will automatically be disbursed to the student account within 45 days. If the post-withdraw disbursement included loan funds creating a credit balance, a student may choose to decline the loan funds so that the student does not incur additional debt. Students will receive notification within 30 days of potential post-withdrawal loan disbursement including a requested response within 14 days. JWCC may automatically use all

or a portion of the post-withdraw 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 their debt at the school (JWCC asks for this permission from the student during the enrollment process). Any credit balance is disbursed as soon as possible or no later than 14 days after the calculation of return to Title IV.

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. The RISE Act removed the 75-hour cap on Monetary Award Program (MAP) paid credit hours for freshmen and sophomores as of January 1, 2020. The overall maximum of 135 MAP paid credit hours remains in effect. 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. Grant Programs for Dependents of Police/Fire/Correctional Officers

The application is available to print on the www.isac.org website. In order to receive full-year consideration, an application must be received on or before October 1 of the academic year for which grant assistance is requested. For spring-term and summer-term consideration, the deadline is March 1. For summer-term consideration only, applications must be received on or before June 15. Applications received by ISAC after these deadline dates will be processed only for subsequent terms, with June 15 as the final date of acceptance for the summer term.

C. Retention of Illinois Students & Equity (RISE) Act and Alternative Application for Illinois Financial Aid

The Retention of Illinois Students & Equity (RISE) Act allows eligible undocumented students and transgender students who are disqualified from federal financial aid to apply for all forms of state financial aid. The Alternative Application for Illinois Financial Aid provides a pathway for these qualified students to apply for Monetary Award Program (MAP) grants, the state's largest need-based grant program for low-income college students. To accommodate RISE Act-eligible students (both undocumented and transgender students), an online application for MAP grants is available. Instead of completing the FAFSA to begin the MAP application process, these students may be eligible to complete the Alternative Application for Illinois Financial Aid. The data from the application will be used to calculate an expected family contribution (EFC), which is used in determining a student's MAP eligibility. The application, patterned after the FAFSA, is accessible for the 2021-22 and 2022-23 academic years as follows: https://studentportal.isac.org/en/alternativeapp

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. **US Department of Veterans Affairs Benefits**

Any veteran who thinks they may be eligible for federal benefits may obtain information through the JWCC Veterans Representative with application made through GI Bill**®** federal website. To maintain eligibility, students who are veterans must be enrolled in an eligible program, attend classes reguarly, and be making satisfactory academic progress. Students who wish to use veterans benefits while at the College must complete a Veterans Benefit Form each semester. This form is available in the Financial Aid/Records & Registration Offices.

The US Department of Veterans Affairs offers eligible students up to 36 months of educational assistance through the Montgomery GI Bill**®**. Education benefits are available for training of students under the following categories (chapters):

Chapter 30 – Montgomery GI Bill**®** – Active duty service person
Chapter 35 – Survivors' and Dependents' Educational Assistance Program
Chapter 1606 – Montgomery GI Bill**®** – Selective Reserve
Reserve Educational Assistance Program (REAP)
Veteran Readiness and Employment (VR&E)
Post-9/11 Veterans Educational Assistance Act

More information about education benefits offered by VA is available at the official U.S. government website at https://www.benefits.va.gov/gibill. Students who live outside of the JWCC district (out-of-district or out-of-state) and utilize Federal Post 9/11, Chapter 30, Chapter 31, or VA Veteran Readiness and Employment (VR&E) 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.

E. **Veterans**

Beginning August 1, 2019, John Wood Community College will not take any of the four following actions towards any students using U.S. Department of Veterans Affairs (VA) Post 9/11, GI Bill® (Chapter 33) or Veteran Readiness and Employment (VR&E) benefits, While their payment from the US Department of Veterans Affairs is pending to the educational institution:

-Prevent veterans enrollment;

-Assess a late penalty fee to;

-Require they secure alternative or additional funding;

-Deny their access to any resources (access to classes, libraries, or other institutional facilities) available to other students who have satisfied their tuition and fee bills to the institution.

However, to qualify for the provision, such students will be required to:

-Produce the VA's Certificate of Eligibility by the first day of class;

-Provide written request to be certified;

-Provide additional information needed to properly certify the enrollment as described in other institutional policies (see VA School Certifying Official for all requirements).

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.

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.

Information about these scholarships may be found at www.jwcc.edu/admissions/money-matters.

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 or view the full listing of JWCC Foundation scholarships at www.jwcc.edu/admissions/money-matters.

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") 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 www.jwcc.edu/financial-aid/forms.

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. He/she will be eligible for qualified funding for that term/semester. 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.

Consumer Information:

Voter registration guidelines to register to vote and participate in the democratic process for all federal and state elections. Sixty days prior to general and special elections for federal offices and elections of the Governor and other chief executives of the State of Illinois, JWCC will make a good faith effort to distribute voter registration information and forms to our enrolled degree-seeking students. Voter Registraton Qualifications include: 17 ½ years of age to register, 18 years of age to vote, U.S. Citizen, and Illinois Resident. https://vote.gov/

Constitution Day and Citizenship Day are observed each year on September 17 to commemorate the signing of the Constitution on September 17, 1787, and "recognize all who, by coming of age or by naturalization, have become citizens." Each educational institution which receives Federal funds is required by law to hold an educational program on the United States Constitution for Constitution Day and Citizenship Day. Watch your JWCC email each year for additional information.

Complaint Process for online Sara (NC-Sara) Higher-education institutions delivering courses by distance education are required to provide the contact information for official entities or agencies within each state designated to handle complaint resolution. States are required by the US Department of Education (34 CFR 668.43(b)) to have a complaint process available to any enrolled or prospective student. JWCC students enrolled in online and distance courses, as well as on-campus courses, should attempt to resolve complaints by following JWCC's Academic Grievance Procedure as outlined in this catalog. If you wish to file a complaint about the College with its accreditor regarding issues of institutional quality, you may do so by following the instructions on the Higher Learning Commission website: www.hlcommission.org. If the Institution has failed to resolve your issues with an online course, please contact: Student Complaints, Illinois Community College Board, 401 E. Capitol Avenue, Springfield, IL 62701. 1.800.573.4604 or 217.557.2741. For easy access go to jwcc.edu/programs/online-learning/online-student-complaint-procedure.

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. This is exclusive of finals week. Course length, credit hours, lecture, lab and clinicals may require variations to this definition.

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.

Freshman	A student who has earned fewer than 28 semester hours of credit
Sophomore	A student who has earned 28 or more semester hours of credit but who has not received an associate degree
Special	A student who has earned 70 semester hours or more of college credit or has already received a degree

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 competency-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 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

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. Students are expected to remain engaged and complete all coursework. The student should initiate this discussion with their Advisor to discuss consequences for accepting a pass/fail grade. Final approval for drop/add grades is granted by the Registrar's Office. A student may take a course "pass/fail" by receiving permission no later than the drop/add period. Once a decision has been made, it cannot be changed after that period has passed. No more than 10 percent of program requirements in degree or certificate programs can be taken as pass/fail.

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

A person may audit a course with approval from the Registrar. To seek approval, the person should initiate the audit discussion with an advisor in the Advising and Retention Office with final approval through the Registrar's Office. The request must be received prior to the end of the add/drop period and cannot be changed after the add/drop 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. Tuition is the same as credit bearing courses if audited.

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. 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. A withdrawal will not impact a student's grade point average.

Withdrawal from a credit course can be processed with the Advising Office or through a student's SOLAR account. At this time, total withdrawals using the SOLAR system are not available. 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 Student Drops

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. 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.

4. The College expects students to remain engaged throughout the entire course. Failure to do so will result in the College dropping the student due to lack of engagement. Student engagement is defined as students who are actively pursuing course completion by completing assignments and earning points. While attendance may be a component of student engagement, it cannot serve as the stand alone measure for withdrawing a student. Faculty may have attendance policies within their course syllabus.

Withdrawal Expectation by Course Length (prior to the 75 percent date of the respective course):

Courses that are greater than eight weeks in length: Students should be withdrawn after two consecutive weeks of no engagement.

Courses that are eight weeks or less in length: Students should be withdrawn after one week of no engagement.

Absences due to College business, illness of the student, death in the student's immediate family, or other reasonable cause will be recorded as absences by an instructor; however, the instructor may or may not count such an absence towards excessive absence totals as may appear appropriate and is consistent with the instructor's pre-established and disclosed classroom policies. 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.

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. Any student who believes that he or she has been unreasonably denied such an accommodation may file a grievance with the Dean of Students who may act on the grievance as considered appropriate under the circumstances.

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. Students are highly encouraged to inform the Dean of Students 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. 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 admission, 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.

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 prevented 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 A, B, C, 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 improved their gpa to meet the minimum requirements at the end of the following semester in order to remove the probation status, the student will be suspended. The student has the privilege of appealing to the Academic Standing Committee for immediate reinstatement. The petition should include descriptions of any extenuating circumstances and a statement of reasons for expecting immediate improvement and quality of academic achievement. The appeal will be reviewed by the Academic Standing Committee and the student will be expected to appear before the committee to ask for reinstatement. The committee, after considering all the information presented, will then reach a decision as to whether the student will be reinstated on probation. If the committee decides the student may not be reinstated, the student may appeal this decision 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 be acted upon by the Dean of Students and may be forwarded to the Academic Standing Committee at the discretion of the Dean of Students. The petition for reinstatement must be submitted to the Dean of Students at least two weeks before 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.

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 programs 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, and 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/student-resources/graduation** 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 four-year colleges and universities. The Associate in Applied Science (AAS) degree is offered for students interested in specialized career/technical training and preparation for full-time employment. The College also offers the Associate in General Studies (AGS) degree for students who wish to design a program 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.

Institutional Goals

JWCC seeks to provide its students a well-rounded education that provides a solid foundation of skills necessary to succeed in future educational, career, personal, and community endeavors. The goals below have been developed to reflect areas of competence essential toward this end. In addition to learning the skills and mastering the knowledge of their specific programs, students will acquire the following core competencies through their studies at JWCC:

Institutional Goal: Communication	Students effectively express ideas through written, verbal, and visual modes appropriate to the situation, purpose, and audience.
Institutional Goal: Critical Reasoning	Students apply a rational approach to problem solving based on evidence and critical thinking.
Institutional Goal: Diversity, Equity, and Inclusion	Students will be able to recognize, promote, utilize, and educate one another regarding the unique qualities and shared humanity of all people and culture.
Institutional Goal: Essential Skills	Students will demonstrate qualities and skills necessary for continuing education, employment, and community involvement.
Institutional Goal: Information Literacy	Students will demonstrate ability to recognize when information is needed and have the ability to locate, evaluate and effectively use the information.

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 Hrs.	AFA Hrs.	AS Hrs.	AAS Hrs.	AES Hrs.
1. Communication Skills:					
a. Written[3]	6	6	6	3	6
b. Oral	3	3	3	3	--
2. Humanities & Fine Arts	9	6	6	3	3
				OR	
3. Social & Behavioral Sciences	9	3	6	3	6
4. Mathematics & Natural Science					
a. Mathematics	3	3	6	3	12
b. Life Science	3-4	3-4	3-4	--	--
c. Physical Science	3-4	3-4	3-4	--	4
d. Life/Physical Science			3-4		
5. First Year Experience	1	1	1	1	1
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 Hrs.	AFA Hrs.	AS Hrs.	AAS Hrs.	AES 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[1] [3]; 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.)

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[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

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 degree-seeking students desiring a humanities or fine arts course may choose any course from either list.

	AA Hrs.	AFA Hrs.	AS Hrs.	AAS Hrs.	AES Hrs.
Humanities	9	6	6	3*	3

a. Humanities:

CHN 101 Elementary Chinese I[2] [5]
CHN 102 Elementary Chinese II[1] [2] [5]
ENG 114 Fiction[1]; H3 901
ENG 130 Introduction to Film[2]
ENG 231 American Literature I[1]; H3 914
ENG 232 American Literature II[1]; H3 915
ENG 241 English Literature I[1] [5]; H3 912
ENG 242 English Literature II[1] [5]; H3 913
ENG 251 World Literature[1] [5]; H3 906
GER 101 German I[2]
GER 102 German II[1] [2]
HUM 101 Introduction to Humanities; HF 900
HUM 200 The Art of Being Human[5]; 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[1] [2]

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 Human[5]; HF 901
MUS 102 Music Appreciation; F1 900
MUS 121 Introduction to Music Literature; F1 901

*Or 3 hrs. Social & Behavioral Sciences
[1] Prerequisite required
[2] Does not meet IAI GECC
[5] Meets international awareness requirement

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 Hrs.	AFA Hrs.	AS Hrs.	AAS Hrs.	AES 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 205 Psychology of Adulthood & Aging[10]
      PSY 221 Social Psychology[1]; S8 900
      PSY 202 Child Psychology[1] [6]; S6 903
      PSY 203 Adolescent Psychology[1] [6]; S6 904 — Only one of these three may be used as general education
      PSY 233 Developmental Psychology[1] [6]; S6 902
      PSY 250 Psychology of Personality[1] [2]
      SOC 101 Introduction to Sociology; S7 900
      SOC 111 Social Problems; S7 901
      SOC 221 Social Psychology[1]; S8 900
      SOC 222 Sociology of Diversity[5]; S7 903D
      SOC 224 Marriage and the Family; S7 902

   b. History
      HIS 101 Western Civilization I[5]; S2 902
      HIS 102 Western Civilization II[5]; S2 903
      HIS 111 World History I[5]; S2 912N
      HIS 112 World History II[5]; S2 913N
      HIS 121 U.S. History I; S2 900
      HIS 122 U.S. History II; S2 901
      HIS 131 Intro to Black History[10]
      HIS 222 U.S. History Since 1945[2]

   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 Hrs.	AFA Hrs.	AS Hrs.	AAS Hrs.	AES 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 degree-seeking students select one course from the general education core below.

MAT 109   Elementary Statistics[1]; M1 902
MAT 111   Math for Elementary Teachers II[1] [8]; M1 903
MAT 113   College Algebra[1] [2] [9]
MAT 220   Analytic Geometry & Calculus I[1]; M1 900-1
MAT 221   Analytic Geometry & Calculus II[1]; M1 900-2
MAT 222   Analytic Geometry & Calculus III[1]; M1 900-3
MAT 234   Calculus for Social Scientists[1]; M1 900

b. AAS degree-seeking students must select at least one course from the following list:

MAT 100   Technical Mathematics[2]
MAT 109   Elementary Statistics[1]; M1 902
MAT 113   College Algebra[1] [2]
MAT 114   Trigonometry[1] [2]
MAT 220   Analytic Geometry & Calculus I[1]; M1 900-1
MAT 234   Calculus for Social Scientists[1]; M1 900

5. **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.

	AA Hrs.	AFA Hrs.	AS Hrs.	AAS Hrs.	AES Hrs.
a. Life Science	4	3-4	4	--	--

AGR 202   Introduction to Animal Science[2] [7]
AGR 204   Principles of Crop Science[2] [7]
BIO 101   General Biology I[7]; L1 900L
BIO 103   Environmental Conservation[2]
BIO 105   Human Biology; L1 904
BIO 111   General Botany[1] [2] [7]; L1 901L
BIO 221   General Zoology[1] [2] [7]; L1 902L
BIO 275   Human Anatomy & Physiology I[1] [2] [7]; L1 904L
BIO 293   Microbiology[1] [2] [7]

[1] Prerequisite required
[2] Does not meet IAI GECC
[7] Includes a laboratory
[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

| | AA | AFA | AS | AAS | AES |
	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.
b. Physical Science	4	3-4	4	--	4

AGR 200 Introduction to Soil Science[1] [2] [7]
AST 101 Elementary Astronomy; P1 906
AST 102 Elementary Astronomy Lab[10]
CHM 100 General Chemistry[1] [7]; P1 902L
CHM 103 Principles of Chemistry I[1] [7]; P1 902L
CHM 104 Principles of Chemistry II[1] [2] [7]
PHY 103 Fundamentals of Physics I[1] [7]; P1 900L
SCI 100 Environmental Geology[7]; P1 905L
SCI 105 Weather & Climate[2] [7]

[1] Prerequisite required
[2] Does not meet IAI GECC
[7] Includes a laboratory
[10] Pending IAI GECC Approval

6. **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. Note: For selected degrees or certificates, an alternative course may be substituted for FYE 101. Exceptions must be reviewed and approved by the instructional dean and Vice President for Instruction.

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 non-career/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 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.

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.**

General Education Core Curriculum Certificate (GECC)

John Wood Community College, in conjunction with the Illinois Community College Board, recognize students who meet the statewide standards for the General Education Core Curriculum (GECC). This coursework (37-41 credit hours) is taken as part of fulfilling an Associate of Arts degree and focuses on the five core general education areas. All coursework must be IAI (Illinois Articulation Initiative) approved coursework to count towards the GECC Credential. A student may earn a GECC certificate either in conjunction with an AA degree or as a stand alone credential. The GECC certificate is designed for students who wish to transfer to public institutions within the state of Illinois. Completion of the GECC certificate will ensure that all general education requirements have been met. Please note that students should check with private colleges and out of state colleges regarding transfer of the GECC. For questions regarding the GECC, please contact the Advising Office.

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 Career and Technical Education 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 non-career/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 or dean. 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.

Academic Information
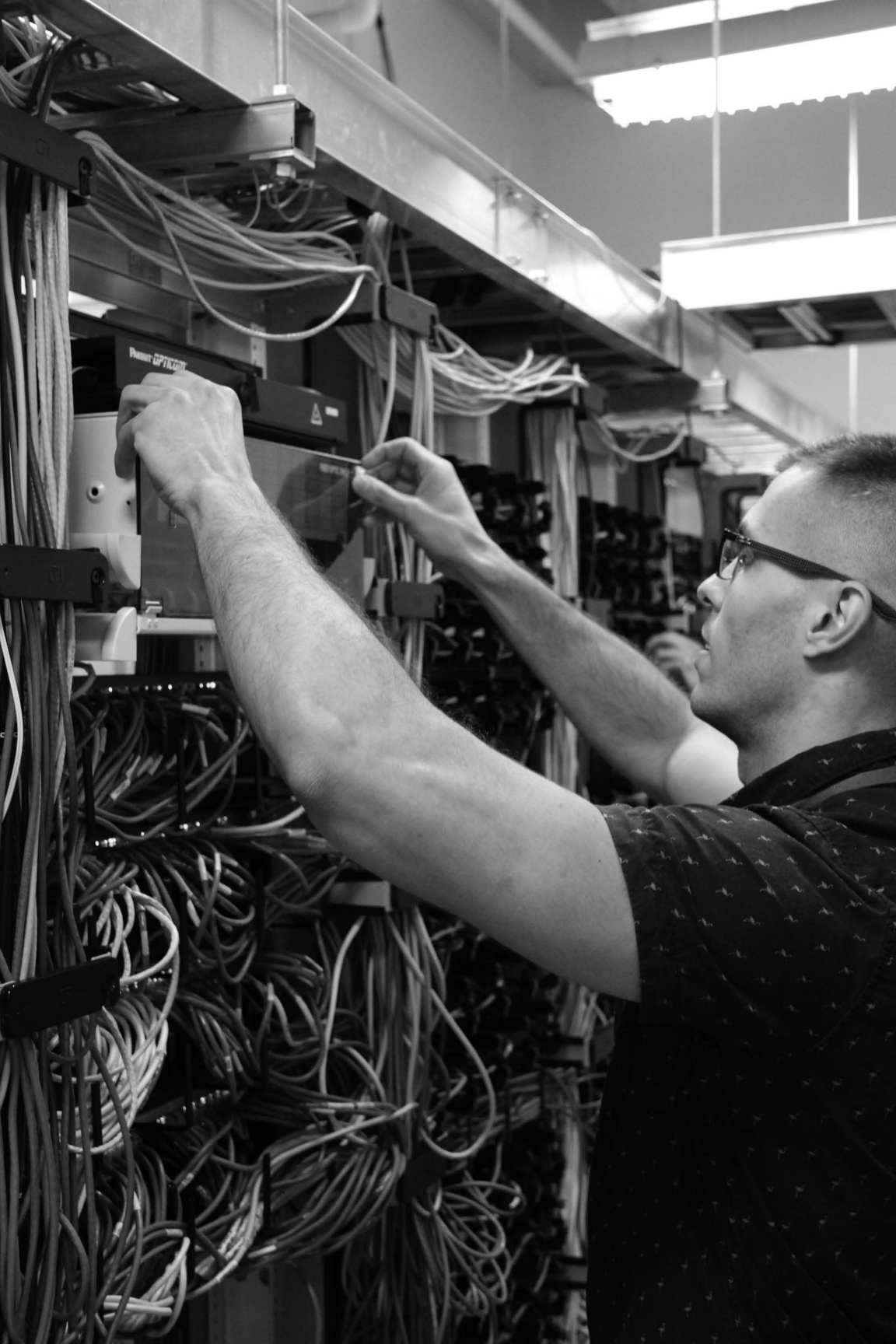
PROGRAMS OF STUDY

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

ENG	101	Rhet & Comp I	3
FYE	101	Blazing Your Trail	1
Humanities			3
Math			3
Social/Behavioral Science			3
Area of Concentration or Elective			3
			16

SECOND SEMESTER

CSC	100	Computer Literacy	1
ENG	102	Rhet & Comp II	3
Humanities			3
Life or Physical Science			4
Social/Behavioral Science			3
Area of Concentration or Elective			3
			17

THIRD SEMESTER

CMN	101	Intro to Speech I	3
Humanities			3
Life or Physical Science			4
Area of Concentration or Elective			6
			16

FOURTH SEMESTER

Social/Behavioral Science		3
Area of Concentration or Elective		6
Electives		6
		15

SUGGESTED AS DEGREE PLAN

FIRST SEMESTER

ENG	101	Rhet & Comp I	3
FYE	101	Blazing Your Trail	1
Humanities			3
Math			3
Social/Behavioral Science			3
Area of Concentration or Elective			3
			16

SECOND SEMESTER

CSC	100	Computer Literacy	1
ENG	102	Rhet & Comp II	3
Math			3
Life or Physical Science			4
Social/Behavioral Science			3
Area of Concentration or Elective			3
			17

THIRD SEMESTER

CMN	101	Intro to Speech I	3
Humanities			3
Life or Physical Science			4
Area of Concentration or Elective			6
			16

FOURTH SEMESTER

Life or Physical Science		3
Area of Concentration or Elective		6
Electives		6
		15

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 72-76. Please visit www.jwcc.edu/course-catalogs for the most up-to-date 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	3
			15

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	5
			16

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	5
			18

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	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	170-181	Applied Lessons	2
MUS	188	Class Piano I	1
Social/Behavioral Science			3
			16

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	170-181	Applied Lessons	2
MUS	189	Class Piano II	1
			17

THIRD SEMESTER

CMN	101	Intro to Speech	3
MUS	151-168	Music Ensemble Act	1
MUS	231	Music Theory/Ear Train III	4
MUS	270-281	Applied Lessons	2
MUS	288	Class Piano III	1
Physical or Life Science			3-4
			14-15

FOURTH SEMESTER

HUM		Gen Ed Requirement	3
MAT		Gen Ed Requirement	3
MUS	151-168	Music Ensemble Act	1
MUS	232	Music Theory/Ear Train IV	4
MUS	270-281	Applied Lessons	2
MUS	289	Class Piano IV	1
Physical or Life Science			3-4
			17-18

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 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
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 81. The minimum total number of credit hours required for the AA or AS degree is 64.

Accounting
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	3
			15

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	3
			16

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	Business Internship OR	
BUS		Elective	3
CSC	107	Word Processing-Core Level	2
			16

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	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

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	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	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	230	Gov/Not For Profit Accounting	3 hrs.
ACC	240	Tax Accounting	3 hrs.
ACC	295	Advanced Special Topics In Accounting	1-4 hrs.

Additional information may be obtained from the Illinois Board of Examiners website (www.ilboe.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, marketing and effective business practices. United States and world agriculture continue to become 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 foreign markets, continually creates opportunity for U.S. agriculture. Today's emphasis on production efficiencies and technologies, 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 agribusiness, 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 global, employment opportunities in agriculture on a world-wide basis will continue to expand.

Agriculture Emphasis
Associate in Science Degree (Transfer) OR
Associate in Arts 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 is required.

AGR	150	Ag & Consumer Related Occup	1 hr.
AGR	200	Introduction to Soil Science	4 hrs.
AGR	201	Intro to Agriculture Education	3 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.
AGR	270	Agricultural Mechanization Skills	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 81. 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

FIRST YEAR - FALL

AGR	150	Ag/Consumer Related Occup I	1
AGR	200	Intro to Soil Science	4
AGR	202	Intro to Animal Science	4
ENG	101	Rhet & Comp I	3
FYE	101	Blazing Your Trail	1
CMN	101	Intro to Speech I	3
Approved Elective*			2
			18

SPRING/SUMMER

AGR	199	Occupational Internship I	4

SECOND YEAR - FALL

AGR	193	Ag/Consumer Rel occup II	1
AGR	203	Ag Econ for Consumers	3
AGR	204	Principles of Crop Science	4
ENG	102	Rhet & Comp II	3
HIS	122	US History II OR any general education history	3
Approved Elective*			2-4
			14-18

SPRING/SUMMER

AGR	299	Occupational Internship II	4

SPRING

AGR	175	Computer Appl in Agribus	3
AGR	189	Ag Finance & Records	3
AGR	270	Ag Mechanization Skills	3
MAT	100	Technical Math OR any general education math course	3
Approved Elective*			2-4
			12-16

SPRING

AGR	184	Ag Commodity Mkt	2
AGR	186	Ag Business Mgmt	3
AGR	188	Ag Sales & Marketing	2
Approved Elective*			3-6
			10-13

*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
FYE	101	Blazing Your Trail	1
		Approved Elective*	4-8
			10-14

SPRING

AGR	175	Comp Appl in Agribus	3
AGR	189	Ag Finance & Records	3
AGR	270	Ag Mechanization Skills	3
		Approved Elective*	2-6
			11-15

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.

Conservation Management Certificate

16 Semester Hours

This Conservation Management certificate is designed to prepare students for entry into or advancement in careers of natural resource management, environmental practices, soil and water conservation, and wildlife conservation. The Certificate provides current environmental professionals and people seeking to move into a related career with course training in specific areas of conservation. Students completing this certification have the option to continuing their education to earn an AAS degree in Agriculture Business Management.

REQUIRED COURSES

AGR	151	Renewable & Sustainable Resources	2
AGR	152	Natural Resource Management	3
AGR	153	Pest Management	2
AGR	154	Wildlife Management	2
AGR	194	Current Issues in Conservation Mgmt	2
AGR	200	Intro to Soil Science	4
FYE	101	First Year Experience	1
			16

Animal Science
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.

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

FIRST YEAR - FALL

AGR	150	Ag/Consumer Related Occup I	1
AGR	161	Animal Evaluation and Selection	3
AGR	202	Intro to Animal Science	4
CMN	101	Intro to Speech	3
ENG	101	Rhet & Comp I	3
FYE	101	Blazing Your Trail	1
Approved Elective*			2
			15-17

SPRING/SUMMER

AGR	199	Occupational Internship I	4

SECOND YEAR - FALL

AGR	180	Swine Management	2
AGR	193	Ag/Consumer Related Occup I	1
AGR	203	Ag Economics	3
ENG	102	Rhet & Comp II	3
HIS	122	U.S. History II OR any general education history	3
Approved Elective*			2-4
			10-12

SPRING/SUMMER

AGR	299	Occupational Internship II	4

SPRING

AGR	167	Applied Beef Prod Skills	2
AGR	169	Artificial Insemination-Cattle	1
AGR	175	Computer Appl in Agribus	3
AGR	189	Ag Finance & Records	3
AGR/VET Elective*			2-4
MAT	100	Technical Math or any general education math course	3
			14-16

SPRING

AGR	164	Animal Nutrition & Health	3
AGR	165	Beef Mgmt	2
AGR	186	Ag Business Mgmt	3
AGR/VET Elective*			2-4
			10-12

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

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 Evaluation and Selection	3
AGR	202	Intro to Animal Science	4
FYE	101	Blazing Your Trail	1
Approved Elective(s)*			3-5
			12-14

SPRING

AGR	164	Animal Nutrition & Health	3
AGR	165	Beef Mgmt	2
AGR	167	Applied Beef Prod Skills	2
AGR	169	Artificial Insemination-Cattle	1
AGR	175	Computer App in Agribus	3
AGR	186	Ag Business Mgmt	3
Approved Elective(s)*			2-4
			16-18

SPRING/SUMMER

AGR   199   Occupational Internship I   4

*Approved Electives: AGR 152-Natural Resource Management, AGR 184-Ag Commodity Marketing, AGR 189-Agricultural Finance & Records, AGR 270-Ag Mechanization Skills

Swine Specialist 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

AGR	150	Ag/Consumer Rel Occup I	1
AGR	161	Animal Evaluation and Selection	3
AGR	180	Swine Management	2
AGR	202	Intro to Animal Science	4
FYE	101	Blazing Your Trail	1
		Approved Elective(s)*	2-4
			12-15

SPRING

AGR	164	Animal Nutrition & Health	3
AGR	174	Artificial Insemination-Swine	1
AGR	175	Computer Appl in Agribus	3
AGR	182	Applied Pork Prod Skills	2
		Approved Elective*	1-4
			10-13

SPRING/SUMMER

AGR   199   Occupational Internship I   4

*Approved Electives: AGR 152-Natural Resource Mgmt, AGR 184-Ag Commodity Marketing, AGR 189-Agribusiness Finance & Records, AGR 270-Ag Mechanization Skills

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 95 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.

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 81. 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 four-year 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 will also need to be taken as program electives as they serve as prerequisites to some of the area of concentration courses listed above.

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 81. 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	2
			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			4
			16

THIRD SEMESTER

ACC	101	Prin of Accounting I	3
CSC	104	Spreadsheets-Core Level	2
CSC	123	Intro to Content Mgmt	2
CSC	146	Intro to Webpage Design	2
BUS/CSC/OFT Electives			4
General Education Requirement			3
			16

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			6
			16

Business: Management Option
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)*			3
			16

SECOND SEMESTER

ACC	101	Prin of Accounting I	3
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)*			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

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
		Elective(s)	5
			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	3
			16

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	1
			14

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 81. 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 81. 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	
		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	1
			16

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	3
			18

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
			15

FOURTH SEMESTER

CAD	202	CAD Applications III	3
CAD	231	Tool Design	3
MAT	114	Trigonometry	3
Approved Technical Elective*			6
			15

*Approved Technical Electives: LOM 102-Supply Chain Management, LOM 180-Project Management and all courses with CAD, ELE, IMT, 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

CAD	101	Intro to Dft & Blueprint	
		Reading for CAD	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
Approved Technical Elective*			1
			16

*Approved Technical Electives: All courses with CAD, ELE, IMT, 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
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 81. 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 ever-increasing 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	2
			17

Graphic Design
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	190	Portable Document Format	1
ENG	101	Rhet & Comp I	3
FYE	101	Blazing Your Trail	1
			15

SECOND SEMESTER

ART	136	Graphic Design I	3
CMN	101	Intro to Speech I OR	
CMN	104	Interpersonal Comm	3
CSC	143	Intro to Desktop Info Mgmt	1
CSC	186	Desktop Pub with InDesign	3
CSC	220	Graphic & Photo Manip	3
MAT		Gen Ed Requirement	3
			16

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	3
			17

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*	4
			16

*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

CSC	106	Intro to Computers	3
CSC	220	Graphic/Photo Manipulation	3
CSC	248	Computerized Illustration	3
ENG	101	Rhet & Comp I OR	
ENG	191	Business Writing	3
FYE	101	Blazing Your Trail	1
			13

SECOND SEMESTER

BUS	131	Prin of Marketing	3
CSC	110	Bus App of Microcomputer	3
CSC	186	Desktop Pub with InDesign	3
CSC	190	Portable Document Format	1
CSC	249	Adv Graphic Applications	3
		Approved Elective*	1
			14

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

Web Design
Certificate

29 Semester Hours

The Web Design Certificate will provide students with skills to create and maintain Websites. 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

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	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*	1
			13

*Approved Electives: All courses with ART, BUS, CSC and OFT prefixes and AAS Web Development degree.

Web Development
Associate Applied Science

64 Semester Hours

Web Development is a dynamic field that requires an understanding of the web best practices, as well as technical and programming expertise, and creative design skills to meet the ever-changing needs of Web-based communication. This Web Development AAS degree introduces students to Web design, development, and programming.

Students will learn to write, design, and edit Web page content, use authoring and scripting languages, and write supporting code for web applications. The degree includes courses that develop skills and experience necessary for a career in Web development.

REQUIRED COURSES

FIRST SEMESTER

CSC	106	Intro to Computers	3
CSC	112	Computer Programming Logic	3
CSC	123	Intro to Content Management Systems (WordPress)	2
CSC	124	Web Programming I (HTML, CSS, Scripting)	3
CSC	248	Computerized Illustration	3
FYE	101	Blazing Your Trail	1
			15

SECOND SEMESTER

ART	136	Graphic Design I	3
CSC	220	Graphic & Photo Manipulation (Photoshop)	3
CSC	223	Web Scripting (JavaScript)	3
CSC	224	Web Programming II (PHP, MySQL)	3
CSC	116	Database - Core Level (Access) OR Approved Elective*	2
			14

THIRD SEMESTER

CMN	101	Intro to Speech I OR	
CMN	104	Interpersonal Communication	3
CSC	247	Web Graphics and Interactivity	3
CSC	256	Web Programming III (Python, (Ruby on Rails)	3
CSC	257	Database Management	3
MAT Gen Ed Requirement			3
Approved Electives*			3
			18

FOURTH SEMESTER

CSC	258	Web Programming IV	3
CSC	259	Web Server Administration	3
ENG	101	Rhetoric and Composition I	3
PSY	101	Introduction to Psychology OR	
SOC	101	Introduction to Sociology	3
Approved Electives*			5
			17

* Approved Electives

ART 126 2-D Design & Color	3
ART 137 Graphic Design II	3
ART 226 Graphic Design III	3
BUS 131 Marketing	3
CSC 119 Programming 1 (C++)	3
CSC 141 Intro to the Internet	1
CSC 190 Portable Document Formatting	1
CSC 216 Database - Expert Level (Access)	2
CSC 274 Language Survey (Java)	3

Web Development Certificate

29 Semester Hours

Web Development is a dynamic field that requires an understanding of the web best practices, as well as technical and programming expertise, and creative design skills to meet the ever changing needs of Web-based communication. This certificate program is a course of study that introduces students to the basics of Web design, development and programming.

Students will learn to write, design and edit Web page content, using authoring and scripting languages and write supporting code for web applications. After completing the certificate, the graduate will be ready to enter the workforce with skills and experience necessary for basic Web development.

REQUIRED COURSES

FIRST SEMESTER

CSC	106	Intro to Computers	3
CSC	112	Computer Prog Logic	3
CSC	123	Intro to Content Management Systems (WordPress)	2
CSC	124	Web Programming I (HTML, CSS, Scripting)	3
CSC	248	Computerized Illustrations	3
FYE	101	Blazing Your Trail	1
			15

SECOND SEMESTER

ART	136	Graphic Design I	3
CSC	116	Database - Core Level (Access) OR Approved Elective	2
CSC	220	Graphic & Photo Manipulation (Photoshop)	3
CSC	223	Web Scripting (JavaScript)	3
CSC	224	Web Programming II (PHP, MySQL)	3
			14

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 080	Basic Writing	3 hrs.
ENG 098	Corequisite Writing Skills	1 hr.
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

33 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. Diesel service technicians repair and maintain diesel engine systems that power transportation 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. Students must pass an Illinois State Police background check and receive clearance before admission.

REQUIRED COURSES

FIRST SEMESTER

DET	101	Diesel Technology I	8
MAT	100	Technical Mathematics	3
MFG	113	Intro to Mfg/Industrial Safety	3
WLD	101	Maint & Repair Welding	3
			17

SECOND SEMESTER

CMN	101	Intro to Speech I OR	
CMN	104	Interpersonal Communication	3
DET	102	Diesel Technology II	8
IMT	150	Fluid Power I (Hydraulics)	3
IMT	155	Fluid Power II (Pneumatics)	2
			16

Early Childhood Education
Associate in Applied Science

64 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. John Wood is an entitled institution through the Gateways Opportunity Network; therefore, students are able to complete coursework for Early Childhood Levels 2, 3 and 4 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 infants, toddlers, preschool and school age children. Students receive excellent training opportunities through experiential and active involvement with children on campus, in area childcare facilities and in local schools. Early Childhood students are encouraged to observe and assess children as they develop academically, socially, physically and mentally in their study of the whole child. 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 may 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	Foundations of Early Childhood Edu.**	3
EDU	124	Health & Safety for Young Children**	3
EDU	150	Caring for Infants & Toddlers**	3
EDU	165	Creative Arts & the Young Child	3
ENG	101	Rhet & Comp I	3
FYE	101	Blazing Your Trail	1
			16

SECOND SEMESTER

CMN	101	Intro to Speech	3
EDU	175	Current Topics & Issues in EC	2
EDU	202	Child Growth & Development**	3
EDU	245	STEM in Early Childhood	3
EDU	271	Child, Family and Community**	3
PSY	101	Intro to Psychology	3
			17

THIRD SEMESTER

EDU	215	Observation & Assessment in EC**	3
EDU	235	Guidance of the Young Child	3
EDU	255	Lang/Lit. & Social Studies in EC	4
EDU	260	Curriculum for Early Childhood Programs**	3
Mathematics Requirement			3
			16

FOURTH SEMESTER

EDU	205	Exceptional Child	3
EDU	251	Child Care Administration	3
EDU	298	Early Childhood Practicum**	3
Early Childhood Education Elective*			3
General Education Requirement			3
			15

*Any electives with an EDU prefix

**Gateway credentialed classes

Students completing the AAS in Early Childhood Education are eligible for the Early Childhood Gateways-Level 4 Certificate.

Early Childhood Gateways - Level 2 Certificate

16 Semester Hours

These certificate programs are Illinois Gateways Entitled programs for Early Childhood Education. Through these JWCC programs, students can earn credentials to meet statewide standards and improve their opportunities for employment by registering their successful 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.

REQUIRED COURSES

FIRST SEMESTER

EDU	102	Foundations of Early Childhood Edu.	3
EDU	124	Health & Safety for Young Children	3
EDU	150	Caring for Infants & Toddlers	3
FYE	101	Blazing Your Trail	1
			10

SECOND SEMESTER

EDU	202	Child Growth & Development	3
EDU	271	Child, Family and Community	3
			6

Early Childhood Gateways - Level 3 Certificate

31 Semester Hours

REQUIRED COURSES

FIRST SEMESTER

EDU	102	Foundations of Early Childhood Edu.	3
EDU	124	Health & Safety for Young Children	3
EDU	150	Caring for Infants & Toddlers	3
FYE	101	Blazing Your Trail	1
			10

SECOND SEMESTER

EDU	202	Child Growth & Development	3
EDU	271	Child, Family and Community	3
			6

THIRD SEMESTER

EDU	215	Observation & Assessment in EC	3
EDU	260	Curriculum for Early Childhood Programs	3
			6

Per Gateways to Opportunity requirements, 9 semester hours of general education coursework must also be completed for the Level 3 certificate. These are must be credit bearing. The courses listed below are recommended, however, any 9 credit hours of general education electives will be accepted.

CMN	101	Introduction to Speech	3 hrs.
EDU	201	Educational Psychology	3 hrs.
ENG	101	Rhetoric & Composition I	3 hrs.
PSY	101	Introduction to Psychology	3 hrs.
SOC	224	Marriage & the Family	3 hrs.

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 Arts 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 81. 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	Foundations of Education	3 hrs.
EDU	201	Educational Psychology	3 hrs.
EDU	205	Exceptional Child	3 hrs.
EDU	290	Field 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.

EDU	202	Child Growth and Development	3 hrs.
EDU	204	Introduction to Technology in Education	3 hrs.
EDU	293	Children's Literature	3 hrs.
PSY	233	Developmental Psychology	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 81. 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 AC/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
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	101	Blueprint Rdg for Electricians	3
ELE	110	Intro to Electricity	3
ELE	120	Intro to National Elec Code	3
FYE	101	Blazing Your Trail	1
Mathematics Requirement			3
			16

SECOND SEMESTER

ELE	125	Electrical Applications I	3
ELE	130	Residential Electricity	3
IMT	120	Industrial Motors & Controls	3
MFG	113	Intro to Manu/Indu Safety	3
Hum/Soc/Behav Science Requirement			3
Written Communication Requirement			3
			18

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			3
			15

FOURTH SEMESTER

ELE	225	Industrial Electricity	3
ELE	230	Specialized Electrical Circuits	3
ELE	235	Electrical Systems Analysis	3
MFG	104	Quality/Continuous Improv	3
General Education Requirement			3
			15

Electrician
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

ELE	100	Survey of Electrical Trade	2
ELE	110	Intro to Electricity	3
ELE	120	Intro to National Elec Code	3
FYE	101	Blazing Your Trail	1
Electives			3
Any general education MAT class			3
			15

SECOND SEMESTER

ELE	125	Electrical Applications I	3
ELE	130	Residential Electricity	3
IMT	120	Industrial Motors & Controls	3
MFG	113	Intro to Manu/Indu Safety	3
Written Communication Requirement			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 four-year 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 81. 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 81. 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 Degree

A general suggested model for the AA/AS/AES/AFA degree for a full-time student is available on page 81. The minimum total number of credit hours required for the AFA is 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			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			2
			15

THIRD SEMESTER				FOURTH SEMESTER		
CMN	101	Intro to Speech I OR		FSC	180 Fire Service & the Law	3
CMN	104	Interpersonal Comm	3	FSC	Electives	3
FSC	136	Basic Firefighter-Module C	3	General Education Requirement		3
FSC	Electives		6	Electives		3
Electives			6	Technical Rescue Requirement		3
			18			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.

BIO	275	Human Anatomy and Physiology I	4 hrs.
BIO	276	Human Anatomy and Physiology II	4 hrs.
HPR	100	Lifetime Fitness and Wellness	2 hrs.
HPR	101	History & Principles of Health, Physical Education & Recreation	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 81. 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 81. The minimum total number of credit hours required for the AA or AS degree is 64.

Heating, Ventilation, Air Conditioning & Refrigeration Service Technician Certificate

31 Semester Hours

This certificate program is designed to provide students the skill set to perform preventative maintenance, service and repairs on residential and commercial air conditioning, heating, and refrigeration systems. Emphasis is placed on practical application to perform system diagnostics and develop troubleshooting techniques.

REQUIRED COURSES

FIRST SEMESTER

FYE	101	Blazing Your Trail	1
HVA	101	Refrigeration Fundamentals	3
HVA	103	Heating Principles	3
HVA	199	HVAC Internship	1
IMT	110	Industrial Wiring	2
IMT	120	Industrial Motors & Controls	3
MAT	100	Technical Math OR	
		any college level math	3
			16

SUMMER

HVA	199	HVAC Internship	2

SECOND SEMESTER

HVA	105	Heating & Cooling	3
HVA	107	Commercial Air Cond Systems	3
IMT	140	Pumps/Piping	2
IMT	155	Fluid II (Pneumatics)	2
IMT	200	Mechanical Systems	3
			13

Industrial Maintenance Technology 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
MFG	113	Intro to Mfg/Industrial Safety	3
			15

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
MAT	100	Technical Math OR	
		any college level math	3
			16

THIRD SEMESTER

CMN	101	Introduction to Speech	3
IMT	290	Rigging	2
MFG	135	Precision Machining I	3
WLD	101	Maint & Repair Welding	3
Hum/Soc/Behav Science Requirement			3
General Education Requirement			3
			17

FOURTH SEMESTER

ENG	101	Rhet & Comp I	3
ELE	230	Specialized Electrical Circuits OR	
IMT	199	Ind Maint Tech Internship	3
IMT	235	Mechatronics	4
MFG	150	Handling Tool Operations/	
		Programming	3
MFG	235	Precision Machining II	3
			16

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 Math OR	
		any college level math	3
MFG	113	Intro to Manu/Ind Safety	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 Math OR	
		any college level math	3
MFG	113	Intro to Manu/Indu Safety	3
			16

Information Management (See Business)

Law Enforcement

JWCC offers both transfer and non-transfer programs in law enforcement. The transfer-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
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 81. The minimum total number of credit hours required for the AA or AS degree is 64.

Law Enforcement
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

ENG	101	Rhet & Comp I	3
FSC	174	Hazardous Materials Oper	3
FYE	101	Blazing Your Trail	1
LEN	101	Law Enforcement I- Overview	3
LEN	111	Juvenile Justice	3
PSY	101	Intro to Psychology	3
			16

SECOND SEMESTER

CMN	101	Intro to Speech I OR	
CMN	104	Interpersonal Comm	3
LEN	150	Sci Criminal Investigation	3
LEN	212	Criminal Law	3
LEN	260	Criminal Justice Seminar I	3
SOC	101	Intro to Sociology	3
			15

THIRD SEMESTER

CSC		Elective	3
EMS	150	Emergency Med Tech*	6
LEN		Elective	3
MAT	109	Elementary Statistics	3
SOC	221	Social Psychology	3
			18

FOURTH SEMESTER

FSC	282	Essentials for the First Responder	3
LEN	261	Criminal Justice Seminar II	3
Electives			9
			15

*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 Requirement ....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 81. 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
CSC	107	Word Processing-Core Level	2
FYE	101	Blazing Your Trail	1
LOM	100	Intro to Logistics Mgmt	3
LOM	102	Supply Chain Mgmt	3
PSY	101	Intro to Psych OR	
PSY	145	Human Rel/Workplace	3
			15

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*			5
			17

SECOND SEMESTER

BUS	125	Supervisory Management	3
CSC	104	Spreadsheets-Core Level	2
ENG	101	Rhet & Comp I OR	
ENG	191	Business Communication	3
LOM	101	Transportation	3
LOM	104	Intro to Warehouse Mgmt	3
MAT	109	Elementary Statistics	3
			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 Requirement			3
			15

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

Logistics
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
CSC	107	Word Processing-Core Level	2
FYE	101	Blazing Your Trail	1
LOM	100	Intro to Logistics Mgmt	3
LOM	102	Supply Chain Mgmt	3
PSY	101	Intro to Psych OR	
PSY	145	Human Rel/Workplace	3
			15

SECOND SEMESTER

BUS	125	Supervisory Management	3
CSC	104	Spreadsheets-Core Level	2
ENG	101	Rhet & Comp I OR	
ENG	191	Business Communication	3
LOM	101	Transportation	3
LOM	104	Intro to Warehouse Mgmt	3
MAT	109	Elementary Statistics	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 130 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 OR any general education math	3
MFG	103	Intro to Manufacturing Maint	2
MFG	104	Quality/Continuous Improv	3
MFG	113	Intro to Mfg/Industrial Safety	3
			15

Required General Education Courses

Humanities/Fine Arts Requirement	3
Oral Communication Requirement	3
Social/Behav Sciences Requirement	3
Written Communication Requirement	3
	12

Complete Courses from 2 of the Specialized Areas Below:

Diesel Technology

DET	101	Diesel Technology I	8
DET	102	Diesel Technology II	8
IMT	150	Fluid Power I (Hydraulics)	3
IMT	155	Fluid Power II (Pneumatics)	2
WLD	101	Maint & Repair Welding	3
			24

Industrial Maintenance

ELE	110	Intro to Electricity	3
ELE	135	Programmable Controls	3
IMT	110	Industrial Wiring	2
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	3
			21

Welding

WLD	121	MIG Welding Short Circuit	3
WLD	124	MIG Welding Spray Transfer	1
WLD	125	Stick Welding I	3
WLD	161	Interpreting Welding Prints	3
WLD	180	Thermal Cutting	2
			12

Engineering Design-SolidWorks

CAD	101	Intro to Dft & Blueprint Reading for CAD	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
			15

Precision Machining

CAD	101	Intro to Dft & Blueprint Reading for CAD	3
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	3
			19

Automation & Robotics

CAD	101	Intro to Dft & Blueprint Reading for CAD	3
CAD	114	Intro to Parametric Modeling	3
ELE	135	Programmable Controls	3
IMT	120	Industrial Motors & Controls	3
MFG	145	Intro to Robotics	3
MFG	150	Handling Tool Operations/ Programming	3
			18

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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, HVA, IMT, 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.

Automation & Robotics Technician Certificate

30 Semester Hours

The Automation and Robotics Technician program provides an introduction of industrial automation including the use of CAD SolidWorks software, PLC programming, Industrial Motors and Controls, and the operation and programming of robotics systems. The program examines applications and examples of automated manufacturing systems including both classroom and hands on lab exercises. This certificate prepares students for immediate employment as an Automated Process Specialist or Technician.

REQUIRED COURSES

FIRST SEMESTER

CAD	101	Intro to Dft & Blueprint Reading for CAD	3
CAD	114	Intro to Parametric Modeling	3
ELE	135	Programmable Controls	3
FYE	101	Blazing Your Trail	1
MFG	103	Intro to Manufacturing Maint	2
MFG	145	Intro to Robotics Operations	3
			15

SECOND SEMESTER

IMT	120	Industrial Motors & Controls	3
MAT	100	Technical Math OR any general education math	3
MFG	104	Quality & Cont Improvement	3
MFG	113	Intro to Mfg/Industrial Safety	3
MFG	150	Handling Tool Operations/Prog	3
			15

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 OR any general education 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*			2
			16

*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

FIRST SEMESTER			
CAD	101	Intro to Dft & Blueprint Reading for CAD	3
FYE	101	Blazing Your Trail	1
MAT	100	Technical Math OR any general education math	3
MFG	103	Intro to Manufacturing Maint	2
MFT	104	Quality/Continuous Improv	3
MFG	113	Intro to Manu/Indu Safety	3
MFG	135	Precision Machining I	3
			18

SECOND SEMESTER			
CAD	230	Intro to Mfg Processes	3
MFG	106	CNC Turning	3
MFG	111	CNC Milling	4
MFG	235	Precision Machining II	3
MFG	250	Physical Metallurgy	3
			16

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 81. The minimum total number of credit hours required for the AA or AS degree is 64.

Medical Laboratory Technician

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.

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 self-motivated. They are problem solvers who like challenge and responsibility. They must be accurate, reliable, and able to work well under pressure.

A degree plan following an articulation agreement with Blessing-Riemann College of Nursing and Health Sciences offers students the ability to prepare for application to the Associates of Science in Medical Laboratory. Enrollment into the BRCN MLT program is limited, and competitive.

JWCC - Semester 1

BIO	101	General Biology*	4
BIO	275	Human Anat & Phys I*	4
CHM	100	General Chemistry	4
ENG	101	Rhet & Comp I	3
MAT	109	Elementary Statistics OR	
MAT	113	College Algebra	3
PSY	101	Intro to Psychology	3
			17

JWCC - Semester 2

BIO	276	Anat & Phys II	4
BIO	293	Microbiology	4
CMN	101	Intro to Speech	3
PHL	121	Ethics	3
Gen Ed Requirement**			3
			17

BRCN - Semesters 3-5

While the above JWCC roadmap is current as of the printing of this catalog, students are encouraged to contact admissions@BRCN.edu for the most up to date degree plan and admissions information.

*BIO 101 - Taken first 8 weeks (may do in previous term); BIO 275 - Taken second 8 weeks
**General Education course in History, Literature or Fine Arts

Nursing Assistant

7 Semester Hours

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 restrictions 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 BNATP certification exam. Once a student successfully completes the required written competency examination, employment opportunities for certified nursing assistants (CNAs) are excellent.

A minimum grade of "C" must be achieved in all courses to successfully complete the program.

Required Courses

NUA 101   Basic Nurse Assistant ....6 hrs.
NUA 103   Nursing Assistant Practicum ....1 hr.
TOTAL REQUIRED FOR CERTIFICATE ....7 HRS.

Advanced Nursing Assistant*

18 Semester Hours

The Advanced Nursing Assistant program has been developed in conjunction with the Illinois Department of Public Health to expand on the skill level and professional opportunities of the Certified Nursing Assistant. Additional skills in oxygenation, wound care and sterile technique are taught, along with an expansion of professional skills and behaviors such as communication and conflict resolution. An expanded clinical practicum will also introduce the advanced nurse assistant to a wider variety of employment options available.

Upon successful completion of the JWCC Advanced Nursing Assistant program, a certificate of completion is awarded and the student is eligible to take the State of Illinois ANATP certification exam. Once a student successfully completes the required written competency examination, employment opportunities for certified nursing assistants (CNAs) are excellent.

A minimum grade of "C" must be achieved in all courses to successfully complete the program.

Required Courses

FYE 101 First Year Experience ....1 hr.
NUA 101 Basic Nurse Assistant ....6 hrs.
NUA 103 Nursing Assistant Practicum ....1 hr.
NUA 121 Advanced Nurse Assistant..7 hrs.
OFT 281 Medical Terminology ....3 hrs.
TOTAL REQUIRED FOR CERTIFICATE...18 HRS.

*Pending IDPH approval

Medical Assistant Certificate

37 Semester Hours

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 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.

REQUIRED COURSES

PREREQUISITE COURSE

OFT	281	Medical Terminology	3

FIRST SEMESTER

FYE	101	Blazing Your Trail	1
HSC	108	Clinical Medical Assisting I	2
HSC	175	Basic Human Structure & Func	3
OFT	101	Beginning Keyboarding	2
OFT	170	Admin Medical Assisting I	4
			12

SECOND SEMESTER

CMN	101	Intro to Speech	3
HSC	128	Clinical Medical Assisting II	2
OFT	171	Admin Medical Office II	2
OFT	185	Medical Insurance & Coding	3
OFT	260	Customer Service	3
OFT	283	Pharm for the Medical Office	3
			16

THIRD SEMESTER

HSC	189	Medical Law & Ethics I	3
HSC	199	Ambulatory Practicum	3
			6

Practical Nurse Certificate

54 Semester Hours

Associate Degree in Nursing Associate in Applied Science

74 Semester Hours

John Wood Community College offers a ladder nursing program including the practical nurse certificate which prepares students to take the NCLEX-PN exam to become a Licensed Practical Nurse (LPN) and the associate degree in nursing program which prepares students for the NCLEX-RN 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 eligible to take the NCLEX-PN exam. These students will still continue on and complete the second year ADN coursework, becoming eligible to sit for the NCLEX-RN exam for licensure as a Registered Professional Nurse.

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 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 ***
   - **BIO 276 Human Anatomy & Physiology II ***
   - **PSY 233 Developmental Psychology**
6. Upon the September 15 and February 15 application dates, applicants without a minimum ACT score of 22, or a minimum SAT score of 1070 (ACT/SAT is NOT REQUIRED) within the past five years 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. Scores are valid for one calendar year; students are allowed two attempts to meet the required score with each applications cycle. If you submit previous HESI scores for consideration, please attach to your application. Scores over one year old will not be considered. The applicant is responsible for all testing fees; testing fees are nonrefundable.
7. **Community LPN** - Required to meet the above admissions criteria, as well as include their current LPN license and proof of employment as an LPN for at least 6 of the previous 12-month period.

Academic Progression Criteria:

1. The following course must be completed prior to the start of NUR 148:
   - **BIO 293 Microbiology****
2. The following course must be completed prior to the start of NUR 203:
   - **CMN 101 Introduction to Speech****
3. Maintain a minimum cumulative grade point average (GPA) of 2.0.
4. Maintain a minumum nursing cumulative grade point average (NGPA) of 2.5.

5. Earn a minimum of "C" in all required nursing courses and earn a minimum of "C" in all required prerequisite and support courses by the time they are required as prerequisites. A "C-" is not acceptable.
6. Complete all prerequisites for subsequent courses.
7. Meet other specific requirements of the program as stated in Nursing Student Handbook.
8. When a second, third or fourth semester student does not progress due to a NGPA below 2.7, the student must retake a required nursing course to raise his/her NGPA and to help the student improve his/her knowledge base as a safe professional nurse.
9. **Community LPN** - Required to maintain a nursing cumulative GPA of 2.5 to continue in program plus cumulative GPA of 2.0 for graduation purposes.

Nursing Graduation Criteria:

1. 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 Records Registrar & Financial Aid.
2. A nursing cumulative grade point average of 2.5 on a 4.0 scale.
3. Any applicable AA degree requirements as indicated in Graduation Requirements section of catalog.

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 - Semester 1*

NUR	108	Fundamentals	4
NUR	118	Physical Assessment	1
NUR	128	Fundamentals II	5
			10

First Year - Semester 2*

NUR	138	Pharmacology	4
NUR	148	Health & Illness Concepts I	5
NUR	190	LPN Scope of Practice*	4
			9 (13)

Second Year - Semester 3

NUR	203	RN Concepts	2 (One to two weeks prior to start of Semester 3)
NUR	248	Health & Illness Concepts II	4
NUR	258	Family Health Concepts	6
			12

Second Year - Semester 4

NUR	268	Complex Health Concepts	6
NUR	278	Community Health Concepts and Mental Health	4
NUR	289	RN Leadership	2
			12

*Students wishing to complete the Practical Nurse certificate (53 semester hours) are required to complete all of the First Year-Semester 1 and Semester 2 courses in addition to NUR 190-LPN Scope of Practice (4 cr. hrs.) and the required general education courses.

* 10-year limit on A&P 1 and 2, Micro, and Statistics.

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

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			3
			16

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		Gen Ed Requirement	3
Oral Communication Requirement			3
BUS/CSC/OFT Elective			3
			16

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			3
BUS/CSC/OFT Elective			3
			16

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/CSC/OFT Elective			3
			16

Office Technology
Certificate

32 Semester Hours

The Office Technology certificate is intended for persons seeking immediate entry-level 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	122	Presentation Software	2
OFT	101	Beginning Keyboarding	2
OFT	102	Keyboarding I	2
FYE	101	Blazing Your Trail	1
PSY	145	Human Rel in the Workplace	3
Written Communication Requirement			3
			16

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	Gen Ed Requirement		3
OFT	260	Customer Service	3
Oral Communication Requirement			3
			16

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. Students that have successfully completed BIO 275 & 276 with a "C" or better, do not have to take HSC 175.

REQUIRED COURSES

FIRST SEMESTER

HSC	175	Basic Human Structure & Func	3
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			3
			15

SECOND SEMESTER

BUS	101	Intro to Business	3
MAT	Gen Ed Requirement		3
OFT	185	Medical Insurance & Coding	3
OFT	260	Customer Service	3
OFT	281	Medical Terminology	3
BUS/CSC/OFT/HSC 189 elective			2
			17

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*			3
			17

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			3
			15

*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			2-3
			17-18

*Approved Electives: HSC 175, HSC 189, and all courses with BUS, CSC, NUA, NUR or OFT prefixes

Paramedicine
Associate in Applied Science

64 Semester Hours

The Emergency Medical Technician—Paramedicine (EMT-P) program is a very fast-paced, 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.

The EMS Director can be reached at 217.223.8400, ext. 6591.

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	1
			40

SECOND YEAR REQUIRED COURSES

FIRST SEMESTER

BIO	275	Human Anat & Phys I	4
CSC	100	Computer Literacy	1
MAT		Gen Ed Requirement	3
PSY	101	Intro to Psychology OR	
SOC	101	Intro to Sociology	3
Elective			1
			12

SECOND SEMESTER

BIO	276	Human Anat & Phys II	4
CMN	101	Intro to Speech OR	
CMN	104	Interpersonal Comm	3
ENG	101	Rhet & Comp I	3
Elective			2
			12

Paramedicine 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

The EMS Director can be reached at 217.223.8400, ext. 6591.

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	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, electro-magnetism, 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 81. 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	3 hrs.
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	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 81. 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.
		Psychology 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 81. The minimum total number of credit hours required for the AA or AS degree is 64.

Radiologic Technology

JWCC has a partnership with Quincy University that will enable students to begin their general education coursework here. 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.

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 81. The minimum total number of credit hours required for the AA or AS degree is 64.

Sport Management

The Sport Management area of concentration prepares students for professional careers in the rapidly growing sport and recreation industry. Students will develop skills in the business and marketing aspects of sport. Career opportunities include athletic administration and coaching, minor and major league sports, facility and event management, sport promotion, equipment development and retail, and client management.

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.
BUS 161   Business Law ....3 hrs.
HPR 214   Introduction to Sport Management ....3 hrs.
HPR 224   Sport Psychology (cross listed with PSY 224).....................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.

BUS 131   Principles of Marketing ....3 hrs.
HPR 244   Sport Safety Training ....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 81. The minimum total number of credit hours required for the AA or AS degree is 64.

Surgical Technology
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.

The first year focuses on general education courses to prepare the student for second year program specific courses.

The second year courses cover the basic knowledge and skills necessary to prepare the student to function in the clinical area, as well as provides courses which emphasize surgical procedures and clinical experiences.

Application deadline for the program is April 1st.

Students are required to sit for the National Certification Exam (CST) upon successful completion of the program.

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.

GENERAL EDUCATION REQUIREMENTS (39 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* **OR**	
ENG	101	Rhet & Comp I	3
CMN	101	Intro to Speech I* **OR**	
CMN	104	Interpersonal Comm	3
CSC	106	Intro to Computers	3
FYE	101	Blazing Your Trail	1
MAT	100	Technical Math **OR**	
		Any College Level Math	3
OFT	281	Medical Terminology	3
PHL	111	Logic/Critical Thinking **OR**	
PHL	121	Ethics	3
PSY	101	Intro to Psychology	3
Elective			1

CORE PROGRAM COURSES
Fall Semester

SUR	200	Professional Issues for the Surg Tech	1
SUR	210	Intro to Surgical Tech	8
			9

Spring Semester

SUR	220	Surgical Tech I	9
SUR	214	Surgical Pharmacology	2
			11

Summer Semester

SUR	240	Surgical Tech II	9

*NOTE: Students can only meet one requirement using CMN 101.

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.

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 Opportunity Act (WIOA) 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 a 6-week long training with students attending Monday through Thursday from 7 a.m. to 4 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	5
			16

Basic Welding Certificate

16 Semester Hours

The Basic Welding Certificate includes reading and interpreting welding symbols and blueprints, safety, thermal cutting, stick welding, MIG short circuit and spray transfer. Students will also sit for their OSHA-10 General Industry certification and Manufacturing Skill Standards Council safety certification. 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

FYE	101	Blazing Your Trail	1
MFG	113	Intro to Manu/Indu Safety	3
WLD	121	MIG Welding Short Circuit	3
WLD	124	MIG Welding Spray Transfer	1
WLD	125	Stick Welding I	3
WLD	161	Interpreting Welding Prints	3
WLD	180	Thermal Cutting Processes	2
			16

**Industrial Welding
Certificate**
30 Semester Hours
The Industrial Welding Certificate is a continuation of the skills learned in the Basic Welding Certificate. Courses include basic TIG, stick, and commercial welding practices. Students will be introduced to other specialized welding skills such as robotic welding and Plasma cutting.

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,S and University of Northern Iowa.

REQUIRED COURSES

FIRST SEMESTER

FYE	101	Blazing Your Trail	1
MFG	113	Intro to Manu/Indu Safety	3
WLD	121	MIG Welding Short Circuit	3
WLD	124	Welding Spray Transfer	1
WLD	125	Stick Welding I	3
WLD	161	Interpreting Welding Prints	3
WLD	180	Thermal Cutting Processes	2
			16

SECOND SEMESTER

MAT	100	Technical Math	3
WLD	126	Stick Welding II	3
WLD	127	TIG Welding Carbon Steel	2
WLD	132	TIG non-ferrous metals	2
WLD	135	Flux Core Inner & Dual	
		Shield Weld	2
WLD	170	Specialized Welding	1
WLD	194	Capstone Project OR	
WLD	195	Welding Internship	1-2
			14-15

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:

course prefix

course number

course title

times course is repeatable

credit hours

MAT 109   **Elementary Statistics*****   **3 cr. hrs.**
Prerequisite: MAT 010 with a grade of "B" or above or MAT 020 with a grade of "C" or above within two semesters, or appropriate JWCC math placement test 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

Illinois Articulation Initiative (IAI) Code

special requirements for enrollment (if applicable)

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.**
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**   **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 computations, 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.

ACC 199   **Accounting Internship*****   **variable 1-5 cr. hrs.**
Prerequisite: Successful completion of at least 24 credit hours of coursework and a minimum of a 2.0 GPA
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   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.

ACC 295   Advanced 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.

AGRICULTURE

AGR 145   Agriculture Transportation   1 cr. hr.
Prerequisite: TRK 150 to be taken concurrently
This course is designed to provide basic information to agriculture transportation as related to the trucking industry. 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. Additional topics include defensive driving, cargo handling, hazardous materials, and other closely related topics. Provides hands-on experience in backing, parking, start-up, preventive maintenance, and driving on a CDL range. 0.5 lecture hour, 1 lab hour

AGR 150   **Agriculture and Consumer-Related Occupations I**   **1 cr. hr.**

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 151   **Renewable & Sustainable Resources**   **2 cr. hrs.**

Introduction to the conservation principles and technology behind various renewable energy sources. Issues involved in the integration of various renewable energy sources and their economics for heat, power, and transportation need are examined. Based on the technical and sustainability challenges, the future outlook for each of the sources and systems are discussed.

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 (Baylis).

AGR 153   **Pest Management**   **2 cr. hrs.**

The identification of weeds, insects, and diseases in agriculture crop production is covered. Emphasis is on safe handling and application of pesticides along with effective biological, cultural, chemical, and mechanical pest control methods.

AGR 154   **Wildlife Management**   **2 cr. hrs.**

Study of the principals and practices used in the production and improvement of North American wildlife resources.

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**   **3 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 (Baylis). 0.5 lecture hours, 5 lab hours

AGR 163   **Advanced Animal Evaluation and Selection**   **3 cr. hrs.**
Prerequisite: AGR 161; 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 (Baylis). 0.5 lecture hours, 5 lab hours

AGR 164   **Animal Nutrition and Health**   **3 cr. hrs.**

Fundamental principles of animal nutrition and maintenance of health for animals 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 (Baylis). 2 lecture hours, 2 lab hours

AGR 165   **Beef Management**   **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, wean to finish, management and marketing. Available at the Agricultural Education Center (Baylis)

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 (Baylis). 0.5 lecture hours, 3 lab hours

AGR 169   **Artificial Insemination – Cattle**   **1 cr. 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 174   **Artificial Insemination – Swine**   **1 cr. 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 (Baylis). 0.5 lecture hours, 1 lab hour

AGR 175   **Computer Applications in Agribusiness**   **3 cr. hrs.**

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 (Baylis). (Same as CSC 106)

AGR 176   **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   **Swine Management**   **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, genetics, wean to finish, management, and carcass evaluation. Covers the science and reasoning behind the application of the above topics.

AGR 182   **Applied Pork Production Skills**   **2 cr. 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 swine artificial insemination are covered. Available at the Agricultural Education Center (Baylis). 0 lecture hours, 4 lab hours

AGR 184   **Agriculture Commodity Marketing**   **2 cr. hrs.**

A basic and practical approach to the understanding and use of futures and options will be covered. Topics of discussion will include the Chicago Board of Trade's

(CBOT) history and transition, trade terminology, the definition and function of futures and options contracts, price, origination, and cash contracts. The goal of the course is to explain marketing tools and how to use them to avert price risk on a farming operation.

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 (Baylis).

AGR 188　　**Agricultural Sales and Marketing**　　　　　　**2 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 (Baylis).

AGR 189　　**Agricultural Finance and Records**　　　　　　**3 cr. hrs.**
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 (Baylis).

AGR 192　　**Agriculture Essay**　　　　　　**variable 1-4 cr. hrs.**
An investigation of the need to stay current in agriculture. The student is required to attend a minimum of 20 hours of current meetings offered by agriculture businesses, university agriculture extension services or other educational institutions to receive one hour of credit. The student must meet with the instructor to develop an approved plan for attendance of meetings and discussion of procedures to be followed in reporting the activities of these pertinent educational excursions into the agricultural business community. Available at the Agricultural Education Center (Baylis).

AGR 193　　**Agriculture and Consumer-Related Occupations II**　　**1 cr. 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 194　　**Current Issues in Conservation Mgmt**　　　　　　**2 cr. hrs.**
Designed to provide the opportunity for students to explore their occupational or educational interests and to become more familiar with current U.S. and World conservation practices.

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 1-5 cr. 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. 3 lecture hours, 2 lab hours; IAI: AG 904

AGR 201   Introduction to Agricultural Education   3 cr. hrs.
An introduction to Agricultural Education programs and delivery systems, state and federal policies; the nature of teaching in school and non-school settings; types and purposes of Agricultural Education; program components; approaches to teaching, teacher characteristics; community relationships; education change and innovation; trends and developments in Agricultural Education. A general study of the nature of Agricultural Education along with its opportunities and responsibilities will be explored.

AGR 202   Introduction to Animal Science   4 cr. hrs.
A basic course in the principles of livestock production and management, including breed identification, evaluation and selection, feeding, reproduction, sanitation, disease control, and physiology of beef cattle, dairy cattle, swine, sheep and poultry. 3 lecture hours, 2 lab hours; IAI: AG 902.

AGR 203   Agriculture Economics for Consumers   3 cr. hrs.
Introduction to the economic forces which have stimulated development of American agriculture. Includes study of finance, taxation, legal descriptions, input allocation and marketing programs, and governmental policies as they relate to agriculture. 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. 3 lecture hours, 2 lab hours; IAI: AG 903

AGR 270   Agricultural Mechanization Skills   3 cr. hrs.
An introduction to the mechanical maintenance and operational problems on the farm and the agribusiness operation. This course emphasizes the study of general mechanics and farm machinery operation in agriculture. Time will be devoted to basic farm/Ag industry safety policies and procedures, operation and basic repair procedures for farm equipment and building utility systems. Fundamental study is given to electrical wiring systems for buildings, plumbing repair, welding skills and basic carpentry knowledge. 2 lecture hours, 2 lab hours

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**   **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 cr. 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**   **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**   **3 cr. hrs.**
Prerequisite: ART 100 or consent of department
Continuation of the materials, skills and techniques of drawing. Emphasis is on the exploration and development of individual expression of form and content. 1 lecture hour, 4 lab hours

ART 126   **2-D Design and Color**   **3 cr. hrs.**
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**   **3 cr. hrs.**
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**   **3 cr. hrs.**
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**   **3 cr. hrs.**
Prerequisite: ART 100 and ART 136, or consent of department
This 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 and ART 137
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**   **3 cr. hrs.**
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

ART 241   **Painting II**   **3 cr. hrs.**
Prerequisite: ART 240
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

AST 102   **Elementary Astronomy Lab**   **1 cr. hr.**
Prerequisite: Intended to be taken concurrently with AST 101 or with previous completion of AST 101
A laboratory course than examines astronomical phenomena and concepts, including the solar system, stars and galaxies, planetary motions, atoms and radiation and the origin and evolution of the universe through the use of hands-on experiments and observation and analysis of astronomical data. Supplement to Elementary Astronomy 101. 0 lecture hours, 2 lab hours

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+
This is an introductory course emphasizing the biology of human beings, including human organization from the atomic level to the biosphere, basic anatomy and physiology, genetics, evolution, and human interactions with the environment. Selected topics of discussion will include how science works and its impact on the human condition, biotechnological advances and ethical considerations, human wellness and disease, and the impact humans have on the environment. IAI: L1 904

BIO 111   **General Botany**   **4 cr. hrs.**
Prerequisite: BIO 101 with a grade of "C" or above or consent of department
A study of plant structure, growth, physiology, reproduction, evolution, classification, and distribution. 3 lecture hours, 2 lab hours

BIO 195   **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.

BIO 221   **General Zoology**   **4 cr. hrs.**
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 score, or consent of department+
A comparative study of the animal kingdom focusing on the study of animal structure, growth, physiology, reproduction, classification, and distribution. This course is designed for students planning to pursue additional study in the natural sciences. 3 lecture hours, 2 lab hours

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 25 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

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

BUS 101　　**Introduction to Business**　　　　　　　　　**3 cr. hrs.**
A functional view of various aspects of business. Emphasis on the operation of a business and the relationships to the environment in which it exists.

BUS 110　　**Entrepreneurship**　　　　　　　　　　　　**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 115　　**Business Leadership I**　　　　　　　　　　**3 cr. hrs.**
Prerequisite: Consent of department
This course will provide an introduction to entrepreneurial skills for self-employment and small business ownership. Students in this course will write multiple business plans, visit with loan officers on their selected plans, and start their own business. Course includes decision-making, feasibility studies, risk taking, business ethics, finance, marketing, organization and other skills. This course will include guest speaker presentations.

| BUS 116 | **Business Leadership II** | **3 cr. hrs.** |

BUS 116   **Business Leadership II**   **3 cr. hrs.**
Prerequisite: BUS 115 and consent of department
This course will be a continuation of Business Leadership I. Students will continue their introduction to entrepreneurial skills for self-employment and small business ownership. Students in this course will write multiple business plans, visit with loan officers on their selected plans, and start their own business. Course includes decision-making, feasibility studies, risk taking, business ethics, finance, marketing, organization and other skills. This course will include guest speaker presentations.

BUS 121   **Principles of Organization and Management**   **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**   **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**   **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**   **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.

BUS 199   **Business 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 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.

BUS 211   **Supply Chain Management I**   **3 cr. hrs.**

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 cr. 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**   **3 cr. hrs.**
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**   **4 cr. hrs.**
Prerequisite: MAT 020 with a grade of "C" or above within two semesters, 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**   **4 cr. hrs.**
Prerequisite: MAT 113 with a grade of "C" or above within two semesters, or appropriate placement test score, or consent of department; Students who have taken high school chemistry will have an advantage.

Comprehensive coverage of the basic principles of chemistry including bonding, nomenclature, reactions, stoichiometry, thermodynamics, kinetics and equilibrium. Designed for pre-med, pre-pharmacy, engineering and science majors with above-average mathematical and scientific backgrounds. 3 lecture hours, 2 lab hours; IAI: P1 902L, CHM 911

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.**
Prerequisite: Consent of department
Deals with current topics in chemistry 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.

CHM 201   **Organic Chemistry I**   **5 cr. hrs.**
Prerequisite: CHM 103 and CHM 104 or equivalent
Structure, nomenclature, classification, properties and reactions of organic compounds including saturated and unsaturated hydrocarbons and alcohols. Determination of molecular structure using infrared, nuclear magnetic and mass spectroscopy. Designed for pre-med, pre-pharmacy, engineering, biology and chemistry majors. 3 lecture hours, 4 lab hours; IAI: CHM 913

CHM 202   **Organic Chemistry II**   **5 cr. hrs.**
Prerequisite: CHM 201
Continued coverage of the structure, nomenclature, classification, properties and reactions of organic compounds including ethers, conjugated double bonds, aromatic hydrocarbons, carbonyl compounds, amines, carboxylic acids and their derivatives, and an introduction to biochemistry. 3 lecture hours, 4 lab hours; IAI: CHM 914

CHM 295   **Advanced Special Topics in Chemistry*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
Deals with current topics in chemistry 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.

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

COMMUNICATIONS

CMN 080   **Understanding Written Communication*****   **3 cr. 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.

CMN 090   **Interpreting Written Communications*****   **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**   **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   **Special Topics in Communications*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
Deals with current topics in communications 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.

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.**
Prerequisite: Consent of department
Deals with current topics in communications 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.

COMPUTER-AIDED DESIGN

CAD 101   **Introduction to Drafting and Blueprint Reading for CAD**   **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**   **3 cr. hrs.**
Prerequisite: CAD 101
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**   **3 cr. hrs.**
Prerequisite: CAD 101 or concurrent, or consent of department
An introduction to the use of CAD using AutoCAD. 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**   **3 cr. hrs.**
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**   **3 cr. hrs.**
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 using SolidWorks. 1.5 lecture hours, 3 lab hours

CAD 195   **Special Topics in Computer-Aided Design*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
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**   **3 cr. hrs.**
Prerequisite: CAD 106 or consent of department
A continuation of CAD 106 using Inventor. Items include assembly of parametric models, working drawings, dimensioning and notes. 1.5 lecture hours, 3 lab hours

CAD 202   **CAD Applications III**   **3 cr. hrs.**
Prerequisite: CAD 200 or consent of department
A continuation of CAD 200 using Inventor. 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**   **3 cr. hrs.**
Prerequisite: CAD 114 or consent of department
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

CAD 214 **Advanced 3-D Applications-SolidWorks** **3 cr. hrs.**
Prerequisite: CAD 204 or consent of department
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** **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. Course requires 80 hours of work experience for each credit hour.

COMPUTER SCIENCE

CSC 100 **Computer Literacy** **1 cr. hr.**
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 **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.

CSC 110 **Business Applications of the Microcomputer I** **3 cr. hrs.**
Prerequisite: CSC 106
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 "C' or above; Intermediate algebra skills recommended
This course involves problem solving on the introductory level, teaches structured and object oriented language, 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 123 **Introduction to Content Management Systems** **2 cr. hrs.**
An introductory course in which students learn to create a complete website using popular Content Management Systems (CMS). Includes hands-on experience.

CSC 124 **Web Programming I** **3 cr. hrs.**
In this course, the student will learn techniques for planning and creative attractive Web pages using HTML and CSS. Topics include working with tables, creating forms, creating hyperlinks and menus for site navigation, and using image maps for navigation. The student will learn techniques for designing Web pages effectively and understand different ways to publish websites. The student will also learn scripting to add functionality to the website.

CSC 136 **Linux Operating System** **3 cr. 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 cr. 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.

CSC 143   **Introduction to Desktop Information Management (Outlook)**   **1 cr. hr.**
This course will be taught using a popular desktop management software. Topics include utilizing email; using calendar for scheduling; managing contacts; creating tasks, notes, and journals.

CSC 146   **Introduction to Web Page Design**   **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**   **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 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 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.

CSC 195   **Special Topics in Computer Science*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
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 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)**   **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 adjustment, working with clipping masks and paths. The course will be taught using industry-standard photo manipulation software.

CSC 223   **Web Scripting (JavaScript)**   **3 cr. hrs.**
Prerequisite: CSC 124 with a grade of "C" or above
This course will guide students in web page development with JavaScript. This course covers the basics of JavaScript to build professional quality web applications.

CSC 224   **Web Programming II (PHP, MySQL)**   **3 cr. hrs.**
Prerequisite: CSC 124 with a grade of "C" or above
This hands-on PHP programming course uses open source software, PHP and MySQL, to provide the student with a limited programming background with the applied skills to build professional-quality, database-driven Websites. By integrating PHP and MySQL, with the XHTML and CSS frameworks, the student will develop the skills to build interactive Websites with authentication and security.

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 Website files. Course is taught using industry standard Web design software.

CSC 247   **Web Graphics and Interactivity (Flash & Fireworks)**   **3 cr. hrs.**
Course focuses on creating and manipulating graphics and interactive elements 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 256   **Web Programming III (Python, Ruby on Rails)**   **3 cr. hrs.**
This course introduces students to popular industry-standard frameworks used to create a variety of websites. Students will learn to use multiple frameworks throughout the course and discover how they work to assist in the programming process.

CSC 257   **Database Management**   **3 cr. hrs.**
This course introduces the student to database concepts and the use of a database management system. Topics include using a mySQL server and mySQL language to: create databases, create tables, add and remove table fields, establishing relationships between table fields, manipulating records, and create queries.

CSC 258   **Web Programming IV**   **3 cr. hrs.**
This course is a capstone for the web programming student. Students will use all of the skills they have learned throughout the program to create a website fulfilling criteria set by the course instructor. Students will learn to evaluate sites for human interaction and make improvements throughout the course.

CSC 259   **Web Server Administration**   **3 cr. hrs.**
This course introduces the student to web server administration. Students learn to install, configure and administer a website. The course includes topics such as user authentication, setting up users and groups, managing file system permissions, sharing resources and securing the server. In addition, the student will learn to troubleshoot a web server, as well as perform maintenance, optimization, and performance tuning.

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

DET 101   **Diesel Technology I**   **8 cr. hrs.**

This class offers students classroom instruction and laboratory experiences in diesel powered transportation and heavy equipment, such as used in the agriculture and construction industries. Learning activities prepare students to maintain and repair diesel engines and related heavy equipment vehicle systems. The course will focus on developing knowledge of diesel engine operations and related vehicle/heavy equipment systems, as well as procedures for maintenance and light repairs. Emphasis is placed on developing safe work habits, employability skills and applied academic skills. The course and program will align with knowledge and skills required by an industry-recognized certification or credential. 2 lecture hours, 12 lab hours

DET 102   **Diesel Technology II**   **8 cr. hrs.**
Prerequisite: DET 101

This class builds upon the knowledge and skills learned in DET 101 by incorporating additional and more challenging major jobs which require troubleshooting, 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**   **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**   **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

EDU 100   **Foundations of 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 field experience component is required.

EDU 102   **Foundations of Early Childhood Edu**   **3 cr. hrs.**
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.

EDU 124   **Health & Safety for Young Children**   **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.

EDU 150   **Caring for Infants and Toddlers**   **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.

EDU 165	**Creative Arts & the Young Child**	**3 cr. hrs.**

This course focuses on the importance of how music, creative movement, dramatic play and the arts stimulate early childhood play and learning. Emphasis is on understanding children's developmental stages and determining what are appropriate learning opportunities, interaction and environments.

EDU 175	**Current Topics & Issues in EC**	**2 cr. hrs.**

This course provides students the opportunity to explore and discuss current topics and issues impacting the federal, state, or local early childhood landscape. Topics will be determined at the time of course offering. *(Pending state approval)*

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.

EDU 204	**Introduction to Technology in Education**	**3 cr. hrs.**

This course introduces educators to the knowledge and skills required to demonstrate their proficiency in the current technology standards. The course focuses on both knowledge and performance and includes hands-on technology activities.

EDU 205	**Exceptional Child**	**3 cr. hrs.**

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 215	**Observation & Assessment in EC**	**3 cr. hrs.**
	Prerequisite: EDU 102	

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.

EDU 235	**Guidance of the Young Child**	**3 cr. hrs.**

This course will examine research and theory related to social and emotional development in young children. Students will explore teaching methods with an emphasis on positive guidance, family engagement, cultural competence and designing appropriate environments. This course requires three 1½ hour observations at a licensed childcare center or kindergarten classroom.

EDU 245   **STEM in Early Childhood**   **3 cr. hrs.**
This course focuses on the importance of math and science for early childhood and early elementary education programs. Emphasis will be on the techniques that provide engaging math and science experiences, while providing an organized, sequential approach to creating a developmentally appropriate math

EDU 255   **Lang/Lit. & Social Studies in EC**   **4 cr. hrs.**
Thie course will examine the purpose, scope, sequence, material and methodology of teaching language, literature and social studies in the early childhood setting. Students will learn how children acquire language and learn social study concepts. Materials and techniques will be provided for teaching young children about language, language arts, literature, pre-reading, reading fluency, and social studies about places, cultures and events around the world.

EDU 260   **Curriculum for Early Childhood Programs**   **3 cr. hrs.**
Prerequisite: EDU 102 and one of the following: EDU 165, EDU 245 or EDU 255
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.

EDU 271   **Child, Family and Community**   **3 cr. hrs.**
An overview of the philosophies and specific techniques of developing 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   **Field Experience in Education****   **1 cr. hr.**
Documented field experience involving observation and interaction with children and teachers in a classroom setting to be determined by the JWCC supervising instructor. Dual supervision is provided by JWCC instructors and the partnering school's teachers. 0 lecture, 2 lab hours

EDU 293   **Children's Literature**   **3 cr. hrs.**
This course introduces students to the significant works, authors and trends in literature written for children as well as the role that literature plays in teaching. Emphasis will be placed on identifying various literary genres and showing future teachers the best strategies for using this information in the classroom.

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.

ELE 110   **Introduction to Electricity**   **3 cr. hrs.**
Course provides a comprehensive study of electronic theory, practices and 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**   **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**   **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

ELE 220   **Electrical Applications II**   **3 cr. hrs.**
Prerequisite: ELE 125 or consent of department
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**   **3 cr. hrs.**
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   **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 120 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** **3 cr. hrs.**
Provides training in emergency medical care for those who may be required to provide the initial care to sustain life and maintain life support until the victim(s) of accidents or sudden illness is cared for by qualified medical personnel.

EMS 150 **Emergency Medical Technician** **6 cr. hrs.**
The development of student skills in recognizing symptoms of illnesses and injuries and proper procedures of emergency care; includes demonstration and practice. 1 lecture hour, 10 lab hours

EMS 161 **Paramedic I** **6 cr. hrs.**
Prerequisite: Admission to the AAS paramedic program, valid Illinois EMT license, valid healthcare provider CPR card
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** **3 cr. hrs.**
Prerequisite: Admission to the AAS paramedic program, valid Illinois EMT license, valid healthcare provider CPR card
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

EMS 171 **Paramedic II** **6 cr. hrs.**
Prerequisite: EMS 161 and EMS 166
Corequisite: EMS 176
In this combined didactic/lab course the student will develop a complex depth and comprehensive breadth of understanding of medical emergencies including respiratory, neurologic, cardiovascular, endocrine, hematologic, gastrological and urological. The focus this semester is on anatomy, physiology, pathophysiology, assessment and management in order to integrate assessment and scene findings with knowledge to form a field impression and formulate a treatment plan for common medical and cardiac emergencies. The Advanced Cardiac Life Support course is built into this semester. 5.5 lecture hours, 1 lab hour

EMS 176   **Paramedic Clinical Practice II**   **3 cr. 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**   **variable 1-5 cr. hrs.**
          **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.

EMS 251   **Paramedic III**   **7 cr. hrs.**
          Prerequisite: EMS 161, EMS 166, EMS 171 and EMS 176
          Corequisite: EMS 256
          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**   **3 cr. hrs.**
          Prerequisite: EMS 161, EMS 166, EMS 171 and EMS 176
          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

EMS 261   **Paramedic IV**   **6 cr. hrs.**
          **Prerequisite: EMS 161, EMS 166, EMS 171, EMS 176, EMS 251 and EMS
          256**
          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 205   **Engineering Mechanics: Materials**   **3 cr. hrs.**
Prerequisite: EGR 203, MAT 221
Topics include concepts of stress and strain; material properties (elastic and plastic); torsion: shear stresses and deformations; thermal stresses; thin-walled pressure vessels; pure bending: stress and strains; transverse loading of beams: shear stress and combined loadings; transformation of stress and strain (Mohr's Circle); design of beams and shafts for strength: shear and moment diagrams; deflection of beams; energy methods; and columns. (*pending state approval)

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; ; IAI: EGR 931L

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 080	**Basic Writing***	**3 cr. hrs.**

Prerequisite: Appropriate placement score or consent of department

A review of basic grammar, usage, mechanics, and writing skills.

ENG 098 **Co-Requisite Writing Skills*** **1 cr. hr.**
Corequisite: ENG 101 (a specified section with the same instructor); eligible students will be identified by JWCC staff based on placement testing and review of application materials

ENG 098 is a 2 hour lab course to be taught as a co-requisite with a designated ENG 101 section. The course will enhance the goals and objectives of ENG 101. ENG 098 will review and supply additional instruction and support for developing the skills of writing at the college level.

The course is designed to supplement instruction for students who test into ENG 099 but who demonstrate through other measures the capability in completing ENG 101 within the same semester with additional assistance. Students my not self-register. Eligible students will be identified and recommended for this course by JWCC staff. 2 lab hours

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** **3 cr. hrs.**
Prerequisite: completion of ENG 101 with a grade of "C" or above

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 901

ENG 111 **Introduction to Literature: Topics** **3 cr. hrs.**
Prerequisite: ENG 101 or permission from the department

Reading and analysis of texts from a variety of literary forms and periods. Approaches to determining literary meaning, form and value. IAI: H3 900

ENG 114 **Fiction** **3 cr. hrs.**
Prerequisite: ENG 101

A study of fiction, including short stories and novels. IAI: H3 901

ENG 130 **Introduction to Film** **3 cr. hrs.**

This course introduces the basics of film production and analysis in order to help students understand and enjoy film as an art form. Students will be introduced to the formal elements of film production as well as fundamental principles of genre and narrative in order to understand how directors' decisions regarding these elements and principles create meaning.

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** **3 cr. hrs.**
Prerequisite: ENG 101 or consent of department
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** **3 cr. hrs.**
Prerequisite: ENG 101 or consent of department
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**   **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   **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   **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**   **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   **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   **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

FSC 162   **Technical Rescue Awareness**   **1 cr. hr.**
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 cr. 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**   **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   **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**   **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 175   **Hazardous Materials Technician**   **3 cr. hrs.**
                Prerequisite: FSC 173, FSC 174
The purpose of this course is to study the chimcal characteristics and reactions related to storage, transportation, and handling of hazardous materials (i.e., flammable liquids, combustible solids, oxidizing and corrosive materials, and radioactive compounds). Emphasis on emergency situations, fire fighting and control, including information on the relevant NFPA standards impacting the program (such as NFPA 471, 471 & 473) and the OSHA regulation governing our response to hazardous materials incidents (29 CFR 1910.120).

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.

FSC 195 **Special Topics in Fire Science***** variable 1-4 cr. hrs.
Prerequisite: Consent of department

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** 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, pre-fire planning and hazardous materials response.

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. Topics include relevant standards for fire tactics, scene safety, multi-company 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** 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** 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.

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. Available via Internet only.

FSC 294   **Fire Prevention Principles**   **3 cr. hrs.**
This course concentrates on the information and skills required of a fire service officer in conducting duties related to fire prevention. The bulk of the course concentrates on fire inspection techniques and pre-fire planning exercises.

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. This course 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. Topics covered include reports and documentation, policy and procedure promulgation, discipline, personnel evaluation, hiring practices, public relations and information management.

FSC 297   **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.

FIRST YEAR EXPERIENCE

FYE 101   **Blazing Your Trail**   **1 cr. 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 German-speaking countries and thus develops students' cultural awareness. 3 lecture hours, 2 lab hours

GER 102   **German II**   **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**   **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.

HPR 214   **Introduction to Sport Management**   **3 cr. hrs.**
                Students will explore careers in the sport industry, both in the U.S. and globally,
                inclusive of professional, collegiate, youth and non-profit sports as well as global
                branding, sponsorships, merchandising and entertainment events. Using the sports
                industry perspective, many business principles will be covered, such as marketing,
                strategic management, communication, sales and revenue generation, facility
                management and finance.

HPR 224   **Sport Psychology**   **3 cr. hrs.**
                This course will introduce students to research concepts and theories relating to
                sport psychology. The content will include an overview of the history and
                development of sport psychology and expose students to the foundational
                concepts of the field. The course material will also include an overview of
                psychological assessment, mental skills training, performance enhancement,
                injury recovery, and participation satisfaction. The course will examine how this
                knowledge can be applied to a wide range of settings and participants, such as
                coaches, parents and athletes, while addressing varying levels of ability (from
                recreational to elite sports participation). Cross listed with PSY 224.

HPR 230   **Coaching as a Profession**   **3 cr. hrs.**
                Prerequisite: Consent of department
                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**   **2 cr. hrs.**
                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 244   **Sport Safety Training**   **3 cr. hrs.**
                Students will learn the knowledge and skills necessary to help provide a safe
                environment for athletes while participating in sports as well as how to sustain
                life and minimize the consequences of injury or sudden illness in an emergency
                until advanced medical care arrives. Students will be able to identify and eliminate
                potentially hazardous conditions, recognize emergencies and make appropriate
                decisions for first aid care.

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.

HEALTH SCIENCE

HSC 108 **Clinical Medical Assisting I** **2 cr. hrs.**
Prerequisite: Admission to the Medical Assistant program; OFT 281 with a grade of "C" or better
The Course introduces students to procedures commonly performed in the health care setting with special attention to patient centered care, evidence based practice, and safety. Specific competencies in this introductory course include infection control, vital signs, electrocardiography, phlebotomy, and clinical laboratory skills. 4 lab hours

HSC 128 **Clinical Medical Assisting II** **2 cr. hrs.**
Prerequisite: HSC 108 and admission to the Medical Assistant program
The Course is a continuation of HSC 108, continuing to introduce students to procedures commonly performed in the health care setting with special attention to patient centered care, evidence based practice, and safety. Specific competencies in this course include rooming of patients and assisting the provider in procedures, principles of asepsis and wound care, and medication administration. 4 lab hours

HSC 175 **Basic Human Structure & Function** **3 cr. hrs.**
In this course, students are taught the anatomy and physiology of the human body. Topics include the various body systems, structures, cells, and tissues and the principles of homeostasis. Students are introduced to the organization and structure of the human body. You will also learn about various disease processes, disease etiology, symptoms, diagnostic tests, therapeutic methods, and disease prognosis.

HSC 189 **Medical Law & Ethics** **3 cr. hrs.**
This course introduces the student to principles of medical law, medical ethics, and bioethics. It will emphasize terminology, regulations, and the function of the law and ethical issues as they apply to the medical environment.

HSC 199 **Ambulatory Practicum** **3 cr. hrs.**
Prerequisites: HSC 108 & HSC 128
This practicum course provides the student with 180 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.

Heating, Ventilation, Air Conditioning & Refrigeration (HVAC)

HVA 101 **Refrigeration Fundamentals** **3 cr. hrs.**
This course introduces vocabulary, concepts and scientific principles used in the refrigeration and air conditioning industry. Theories on heat laws, pressures, matter, and energy; refrigerant chemistry and the refrigeration cycle will be examined and studied. The course also covers proper refrigerant management techniques and safe practices. Practical application, troubleshooting techniques, measuring and testing the operation of the basic refrigeration cycle; including working with ACR copper tubing, tools, and instruments are emphasized. Passing the EPA certification is a requirement of this course. 2 lecture hours, 2 lab hours

HVA 103 **Heating Principles** **3 cr. hrs.**
Prerequisite: HVA 101 with a grade of "C" or above or consent of department
This course introduces vocabulary, concepts and scientific principles used in the heating industry. Heat laws, heat transfer, and fundamentals of the combustion process are examined and studied. Also covered are gas, oil, and electric forced-air systems for residential comfort heating. Practical application for testing and

adjusting system performance, troubleshooting electrical systems and control, working with gas pipe, preventative maintenance, service and repair are emphasized. 2 lecture hours, 2 lab hours

HVA 105   **Heating & Cooling**   **3 cr. hrs.**
This course covers the purposes and principles of operation, and causes of failure in electrical components common to residential and small commercial systems. Wiring schematics and diagrams will be emphasized. 2 lecture hours, 2 lab hours

HVA 107   **Commercial Air Conditioning Systems**   **3 cr. hrs.**
Prerequisite: HVA 105 with a grade of "C" or above or consent of department
This course focuses on air conditioning systems used in commercial buildings and their applications. Direct expansion systems, packaged units, and chilled-water systems will be covered. Also covered will be rooftop units, variable refrigerant flow systems, air handling units, chillers and cooling towers. Practical application, to develop troubleshooting techniques, perform system diagnostic/installation/preventative maintenance service and repairs will be emphasized. 2 lecture hours, 2 lab hours

HVA 195   **Special Topics in HVAC**   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
Deals with current topics in HVAC 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.

HVA 199   **HVAC Internship***   **variable 1-5 cr. hrs.**
This course offers HVAC students several options for acquiring work-based education in the HVAC 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. Course requires at least 80 hours of work experience for each credit hour.

HISTORY

HIS 101   **Western Civilization I**   **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**   **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**   **3 cr. hrs.**
Cultural, economic, and political developments throughout the world from ancient times through the 16th century. IAI: S2 912N

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**   **3 cr. hrs.**
History of the United States from the early foundation of the republic to 1877. IAI: S2 900

HIS 122   **U.S. History II**   **3 cr. hrs.**
Continuation of HIS 121 to the present. IAI: S2 901

HIS 131   **Intro to Black History**   **3 cr. hrs.**
This course is a survey of African-American history from the African background to the present. The course explores dimensions of the African-American experience, and in doing so, highlights the multifaceted ways they made their own history while simultaneously shaping and contributing to the history of the United States.

HIS 195   **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.

HIS 222   **U.S. History Since 1945**   **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**   **3 cr. hrs.**
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**   **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

IMT 120   **Industrial Motors & Controls**   **3 cr. hrs.**

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

IMT 150   **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.

IMT 200   **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

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IMT 290 **Rigging** **2 cr. hrs.**

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. 1 lecture hour, 2 lab hours

LAW ENFORCEMENT

LEN 101 **Law Enforcement I - Overview** **3 cr. hrs.**

A general examination of the various aspects of police, court, probation, correction, and parole practices.

LEN 103 **Law Enforcement Terminology** **1 cr. hr.**

A programmed course taking the student through a series of police terms, emphasizing both vocabulary and spelling.

LEN 111 **Juvenile Justice** **3 cr. hrs.**

This course covers definitions of delinquent behavior; development and trends in the juvenile court movement; laws and procedures; the adjudication process - philosophy and practices; causation, prevention, treatment and control.

LEN 122 **Police Patrol Operations and Tactics** **3 cr. hrs.**
Prerequisite: LEN 101 preferred

A variety of proven police tactics and procedures for handling situations ranging from misdemeanors to felonies.

LEN 125 **Law Enforcement Report Writing** **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** **3 cr. hrs.**
Prerequisite: LEN 101 preferred

A study of the probation and parole systems on a local, state, and national level and expected future trends.

LEN 150 **Scientific Criminal Investigation** **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** **3 cr. hrs.**
Prerequisite: LEN 101

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** **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** | **Criminal Justice Seminar I** | **3 cr. hrs.** |

LEN 260   **Criminal Justice Seminar I**   **3 cr. hrs.**
Prerequisite: Consent of department
A consideration of contemporary law enforcement and criminal justice programs and problems.

LEN 261   **Criminal Justice Seminar II**   **3 cr. hrs.**
Prerequisite: LEN 260 or consent of department
Continuation of Criminal Justice Seminar I.

LEN 295   **Advanced 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 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**   **3 cr. hrs.**
This course presents an overview of logistics and supply chain management, customer service, and inventory management for personnel working in retail, wholesale and the manufacturing sectors. Course content is based on the Manufacturing Skill Standards Council Certified Logistic Technician (MSSC-CLT) curriculum. ***When taking this class online, students are required to take the MSSC-CLA exam and the MSSC-CLT exam at JWCC or any authorized MSSC testing facility.***

LOM 101   **Transportation**   **3 cr. hrs.**
This course presents an overview of transportation, the transportation environment, the basic modes of transportation, the regulatory and public policy frameworks, and emerging transportation management issues.

LOM 102   **Supply Chain Management**   **3 cr. hrs.**
This course introduces basic supply chain principles including warehousing, transportation and distribution.

LOM 104   **Introduction to Warehouse Management**   **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 1-5 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.

LOM 202 **Applied Supply Chain Management** **3 cr. hrs.**
Prerequisite: LOM 102
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** **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 111 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

MFG 110 **Introduction to CAD/CAM** **3 cr. hrs.**
Prerequisite: CAD 114 and MFG 105 or consent of department
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

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MFG 113   Introduction to Manufacturing & Industrial Safety   3 cr. hrs.

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. 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   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 145   Introduction to Robotics Operations   3 cr. hrs.

This course covers the evolution of robotics and how they are used in a manufacturing or distribution facility. Students will learn the various classifications of robots, understand work-cell sensors, end-of-arm tooling, and the various types of robotics programming. 2 lecture hours, 2 lab hours

MFG 150   Handling Tool Operations/Programming   3 cr. hrs.

This course is intended for an operator, technician, engineer or programmer who must setup and record programs on a robot. The course covers the tasks required to set up the specific application, test, run and refine the program and production setup. The course consists of lectures, demonstrations and lab exercises. 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

MFG 295   **Advanced 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 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   **Basic Arithmetic and Prealgebra*****   **3 cr. hrs.**
This course reviews basic arithmetic skills and develops preliminary algebra skills.

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.

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**   **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 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**   **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**   **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 meets the requirements for students pursuing a degree in elementary and/or special education. Topics include probability and statistics; odds and expected value; permutations and combinations; measures of central tendency and variation; statistical graphs; geometry of angles, lines, and polygons; congruence and similarity; and length, area, volume, mass, and temperature calculations in both the English and metric systems. This course meets IAI only when both 110 and MAT 111 are taken. IAI: M1 903

MAT 113   **College Algebra**   **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   **Trigonometry**   **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. 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.

MAT 195   **Special Topics in Mathematics*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
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   **Analytic Geometry and Calculus I**   **4 cr. hrs.**
Prerequisite: MAT 113 and MAT 114 with grades of "C" or above within one academic year, appropriate placement score, or consent of department
A course designed to introduce the concepts of derivative and integral to the student interested in pursuing degrees related to engineering, science or mathematics. Specific topics include functions and graphs; slopes and rates of change; limit theory and continuous functions; formal differentiation; application of differentiation; integration; and applications of integration. IAI: M1 900-1, MTH 901

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   **Analytic Geometry and Calculus III**   **4 cr. hrs.**
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 three-dimensional 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 900B

MAT 251   **Differential Equations**   **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

MAT 295   **Advanced Special Topics in Mathematics*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
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 with different topics to maximum of four credit hours. Topics to be listed on student's permanent academic record.

MUSIC

MUS 102   **Music Appreciation**   **3 cr. hrs.**
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**   **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   **Music Theory/Ear Training II**   **4 cr. hrs.**
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 cr. 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

MUS 170-181 Applied Music Lessons*   **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 170 Voice I - private lessons in voice
MUS 171 Piano I - private lessons in piano
MUS 172 Organ I- private lessons in organ
MUS 173 Guitar I - private lessons in guitar
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.

MUS 231   **Music Theory/Ear Training III**   **4 cr. hrs.**
Prerequisite: MUS 132
A continuation of Music Theory II. The study of melodic and harmonic practices of the 19th century. Includes emphasis on chromatic harmony and aural skills. 2 lecture hours, 4 lab hours

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 273 Guitar II - private lessons in guitar
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

MUS 288   **Class Piano, Level III**   **1 cr. hr**
Prerequisite: MUS 189 or consent of department
Class piano instruction for music majors and non-majors. 0 lecture hours, 2 lab hours

MUS 289   **Class Piano, Level IV**   **1 cr. 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**   **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   **Physical Assessment**   **1 cr. hr.**
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**   **4 cr. hrs.**
Prerequisite: Admission to the ADN program
This course further develops the concepts within the three domains of individual, healthcare and nursing as they relate to pharmacology. The concepts include medication administration, clinical decision making, nutrition, evidence-based practice, informatics, communication, individual-centered care, quality improvement, ethics and interdisciplinary teams.

NUR 148   **Health & Illness Concepts**   **5 cr. hrs.**
Prerequisite: Admission to the ADN program
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

NUR 190   **LPN Scope of Practice**   **4 cr. hrs.**
Prerequisite: Admission to the ADN program; Completed or concurrently enrolled in NUR 148
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   **Special Topics in Nursing*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
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 203   **RN Concepts**   **2 cr. hrs.**
Prerequisite: Admission to the ADN program; Completed or concurrently enrolled in NUR 148.
This course will incorporate Whole Person Nursing into clinical practice. The course will focus on Whole Person Nursing as a model for practice. Core concepts are explored relating to the RN scope and practice, environment, health, and development as interactive components of the Whole Person Nursing curriculum framework. Scientific knowledge from nursing, physiological and psychological theories and other support courses is the basis for planning, implementing, and evaluating the outcomes of nursing actions. The RN scope and practice will include the legal and ethical issues of nursing practice. 1 lecture hour, 3 clinical hours

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

NUR 258   **Family Health Concepts**   **6 cr. hrs.**
Prerequisite: Second year standing in ADN program
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 101   **Basic Nurse Assistant**   **6 cr. hrs.**
Prerequisite: Admission to the CNA program; concurrent enrollment in 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. 5.5 lecture hours, 1 lab hour

NUA 103   **Nursing Assistant Practicum**   **1 cr. hr.**
Prerequisite: Admission to the CNA program; concurrent enrollment in NUA 101
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

NUA 107   **Physical Rehabilitation Aide Training**   **2 cr. hr.**
Prerequisite: Certified nursing assistant or consent of department
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 121   **Advanced Nurse Assistant**   **7 cr. hrs.**
Advanced Nurse Assisting is intended for the Certified Nursing Assistant wanting to expand their professional role and practice. Based on the Advanced Nurse Assistant Training Program developed by the Illinois Department of Public Health, the ANA student will expand knowledge on anatomy, physiology and disease process, as well as skills in customer service, conflict resolution, and learning styles, and patient care skills including point of care glucometers and orthostatic vital signs. 6 lecture hours, 3 clinical hours

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.

NUA 295   **Advanced 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.

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 **Administrative Medical Office I** **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 171 **Administrative Medical Office II** **2 cr. hrs.**
Prerequisite: OFT 170 with a grade of "C" or above.
This course is a continuation of Administrative Medical Office I and is focused on administrative duties required for medical assistants. Students will be introduced to the responsibilities of medical assistants, safety in the medical office, patient education, and the role of the medical assistant as a patient navigator. Students will review EMR functionality and patient schedule management. 1 lecture hour, 2 lab hours

OFT 185 **Medical Insurance & Coding** **3 cr. hrs.**
This course provides an overview of medical insurance, medical claims, and coding requirements and procedures. Topics include government and third-party insurance plans, coding systems, and claims form processing.

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 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.

OFT 281   **Medical Terminology**   **3 cr. hrs.**
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**   **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**   **3 cr. hrs.**
Prerequisite: OFT 281 and appropriate math placement score
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: OFT 281 and HSC 175
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: OFT 281 and HSC 175
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 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 Philosophy**   **3 cr. hrs.**
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**   **3 cr. hrs.**
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**   **3 cr. hrs.**
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*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
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**   **3 cr. hrs.**
A study of the great religions of the world today. IAI: H5 904N

PHL 211   **Philosophy of Religion**   **3 cr. hrs.**
A philosophical approach to a study of one's religious experience. IAI: H4 905

PHL 295   **Advanced Special Topics in Philosophy*****   **variable 1-4 cr. hrs.**
Prerequisite: Consent of department
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**   **4 cr. 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.

PHY 227   **Principles of Physics I**   **5 cr. hrs.**
            Prerequisite: MAT 220; Advanced high school physics recommended
            First 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 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**   **3 cr. hrs.**
            Fundamentals of federal, state and local governments with emphasis on national
            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**   **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**   **3 cr. hrs.**
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 success-oriented attitudes.

PSY 123   **Career Management**   **1 cr. 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.)

PSY 202   **Child Psychology**   **3 cr. hrs.**
Prerequisite: PSY 101
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

PSY 203   **Adolescent Psychology**   **3 cr. hrs.**
Prerequisite: PSY 101
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 205   **Psychology of Adulthood & Aging**   **3 cr. hrs.**
        Prerequisite: PSY 101
        Introduction to the changes that occur from early adulthood through the end of
        the lifespan. Topics include: physical and neurological changes that occur
        throughout adulthood; career choice and development; mate selection and
        marriage; conventional and nonconventional families; theories of adult person-
        ality development; mid- and late-life transitions; mental health in adulthood; and
        dying, death and bereavement.

PSY 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 SOC 212)

PSY 221   **Social Psychology**   **3 cr. hrs.**
        Prerequisite: PSY 101 or SOC 101
        A study of the impact of social factors on individual and group behavior, including
        attitudes, behavior, and motivation. IAI: S8 900

PSY 224   **Sport Psychology**   **3 cr. hrs.**
        This course will introduce students to research concepts and theories relating to
        sport psychology. The content will include an overview of the history and
        development of sport psychology and expose students to the foundational
        concepts of the field. The course material will also include an overview of
        psychological assessment, mental skills training, performance enhancement,
        injury recovery, and participation satisfaction. The course will examine how this
        knowledge can be applied to a wide range of settings and participants, such as
        coaches, parents and athletes, while addressing varying levels of ability (from
        recreational to elite sports participation). Same as HPR 224.

PSY 233   **Developmental Psychology**   **3 cr. hrs.**
        Prerequisite: PSY 101
        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   **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**   **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

RST 111   **Introduction to the Old Testament**   **3 cr. hrs.**
Jewish 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 101. IAI: H5 901

RST 112   **Introduction to the New Testament**   **3 cr. hrs.**
A study of 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 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; IAI: P1 910L

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** **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 of 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 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.

SOC 295   **Advanced 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 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

SPN 201   **Intermediate Spanish I**   **4 cr. hrs.**
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 200   **Professional Issues for the Surgical Technologist**   **1 cr. 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 210   **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

SUR 214   **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.

SUR 220   **Surgical Technology I**   **9 cr. hrs.**
           Prerequisite: SUR 110
           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 240   **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

SWINE MANAGEMENT (SEE AGRICULTURE)

TRUCK DRIVER TRAINING

TRK 150   **Introduction to Truck Driver Training**   **1 cr. hr.**
           **Prerequisite: LOM 100 and LOM 102 or consent of department; Minimum
           of 21 years of age (or waiver by the Dean of CTE), 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**   **5 cr. hrs.**
           Corequisite: TRK 180
           **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. 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

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 101   **Maintenance and Repair Welding**   **3 cr. hrs.**

Course covers basic electric arc, oxy-fuel, gas metal arc, and shielded metal arc welding processes. Safety procedures required to set up and shut down welding equipment for the various processes. Hands-on experience includes practice with the three welding and cutting systems using various thickness materials. 1 lecture hour, 4 lab hours

WLD 121   **MIG Welding Short Circuit**   **3 cr. hrs.**
Prerequisites: MFG 113 (can be taken concurrently), WLD 180 or consent of department

Learn machine setup and welding techniques of Gas Metal Arc Welding Short-Circuit 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 124   **MIG Welding Spray Transfer**   **1 cr. hr.**
Prerequisites: MFG 113 and WLD 180 or consent of department
Corequisites: May be taken with WLD 125

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 Indicator 2. 0 lecture hours, 2 lab hours

WLD 125   Stick Welding I   3 cr. hrs.
Prerequisites: MFG 113 (may be taken concurrently) and WLD 180 or
consent of department
This course focuses on safety, amperage settings, polarity and the proper selection
of electrodes for the shielded metal arc welding process. Students perform AWS
D1.1 Structural Welding Code-Steel compliant welds on carbon steel in the flat
and horizontal positions using visual and destructive methods for determining
weld quality. This course aligns to AWS SENSE 1 Module 4 - Key Indicators
1 - 7 for the flat and horizontal positions, as well as Module 2 - Key Indicator 7,
Module 3 - Key Indicator 3, and Module 9 - Key Indicator 2. 0.5 lecture hours,
5 lab hours

WLD 126   Stick Welding II   3 cr. hrs.
Prerequisites: MFG 113, WLD 125 and WLD 180 or consent of department
This course focuses on safety, amperage settings, polarity and the proper selection
of electrodes for the Shielded Metal Arc Welding process. Perform AWS D1.1
Structural Welding Code-Steel compliant welds on carbon steel in the vertical up
and overhead positions using visual and destructive methods for determining weld
quality. Students will also visually examine and test various weldments and
thermally cut surfaces per multiple welding codes, standards and specifications.
This course aligns to AWS SENSE 1 Module 4: Shielded Metal Arc
Welding Key Indicators 1-7 for the vertical up and overhead positions as well as
Module 2 - Key Indicator 7, Module 3 - Key Indicator 3, and Module 9 - Key
Indicator 2. Imbedded credential: AWS welder certification and SENSE 1,
Module 9: Welding Inspection and Testing Principles. 0.5 lecture hours, 5 lab
hours

WLD 127   TIG Welding Carbon Steel   2 cr. hrs.
Prerequisites: MFG 113 and WLD 180 or consent of department
Learn weld safety, machine setup and welding techniques for Gas Tungsten Arc
Welding. Perform AWS D1.3 Structural Welding Code-Sheet Steel compliant
welds on carbon steel in the flat, horizontal, vertical and overhead positions. This
course aligns to AWS SENSE 1, Module 7 - 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,
3 lab hours

WLD 132   TIG Non-Ferrous Metals   2 cr. hrs.
Prerequisites: MFG 113, WLD 127 and WLD 180 or consent of department
This course focuses on proper weld safety, machine setup and welding techniques
for gas tungsten arc welding on aluminum and stainless steel. Perform AWS D1.2
Structural Welding Code-Aluminum compliant welds on aluminum in the flat and
horizontal positions. Perform AWS D1.2 Structural Welding Code-Aluminum
Compliant welds on aluminum in the flat and horizontal positions and 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
1, Module 2 - Key Indicator 7, Module 3 - Key Indicator 3, Module 7 - Key
Indicators 1, 2 and 8-17 and Module 9 - Key Indicator 2. The course combines
former WLD 128 and WLD 129. 0.5 lecture hours, 3 lab hours

WLD 135   **Flux Core Inner & Dual Shield Weld**   **2 cr .hrs.**
Prerequisites: MFG 113 and WLD 180 or consent of department
Perform proper weld safety, machine setup and welding techniques for Flux Cored
Arc Welding Self-Shielded (FCAW-S) and Flux Cored Arc Welding Gas Shielded
(FCAW-G). 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 1-12, as well as Module 2 - Key
Indicator 7, Module 3 - Key Indicator 3, and Module 9 - Key Indicator 2. The
course combines former WLD 122 and WLD 123. 0.5 lecture hours, 3 lab hours

WLD 161   **Interpreting Welding Prints**   **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 170   **Specialized Welding**   **1 cr. hr.**
Prerequisites: MFG 113 or consent of department
This course will cover specialized welding processes including basic robotic
welding and basic plasma cutting. Students will be introduced to robotic welding
systems as well as learn how to perform basic procedures on a system. This course
also provides fundamental safety precautions while operating robotic and plasma
cutting equipment. 0.5 lecture hours, 1 lab hour

WLD 180   **Thermal Cutting Processes**   **2 cr. hrs.**
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**   **1 cr. hr.**
Prerequisites: MFG 113 and WLD 180
Corequisites: WLD 126, WLD 127, WLD 132, WLD 135 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 cr. hrs.**
Prerequisite: 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.**

ABE 001   **Beginning Skills—General**   **3 cr. hrs.**
Prerequisite: TABE reading (grade) level of 0-3.9 or consent of instructor
Classes are designed to increase basic skills of literacy, reading, writing and mathematics. The curriculum is designed to accommodate individualized instruction and includes instruction in workforce/employability skills, technology and digital literacy skills.

ABE 002   **Intermediate Skills—General**   **3 cr. hrs.**
Prerequisite: TABE reading (grade) level of 4.0-8.9 or consent of instructor
Classes designed to increase basic skills of literacy, reading, communication and mathematics to high school level. The curriculum is designed to accommodate individualized instruction and includes instruction in workforce/employability skills, career exploration/awareness skills, and technology and digital literacy skills.

ABE 003   **Math Beginning Skills**   **3 cr. hrs.**
Prerequisite: TABE Math NRS level 1 or 2
ABE Math Beginning Skills will include instruction from Illinois ABE Mathematics Content Standards NRS levels 1 and 2. The curriculum is designed to assist students learn number fluency and basic math skills necessary to be successful in Intermediate ABE level math. This is a beginning course in a series of math courses designed to help students prepare for high school equivalency and the GED examination. Class sessions will include whole group activities using math manipulatives, real-world math scenarios, and technology. Classes will also provide whole group direct instruction, individual instruction, and individual pratice.

ABE 004   **Math Intermediate Skills**   **3 cr. hrs.**
Prerequisite: TABE Math NRS level 3 or 4 or consent of instructor
ABE Math Intermediate Skills will include instruction from Illinois ABE Mathematics Content Standards NRS levels 3 and 4. Pertinent NRS level 2 standards will be reviewed as needed. The curriculum is designed to assist students learn pre-high school math skills necessary to be successful in ASE level math. This is one course in a series of math courses designed to help students prepare for high school equivalency and the GED examination. Class sessions will also include whole group activities using math manipulatives, real-world math scenarios and technology.

ABE 020   **Bridge to Manufacturing**   **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 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**   **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.

ABE 040   **Bridge to Logistics**   **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 field of Logistics. The course presents an overview of logistics and supply chain management, customer service, transportation and inventory management. Course material is based on the Manufacturing Skill Standards Council Certified Logistics Technician (CLT) credentials. The CLT program is designed to recognize, through certification, individuals who demonstrate mastery of the core competencies of material handling at the frontline (entry level through front line supervisor) through successful completion of the certification assessments. The course includes a combination of identified workplace competencies, career exploration and basic skills presented in an occupational context.

ASE 001   **Advanced Skills—General**   **3 cr. hrs.**
Prerequisite: TABE reading (grade) level of 9.-12.9
Classes that include instruction in reading, literature, mathematics, science and social studies in preparation for high school equivalency and the GED examination. Includes study skills and test preparation skills. The curriculum is designed to accommodate individualized instruction and includes instruction in workforce/employability skills, career exploration/awareness skills, and technology and digital literacy skills.

ASE 002   **Math Advanced Skills**   **3 cr. hrs.**
Prerequisites - Student to meet at least one of the following:
TABE Math NRS levels 4, 5, or 6; Successful completion of ABE Math Intermediate Skills; or instructor recommendation
ASE Math Advanced Skills will include instruction from Illinois ABE and ASE Mathematics Content Standards NRS levels 4, 5, and 6. This course is designed to help students prepare for high school equivalency, the GED examination, and college placement tests. Class sessions will accommodate individualized pacing through a skill mastery model. Class sessions will also include whole group activities using math manipulatives, real-world math scenarios, and technology.

ASE 020   **Bridge to Manufacturing**   **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   **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.

ASE 040   **Bridge to Logistics**   **3 cr. hrs.**
Prerequisite: TABE reading (grade) level of 9.0 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 Logistics. The course presents an overview of logistics and supply chain management, customer service, transportation and inventory management. Course material is based on the Manufacturing Skill Standards Council Certified Logistics Technician (CLT) credentials. The CLT program is designed to recognize, through certification, individuals who

demonstrate mastery of the core competencies of material handling at the front-line (entry level through front line supervisor) through successful completion of the certification assessments. 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 needing a thorough review of basic English language structures and vocabulary. The course covers the skills of listening, speaking, reading, writing and math. The goal of the course is to improve the student's English communication skills to 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 skills of listening, speaking, reading, writing and math at the intermediate level. The goal of the course is to improve the student's English communication skills to use English more successfully in daily life and in the workplace.

ESL 003	**Advanced ESL (English as a Second Language)**	**3 cr. hrs.**
Course designed for students who have completed the intermediate level. This course covers the skills of listening, speaking, reading, writing and math at an advanced level. The goal of the course is to improve the student's English communication skills to use English more successfully in daily life and in the workplace.

ESL 020	**Bridge to Manufacturing**	**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.

ESL 040	**Bridge to Logistics**	**3cr. hrs.**
Prerequisite: English language proficiency at or above the low advanced ESL level or consent of instructor
This course is designed to educate and train workers for sustainable employment or post-secondary education in the field of Logistics. The course presents an overview of logistics and supply chain management, customer service, transportation and inventory management. Course material is based on the Manufacturing Skill Standards Council Certified Logistics Technician (CLT) credentials. The CLT program is designed to recognize, through certification, individuals who demonstrate mastery of the core competencies of material handling at the front-line (entry level through front line supervisor) through successful completion of the certification assessments. 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
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Michael Elbe
B.S., Quincy University
M.Ed., University of South Alabama
Ed.S., William Woods University

Executive Assistant to the President
Leah Benz

ADVANCEMENT
Director of Advancement
Barbara Dietrich Holthaus
B.A., Truman State University
M.B.A, William Woods University

Grants Compliance Officer
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B.S., Quincy University

Administrative Specialist
Barbara Woodyard

RETIRED AND SENIOR VOLUNTEER PROGRAM (RSVP)
Manager of Volunteer Services
Vacant

Volunteer Services Specialist
Susan Abbott
Jack Pool
Nicole Zulauf

Volunteer Services Assistant
Kathleen Ebbing
Heather Manwell

PUBLIC RELATIONS
Director of Public Relations and Marketing
Tracy Hagman
B.S., University of Texas at Austin

Assistant Director of Public Relations and Marketing
Heidi Lanier
B.A., Quincy University
M.S., Franklin University

Coordinator, Visual/Social Media
Allison Milligan

HUMAN RESOURCES
Director of Human Resources
Dana Keppner
B.S., University of Illinois-Urbana/Champaign
M.S.Ed., Quincy University

Coordinator, Employment Services/Benefits
Allison Dietrich

Administrative Assistant to the Director of Human Resources
Deborah Amsler

INSTRUCTIONAL SERVICES

VICE PRESIDENT FOR INSTRUCTIONAL SERVICES
Vice President for Instruction
Laurel Klinkenberg
BME-MT, Wartburg College
M.S., Iowa State University
Ed.S., Drake University
Ph.D., Iowa State University

Administrative Assistant to the Vice President for Instructional Services
Kristina Johnson

Dean of Arts and Sciences
Stephanie Phillips (Interim)
B.S., Culver Stockton College
M.S., Western Illinois University

Administrative Assistant to the Dean of Arts & Sciences
Kristina Johnson

Dean of Careers & Technical Education
David Hetzler (Interim)
B.S., Culver Stockton College

Director, Curriculum Programs and Instructional Support
Rachel Hansen
B.A., University of Louisville
J.D., St. Louis University School of Law

Administrative Specialist, CTE/CBO
Lori Eschweiler

Manager, Regional Centers
Diane Vose

Specialist, Regional Centers
Jaclyn Baker (Southeast Center)
Jeanne Yingling (Mt. Sterling Center)

Coordinator, College for Life
Michele Westmaas

AGRICULTURAL SCIENCES PROGRAMS
Department Chair and Assistant Professor of Agriculture Sciences
Michael Tenhouse
B.S., Western Illinois University
M.S., University of Illinois

Specialist, Ag Center
Michele Long

Assistant Professor of Agriculture Sciences
Justin Lewis
A.A.S., Lake Land College
B.S., University of Illinois Urbana-Champaign
M.S., University of Illinois Urbana-Champaign

BUSINESS AND COMPUTER SCIENCE

Department Chair and Assistant Professor of Business & Computer Science
> Devron Sternke
> A.S., University of Central Missouri
> B.S., University of Central Missouri
> M.S., University of Central Missouri

Professor of Business
> Gregory J. Lee
> B.S., Northeast Missouri State University
> M.B.A., Quincy University

Assistant Professor of Business
> Jerry Lunt
> B.S., Western Illinois University
> M.B.A., Quincy University

Assistant Professor of Computer Science
> Joan Mast
> A.S., John Wood Community College
> B.S.E., Northeast Missouri State University
> M.S., University of Illinois-Springfield

Assistant Professor of Office Technology
> Lisa Atwell
> A.A.S., State University of New York
> B.S., Salem-Teikyo University

Instructor of Computer Science
> Michael Wells
> A.A.S., Eastern Kentucky University
> B.S., Eastern Kentucky University
> M.S., Eastern Kentucky University

BUSINESS AND INDUSTRY PROGRAMS

Specialist, Workforce Development Center
> Kelly Lewis

Coordinator, Business & Industry
> Gordon Forbes

Missouri & Business Outreach Advisor
> Keely Ragar

CAREER SERVICES AND COMMUNITY BASED OUTREACH

Manager, Career Services/CBO
> Kathleen Rodgers

Career Services and Outreach Specialist
> Deborah Riddell

ADULT EDUCATION

Manager, Adult Education
> Monica Foster

Adult Education, Transition Coordinator
> Emily Dozier

ALLIED HEALTH AND EMERGENCY SERVICES

Director of Allied Health and Emergency Services
> Kimberly Buck
> M.S.N., Blessing-Rieman College of Nursing and Health Sciences

Administrative Specialist for Allied Health and Emergency Services
> Sarah Straza

Program Director of Surgical Technology
> Jori Bottorff
> A.A.S., John Wood Community College

Assistant Professor of Nursing
> Laura Mathews
> A.S.N., Hannibal La-Grange University
> B.S.N., Chamberlain College of Nursing
> M.S.N., Chamberlain College of Nursing

> Joni Smith
> B.S.N., Blessing-Rieman College of Nursing and Health Sciences
> M.S.N., Blessing-Rieman College of Nursing and Health Sciences
> M.B.A., Culver Stockton College

Instructor of Nursing
> Sue Bride
> A.D.N., Southeastern Community College
> B.S., Regis University
> M.S.N., Regis University

Program Director of CMA
> Roselee Ghattas
> C.M.A., Midwest Institute for Medical Assistants
> A.S.N., Hannibal LaGrange University

EMERGENCY SERVICES

Assistant Professor of Emergency Services
> Thomas V. Bentley

INDUSTRIAL TECHNOLOGY

Assistant Professor of Industrial Technology
> David Leonard
> B.S., Western Illinois University
> M.S., Western Illinois University

Assistant Professor of Welding
> Mark Schenk
> Certification, American Welding Society

> Ron Kraft
> Certificate, Quincy Technical School

Assistant Professor of Industrial Maintenance Technology
> Richard Gertz
> B.S., Bellevue University
> M.B.A., Bellevue University

INSTRUCTIONAL SUPPORT AND DISTANCE LEARNING

Director of Instructional Support and Distance Learning
Stephanie Phillips
B.S., Culver Stockton
M.S., Western Illinois University

Coordinator, Instructional Technology and Training
Vicky Nieders

Coordinator, Instructional Services
Jacob Savoia

FINE ARTS, HUMANITIES, AND EDUCATION

Department Chair and Assistant Professor of Fine Arts, Humanities, and Education
Steven E. Soebbing
B.A., University of Notre Dame
M.Mus., University of Nebraska-Lincoln
D.M.A., University of Nebraska-Lincoln

Professor of Humanities
Christine Wiewel
B.A., Quincy College
B.S., State University of New York
M.A., State University of New York
M.F.A., University of Alabama

Associate Professor of Humanities
Patrick Fodor
B.A., State University of New York Buffalo
M.Div., Brock University
M.A., University of Balamand
D.Min., Concordia Theological Seminary

Assistant Professor of Philosophy
Matthew Carey
B.A., Western Illinois University
M.A., Northern Illinois University

Instructor of Early Childhood Education
April Darringer
B.AS., Hannibal LaGrange College
M.S., Walden University

COMMUNICATION, LANGUAGES, AND LITERATURE

Department Chair and Assistant Professor of Communication, Languages, and Literature
Todd Saxton
B.A., Western Illinois University
M.A., Western Illinois University

Professor of Communication, Languages, and Literature
Mike Terry
B.S., Truman State University
M.A., Truman State University

Assistant Professor of Communication and Languages
Christina Farwell
B.A., Iowa Wesleyan
M.A., Western Illinois University

Assistant Professor of Communication, Languages, and Literature
Jennifer Grindstaff
B.A., Western Illinois University
M.A., Eastern Illinois University

Elizabeth Onik
B.S.E., Truman State University
M.S.E., Missouri Baptist University
M.B.A., Rockhurst College

LEARNING RESOURCES CENTER

Director of Learning Resources Center
Barb Lieber
B.A., Quincy University
B.S., Quincy University
MSLIS, Dominican University

Manager of Learning Resources Center
Erin Wisslead
B.A., Western Illinois University
MSLIS, University of South Carolina

Coordinator, Learning Resources Center
Becky Will

Administrative Assistant to the Director of Learning Resources Center
Vacant

Learning Resources Center Assistant
Taylor Bruns
Courtney Erfft

Testing Room Monitor
Sharon Labroo
Michael McLaughlin

MATHEMATICS

Co-Department Chair and Assistant Professor of Mathematics
Brenda Graff
B.S., Quincy University
M.S., Western Illinois University

Melissa Knapp
B.S., Quincy University
M.S., Western Illinois University

Professor of Mathematics
Shari Harris
B.S.E., Truman State University
M.S., University of Missouri-Columbia

Assistant Professor of Mathematics
James Behrens
B.S., Quincy University
M.A., University of Missouri-Columbia

NATURAL SCIENCES

Department Chair and Professor of Natural Sciences
Christopher Kaelke
B.A., Augustana College
M.S., University of Wisconsin-Madison
Ph.D., University of Illinois-Urbana/Champaign

Assistant Professor of Natural Sciences

Kelly Larson
B.S., Quincy University
M.S., Western Illinois University

Assistant Professor of Physics

Randy Wolfmeyer
B.S., Milwaukee School of Engineering
M.A., Washington University-St Louis
Ph.D., Washington University-St. Louis

Instructor of Natural Sciences

Osman Cen
B.S., Dicle University
M.S., Illinois Institute of Technology
Ph.D., University of Texas-Medical Branch, Galveston

Jamie Chapman
A.A, Pierce College
B.S. Culver-Stockton College
M.S., University of Cincinnati

SOCIAL/BEHAVIORAL SCIENCES

Department Chair and Assistant Professor of Social/Behavioral Sciences

Beth Reinhardt
B.S., Western Illinois University
M.S., Western Illinois University

Associate Professor of Social/Behavioral Sciences

Randall Egdorf
B.A., Eastern Illinois University
M.S.W., University of Illinois-Urbana/ Champaign
Ph.D., Iowa State University

Tiffany Frericks
B.A., Western Illinois University
M.A., Western Illinois University

Assistant Professor of Social/Behavioral Sciences

David L. Harbin
B.S., Western Illinois University
M.S., Illinois State University

TRANSPORTATION SERVICES

Assistant Professor of Truck Driver Training

Phillip Steinkamp

PROFESSOR EMERITUS

Dennis Campbell
B.A., Quincy College
M.A., University of Tulsa

Gary DeClue
B.M., Culver-Stockton College
M.A., Truman State University

Charles DeVerger
B.A., Culver-Stockton College
M.S., New Mexico Highlands University

Jeff Galle
B.S., Western Illinois University
M.S., Southern Illinois University Carbondale
Ph.D., University of Illinois-Urbana/Champaign

Jerry Hagmeier
B.S., Northeast Missouri State Teachers College

Diane Humke
R.N., Illinois Wesleyan University
B.S.N., Illinois Wesleyan University
M.S.N., University of Missouri-Columbia

Mark Moore
B.A., Syracuse University
M.S., Purdue University

Marty Otto
B.A., University of Illinois
B.S., Quincy College
M.S., University of Illinois-Springfield

Nancy Schneblin
B.S., Northeast Missouri State University
M.S.Ed., Southwest Baptist University

Carol Sharpe
B.S., Northeast Missouri State University
M.S., University of Missouri

Janet Stuckman
B.S.N., Quincy College
M.S.N., University of Missouri-Columbia

Carolyn Warren (deceased)
A.A., Freed Hardeman College
B.S., University of North Alabama
M.S., University of Tennessee

Lynne Weller (deceased)
B.A., Sangamon State University
M.A., Sangamon State University

BUSINESS SERVICES/INSTITUTIONAL EFFECTIVENESS

Dean for Business Services/Institutional Effectiveness
  Josh Welker
  B.S., Missouri State University
  M.A., University of Missouri

Administrative Assistant to the Dean for Business Services/Institutional Effectiveness
  Jenny Venvertloh

Data Coordinator
  Jacob Dalke

CAMPUS SERVICES

Manager, Campus Services with Purchasing
  Darla Snyder

Administrative Specialist, General Merchandising
  Ann Vogel

Bookstore Clerk
  Gary Bracy

Assistant, Mailroom
  Carl Askew

FISCAL SERVICES

Director, Fiscal Services
  Nora Klingele
  B.A., Quincy University
  M.B.A., Quincy University

Manager, Accounting Services
  Tammy Humphrey

Manager, Student Accounts
  Brenda Manis

Coordinator, Accounting Services
  Jessica Snow

Coordinator, Student Accounts
  Justine Williams

Specialist, Fiscal Services
  Nancy Dryer

Business Office Fiscal Assistant
  Vacant

OPERATIONS/CAMPUS POLICE

Dean of Operations/Chief of Campus Police
  Bill LaTour
  B.S., Western Illinois University
  M.S., Amberton University

Administrative Assistant to Dean of Operations/Chief of Campus Police
  Hollie Perry

Campus Police Sergeant
  Sam Tedrow

Campus Safety Officer
  Douglas McQuern

INFORMATION TECHNOLOGY

Director, Information Technology
  Josh Brueck
  B.S., Quincy University

Assistant Director, Information Technology
  John Entrup
  B.S., Culver Stockton College

Database Administrator
  Margaret Steinbrecher

Web Applications Administrator
  Leonard Craft

Systems Administrator
  Kyle Pho

Systems Analyst
  Andrew Goerlich
  Kaitlyn Winship

PC Administrator
  Andrew Terford

Network Administrator
  Gregory Meyer

Audio/Visual Coordinator
  Garris Brown

Administrator, Applications
  Seth Brammer

Administrator, Software Licensing
  Gina Chapman

Administrator, Computer Technician
  Denver Garkie

Technician, Help Desk
  Wayne Hersey

PHYSICAL PLANT

Director of Physical Plant
  Lou Barta
  B.A., University of Illinois-Urbana/Champaign

Manager, Physical Plant (HVAC)
  Jerry Wellman

Maintenance Technician
  William Arp
  Jason DeVerger
  Sam Moore
  Eric Piner
  Kevin Schaller
  Randy Schild

Groundskeeper
  Christopher "Adam" Holtschlag

Custodians

Michelle Attebery   Roberta Dougherty
David Bullard   JoAnn Liesen
Susan Detwiler   Joseph Sapp
Donald Dougherty   Carrie Tarpein

STUDENT SERVICES

Dean of Students & Enrollment Management
Tracy Orne
B.S., Quincy University
M.S.Ed., Quincy University

Administrative Assistant to the Dean of Students & Enrollment Management
Courtney Loos

Dean of Records, Registrar & Financial Aid
Melanie Lechtenberg
B.S., Quincy University
M.B.A., Quincy University

Coordinator, High School & Prospective Student Relations
Brittany McKeown

ADMISSIONS
Director, Admissions
Kristen Ritterbusch
B.S., Columbia College

Advisor, Admissions
Matthew Bilgri
Melissa Hess

Missouri & Business Outreach Advisor
Kelly Ragar

Specialists, Admissions
Mary Durk
Sandy Smith

Student Services Specialist, Information Center
Megan Root

FINANCIAL AID
Dean of Records, Registration & Financial Aid
Melanie Lechtenberg
B.S., Quincy University
M.B.A., Quincy University

Coordinator, Financial Aid
Christine Genenbacher
Lindsay Herren

Specialist, Financial Aid
Milini Heckenkamp
Joni Veile

ADVISING AND RETENTION SERVICES
Director of Advising and Retention Services
Andy Happekotte
B.A., Lincoln College-Normal

Specialist, Advising and Retention Services
Madeline Davis

Academic Advisors
Marty Fleer
Bonnie Henke
Amanda Klingele
Leslie Spears

Coordinator, Records/Registration
Lisa Snodgrass (Veteran Services)
Michelle Wright

Records/Registration Assistant
Josephine Miller

STUDENT LIFE AND ATHLETICS
Director, Athletics
Brad Hoyt
A.A., John Wood Community College
B.A., Coe College

Coordinator, Student Life
Eric Foster

SUPPORT SERVICES
Director, Support Services
Rob Hodgson
B.A., Western Illinois University
M.S., Western Illinois University

Administrative Assistant to the Director of Support Services
Mary Edwards

Manager, TRIO-Student Support Services
Alisa Cameron

Manager, TRIO-Educational Talent Search
Kristi Stadler

Coordinator, TRIO-Student Support Services
Bridget Quinlivan

Advisors, TRIO-Educational Talent Search
Kimberly Bricker
Bailee Dusterhaus
Cynthia Unmisig

Advisors, TRIO-Student Support Services
Devan Bevelheimer

Assistant, TRIO-Educational Talent Search
Kira Houghton

Assistant, TRIO-Student Support Services
Jacqueline Dickson

Faculty And Staff

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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.

- Unanimously adopted by the JWCC Board of Trustees on January 21, 2009
- Seal design by William Beard, JWCC student 2008-09
- Narrative description by James Huber, JWCC student 2008-09