



GOGEBIC
COMMUNITY COLLEGE

A black and white photograph of a graduation ceremony. Graduates are seen from behind, wearing caps and gowns. A green rectangular frame is overlaid on the center of the image, containing the text 'COURSE CATALOG'.

**COURSE
CATALOG**

2025-26



2025-2026 CATALOG

Accredited by the
Higher Learning Commission

800-621-7440



Gogebic Community College is an equal opportunity institution and adheres to a policy that no qualified person shall be discriminated against because of age, race, color, religion, marital status, sex/gender, pregnancy, sexual orientation, gender identity, gender expression, height, weight, national origin, disability, political affiliation, familial status, veteran status, or genetics in any program or activity for which it is responsible. If you have a disability and need special accommodations, please contact Accessibility Services at supportservices@gogebic.edu.

If you have questions or complaints related to compliance with this policy, please contact: Director of Human Resources or the Vice President of Student Services and Athletics (students), Gogebic Community College, E4946 Jackson Rd, Ironwood, Michigan 49938, 906-932-4231, equity@gogebic.edu; or U.S. Department of Education, Citigroup Center, 500 W. Madison, Suite 1475, Chicago, IL 60661, phone number (312) 730-1560, fax (312) 730- 1576, ocr.chicago@ed.gov. Gogebic Community College is accredited by the Higher Learning Commission, www.hlcommission.org, 800.621.7440.

Welcome to Gogebic Community College! From the main campus in Ironwood, Michigan and the Copper Country Center in Houghton, Michigan, the GCC community welcomes you! Whether your goal is transfer to a four-year institution, to advance your career through attainment of a technical certificate or degree in one of many high demand fields, personal enrichment or workforce development, Gogebic Community College is ready to meet your individual needs. Situated in Michigan's majestic Upper Peninsula with year-round adventure and attractions, you will be amazed by all the opportunities here. Within this beautiful setting, you can receive a quality education and engage in campus life complete with athletics and residential living, where highly qualified faculty and staff truly care about your holistic development. GCC supports continued economic growth throughout the region in partnering with local business and industry to develop highly skilled employees of the future. Our committed and experienced educators use of cutting-edge technology and training ensures a bright future laden with opportunities.



We are committed to making your educational experience a positive one, from application through graduation and beyond. We are driven by your success and strive to be a positive chapter in your life story. Start today... we look forward to getting to know you!

Go Bold!

Chris Patritto
President

gogebic
BOLD



L-R front row: Robert Stempihar, John Lupino, Susan Beals, and William Malloy
L-R back row: Michael McPherson, Tom Brown, and Eric Fitting

BOARD OF TRUSTEES

<i>Board Member</i>	<i>Term Expires</i>
SUSAN BEALS, Chairperson	December 31, 2028
MICHAEL MCPHERSON, Vice-Chairperson	December 31, 2028
JOHN LUPINO, Secretary	December 31, 2026
ERIC FITTING, Treasurer	December 31, 2030
EVE KOMOSA, Trustee	December 31, 2026
WILLIAM MALLOY, Trustee	December 31, 2030
ROBERT STEMPIHAR, Trustee	December 31, 2028

ADMINISTRATION-EXECUTIVE COMMITTEE

CHRIS PATRITTO	President
CHAD LASHUA	Vice President of Business Services
DR. JENNIFER SABOURIN	Vice President of Student Services & Athletics
	Interim Vice President of Academic Services

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**BOLD
MISSION**

Gogebic Community College is a learning community that contributes to academic, cultural, economic, and social success for our students and region.

PHILOSOPHY

Gogebic Community College believes all individuals should have opportunities to prepare for active participation in the economic, domestic, political, aesthetic, and cultural affairs of the communities in which they live. This preparation includes:

- The development of an increased ability to deal intelligently with the responsibilities of living in a rapidly changing global society.
- The development of techniques for self-criticism, initiative, intellectual curiosity leading to a poised, well rounded, and mentally, physically, and socially adjusted individual.
- The understanding that education is a life-long process and that the techniques and skills acquired in learning how to learn will be of life-long benefit.

INSTITUTIONAL INTEGRITY STATEMENT

We embrace a learner-centered philosophy that guides us in our efforts to improve student progress and program completion with honesty, integrity, and mutual respect.

ACCREDITATION

Gogebic Community College is accredited by the Higher Learning Commission. Our status of accreditation can be reviewed by clicking on the word “accreditation” at the bottom of the GCC home page, or by going to the following link: <https://www.gogebic.edu/AboutUs/accreditation.html>. You can also find our accreditation status on the Higher Learning Commission website. Under find institutions, search for Gogebic Community College.

INSTITUTIONAL LEARNING OUTCOMES

GCC’s Institutional Learning Outcomes (ILOs) represent the educational values of the college. The ILOs are the knowledge, skills, and abilities students are expected to develop as a result of their overall experiences at GCC. The ILOs are embedded within each degree and program at GCC and align with Student Learning Outcomes and Program Learning Outcomes. The ILOs are assessed within courses and programs as part of the College’s assessment process. The assessments are monitored and documented by the College to ensure the ILOs are met.

<p><i>Critical Thinking & Information Competency (CTIC)</i> Students will recognize the need for information to solve problems and make decisions. Students will identify, organize, analyze, and evaluate the credibility of relevant sources and use information in an ethical manner.</p>	<p><i>Community and Global Consciousness and Responsibility (CGCR)</i> Students will demonstrate an understanding of the interconnectedness of global, national, and local concerns, analyzing cultural, political, social, and environmental issues from multiple perspectives.</p>
<p><i>Communication and Expression (CE)</i> Students will communicate effectively and express themselves creatively. Students will interpret thoughtfully and logically, engaging actively in dialogue and discussion.</p>	<p><i>Quantitative and Technological Competence (QTC)</i> Students will solve problems by selecting and applying quantitative methods to construct arguments with the use of numerical and statistical support. Students will utilize technology appropriate to their chosen field of study.</p>

QUALITY ASSURANCE POLICY

Gogebic Community College is committed to providing an environment in which its students can be confident of receiving the highest quality instructional programs. Recognizing its responsibilities, Gogebic Community College offers assurance to its students, prospective employers, and transfer institutions that graduates shall have the basis for competent performance in their degree or certificate area.

The college has articulation agreements with a number of Michigan institutions. These agreements guarantee the transferability of the associate degree and of specific courses within the curriculum. Students following the direction of college advisors are assured of maximal transferability of earned credits.

Gogebic Community College will refund the tuition of any GCC graduate for any transfer course passed at GCC with a grade of C or higher if that earned course credit does not transfer to an accredited college or university in which the student enrolls within two years of graduation from GCC. Such classes must be listed as transferable on GCC's listing of transfer courses in the Vice President of Student Services' Office.

Non-transferring students who earn a degree or certificate with a "C" average or better can be expected to perform competently in the area in which they were instructed. Any employer who views a Gogebic Community College graduate as not possessing appropriate entry-level skills and can specify such deficiencies may request remediation. The student will be permitted to retake a specified course or courses without an additional tuition charge. The college recognizes that unused skills decay rapidly. The assurances offered herein are made for individuals who gain employment within a year of receiving a degree or certificate.

The GCC Foundation, established in 1977 as a non-profit, 501 (c) (3), tax exempt organization, exists solely for the support and development of the College and its mission. It is the preferred channel for private gifts to the College. The mission of the GCC Foundation is to promote, encourage, and aid Gogebic Community College in its development of educational programs and its enhancement of facilities. All members of GCC’s family – alumni, parents, grandparents, friends, faculty and staff – are vitally important to the success and future of our programs and the College.

Alumni Relations

Regardless of whether you took four credits, forty credits, received a certificate or an associate degree, you are an alumnus of Gogebic Community College. No matter how many years or how many miles may separate us – you’ll always receive a hearty “welcome home” when you visit us on campus or online. Stay connected with the college and the community that has come to mean so much to you over the years by attending a special event on-campus, an Open House, a Samson athletic event, or stopping in for a tour. For more information, go to the About Us / Foundation link on the college web site at gogebic.edu.

Foundation Board of Directors

The Gogebic Community College Foundation is a non-profit, 501(c)(3) tax exempt organization, governed by a volunteer board of directors comprised of professionals, community leaders, and alumni. The mission of the GCC Foundation is to promote, encourage and aid Gogebic Community College in the development of educational programs and the expansion of facilities. Foundation officers and members include:

Officers

JAMES MILAKOVICH	Foundation President
JOHN SIIRA	Vice President
CHAD LASHUA	Treasurer
KELLY MARCZAK	Executive Director

Members

Neil Beckman	John Matonich	George Samardich
Thomas Brown	Joel Massie	Dr. Maria Sokol
Daniel Jamison	Linda Paoli	Steve Wesselhoft
Kari Klemme	Carol Pisani	Judi Whitley-Yatchak
	Greg Ryskey	

WORKFORCE DEVELOPMENT & COMMUNITY EDUCATION

This program is dedicated to creating a vibrant environment highlighting the learning opportunities in our region. Gogebic Community College's Entrepreneurial Center for Collaboration, Innovation and Development (GCC-ECID) provides customized non-credit professional development training and consulting to our local and regional businesses and community members. Community Education is dedicated to continuing development of people of all ages. Programs are an extension of traditional academic work to develop occupational improvement, vocational interests, cultural pursuits, health and wellness, and self-improvement to name a few. All have the aim of advancing everyday living for community residents and businesses. If you or your organization have an interest in customized learning experiences ranging from short lunch and learn programs to full day sessions, contact Monica Benson at monicab@gogebic.edu to learn about our opportunities. We look forward to partnering and supporting your success.

COMMUNITY USE OF FACILITIES

Gogebic Community College is available to community-based organizations for use of its classrooms and meeting room facilities for meetings and special events which do not conflict with instructional and college-related activities. Designated meeting/conference rooms are in the Lindquist Student and Conference Center, the Erickson Academic Center, and the Solin Business Education Center. Room capacities accommodate groups of varying sizes up to 200+ individuals. The college, upon request, can also provide audio visual equipment. For additional information, contact (906) 307-1201. Fees may apply.

Fall Term

Orientation and College Assembly	August 19-22, 2025
Classes Begin	Monday, August 25, 2025
Labor Day: No Classes <i>College Closed</i>	Monday, September 1, 2025
Thanksgiving: No Classes <i>College Closed</i>	November 27-28, 2025
Final Exam Week for 16-week courses	December 8-12, 2025
End of Term	December 12, 2025
Grades due	Monday, December 15, 2025 @ 7:30 am CST.

Spring Term

Wintersession Begins	Wednesday, December 17, 2025
Wintersession Ends	Wednesday, January 7, 2026
Wintersession Grades Due	Monday, January 10, 2025 @ 7:30 am CST.
Orientation and College Assembly	January 6-8, 2026
Classes Begin	Monday, January 12, 2026
Martin Luther King Inservice: No classes	Monday, January 19, 2026
Spring Break: No classes	March 9-March 13, 2026
No Classes <i>College Closed</i>	April 3-April 6, 2026
Final Exam Week for 16 week courses	May 4-May 8, 2026
End of Term	May 8, 2026
Commencement	May 8, 2026
Grades due	Monday, May 11, 2026 @ 7:30 am CST.

Summer Term

Start of Term	Monday, May 11, 2026
Regular Summer Classes begin	Monday, June 1, 2026
July 4 th Holiday No Classes <i>College Closed</i>	July 4, 2026
Last Day of Classes	Friday, July 24, 2026

CLASSROOM AND COMMUNITY FACILITIES

The Ironwood campus classroom buildings are the Rutger Erickson Academic Building, the Carl Kleimola Technical Center and the Jacob Solin Center for Business Education. The three buildings are connected by walkways on two floors and surround a courtyard. In addition to classrooms, laboratories, and faculty offices, each building houses facilities and services for instructional support and student activities. The David G. Lindquist Student Center is also connected to the classroom buildings by a walkway from the Kleimola Technical Center. The Skilled Trades Center located on Midland Avenue in Ironwood is just a few blocks from the Ironwood campus. The Copper County Campus is located in Houghton.

RUTGER ERICKSON ACADEMIC BUILDING

Academic classrooms and academic faculty offices
(1st & 3rd floors)

Administrative Offices (2nd floor)

- President
- Vice President of Business Services
- GCC Foundation/Alumni Relations
- Human Resources
- Institutional Researcher
- Accounting Services and Payroll

Ski Area Management/Mt. Zion Operations

Alex D. Chisholm Library and Learning Resources
Center

CARL KLEIMOLA TECHNICAL CENTER

Technical classrooms and technical faculty offices
(1st & 2nd floor)

Student Services Offices (2nd floor)

- Vice President of Student Services and Athletics
- Admissions
- Financial Aid
- Transfer Coordinator
- Registrar
- Learning Support Services (in ACES Center)
- TRIO Student Support Services
- Career Services (TRiO, Perkins)
- Assessment Services
- The Samsons Canteen

JACOB SOLIN CENTER FOR BUSINESS EDUCATION

Business classrooms and business faculty offices
(1st & 2nd floors)

Esports Arena (2nd floor, A-211)

Administrative Offices

- Vice President of Academic Services (1st floor)
- Workforce Development Director (1st floor)
- Computer Services (2nd floor)
- Technology Specialist (2nd floor)

Solin Conference Center and multi-purpose meeting
rooms (1st floor)

Computer Learning Laboratories (2nd floor)

DAVID G. LINDQUIST

STUDENT & CONFERENCE CENTER

The Lindquist Student and Conference Center is designed to provide opportunities for a balanced physical fitness education program and student social, cultural, and recreational activities.

Included in the Lindquist Student Center are:

- Gymnasium and home court of the Samson basketball teams and Women's volleyball team
- Indoor cushioned walking track
- Aerobics area
- Weight rooms
- Student lounge and game area
- Student Organization offices
- Concessions
- Courtside Conference Area
 - Located on the upper level of the Lindquist Student and Conference Center
 - Meeting and banquet availability

SKILLED TRADES CENTER

The Skilled Trades Center currently houses the welding lab, faculty offices, classroom space and a student lounge. This facility will improve and increase the skilled trades offerings in our region. The Welding program is currently housed in this building.

THE SAMSONS CANTEEN

The Canteen, 2nd floor Technical Center, offers students a complete line of instructional materials, office supplies, a vast array of nursing supplies, hoodies, shirts, welding supplies, and general merchandise. It also includes a snack bar and lounge area with TV, charging station and portable workstations. Samsons Canteen is open to the public Monday through Friday. Contact Samsons Canteen for hours of operation: Call 307-1225, (800) 682-5910 x 225, or e-mail amy@gogebic.edu.

The GCC Online Bookstore is available under Student Resources on the college website to shop online and find current deals!

CAMPUS SUITES - STUDENT HOUSING

The Campus Suites Housing Complex, located adjacent to the Lindquist Student Center, is designed to provide convenient, safe, affordable housing in a campus community environment for GCC students carrying a minimum of 12 credits per semester. Each suite includes accommodations for four students, along with a full kitchen and bathroom. All utilities are included with free Internet in the lounge areas. Phone hookups are provided, and students can contract with the companies for these services individually. It is recommended that students obtain their own wifi for their personal use. The complex includes space for 96 students, as well as an onsite manager and staff.

MT. ZION RECREATIONAL COMPLEX

The Mt. Zion Recreational Complex located on campus features a panoramic view of Gogebic Community College and the surrounding area. In addition to functioning as an on-campus laboratory for GCC's nationally acclaimed Ski Area Management Program, Mt. Zion serves downhill, cross-country, snowboard, and snowtubing enthusiasts. Open to the public, Mt. Zion has a full complement of rental equipment. Students and guests are encouraged to participate in various "learn to ski/snowboard" programs.

Mt. Zion is operated by GCC's Ski Area Management program. GCC students carrying a minimum of six credit hours qualify for free skiing/snowboarding with their photo student ID card.

COPPER COUNTRY CENTER

Gogebic Community College provides courses throughout the day and evening at the Copper Country Center in Houghton, MI located on Hwy M-26. Classes are offered in general classrooms, lecture-style rooms, computer labs, state of the art science and nursing lab. The GCC office is open Monday-Friday from 8am-4:30pm, although the center remains open and available for student use until 9pm Monday-Thursday. The office is staffed by 3 full-time employees who are available to assist students. Full-time instructors in Mathematics, English, Biology, Chemistry, Anatomy and Physiology, and Nursing along with a valuable mix of adjunct instructors provide high-quality student support and instruction.

Students can enroll in general studies, program specific or self-enrichment courses. In addition to a growing variety of certificate programs available, programs offered at the center include Associate Degree Nursing, Early Childhood Education, Criminal Justice, Business, as well as general education Associate of Arts and Associate of Science degrees. Early College and dual enrollment options are also available to high-school students. GCC continues to expand offerings in the Copper Country to meet the community needs at an affordable rate.

Copper Country Center students have access to a computer lab at the complex, tutoring services and an on-site advisor. Outreach services are aimed at removing barriers to admission, assisting students with the completion of educational goals and providing information on skills assessment, admissions, financial aid, course registration, orientation and academic advising.

ADMISSION POLICIES

Gogebic Community College offers a liberal “open door” admissions policy. In general, all high school graduates are considered for admission. Adult students may also be admitted after successfully passing a high school equivalency examination (such as the General Education Development Test).

Admission to specific courses and programs of study within the college will depend upon the student’s preparation and readiness to succeed as determined by the admissions committee.

The college reserves the right to deny admission to any applicant who does not meet entrance requirements.

STEPS FOR ADMISSION

- ✓ Complete an APPLICATION FOR ADMISSION
- ✓ Submit official high school transcript or GED
- ✓ Submit official college transcripts, if requesting transfer credit.

APPLYING FOR ADMISSION

Applicants for admission must complete an Application for Admission form and submit the following:

- Official high school transcript must be on file before admission is granted to a degree or certificate program. Students taking individual courses for personal enrichment or upgrade of job skills are exempt from the transcript requirement (6 or less credits).
- Official college transcripts from all colleges attended must be sent to the Admissions Office, if transfer credit is requested.

ADMISSION STATUS

High School Graduates

All fully matriculated high school graduates without prior college experience are eligible for regular admission. An official transcript of the student’s high school academic record must be on file in the Admissions Office before admission status will be determined.

High School Equivalency

Students who have successfully completed the GED test or another high school equivalency examination are eligible for regular admission. Documentation of high school credit, including test subscores, must be on file in the Admissions Office before admission status will be determined.

Transfer

Students transferring from other post-secondary educational institutions are eligible for regular admission if in good academic standing at the prior schools attended. College students transferring to Gogebic Community College from other institutions must fulfill the same requirements of all incoming students and follow the same procedures in applying for admission as well as the following:

- If a student is seeking transfer credit, official transcripts from all other colleges or universities attended should be sent to the Admissions Office.
- The Transfer Coordinator utilizes The Database of Accredited Postsecondary Institutions and Programs to verify college credentials and insure the transferring institution has accreditation before granting transfer credit. Each transcript is evaluated on an individual basis, and credit is awarded based on the entering major. Grades lower than a “C” will not be accepted as transfer credit to Gogebic Community College. GCC can assume no responsibility, however, for the acceptance of such credits by institutions to which students with advanced standing may transfer later.

Re-Admission

Students who have withdrawn from Gogebic Community College for one semester or more may reapply for admission into the college. If a student has attended another college, an official transcript of all academic work should be on file in the Admissions Office before re-admission status will be determined. Applicants seeking readmission should file their applications at least one month prior to the semester of enrollment.

- Former students who have voluntarily dropped out of Gogebic Community College for one or more semesters and who were in good standing must apply for readmission by completing an application obtained from the Admissions Office or on the GCC website, gogebic.edu.
- Former students who have been suspended from Gogebic Community College for one semester or more must apply for readmission by completing the Application for Admission. A suspended student is required to make an appointment and meet with the Vice President of Student Services and Athletics to discuss readmission.
- Students who graduate from Gogebic Community College, and plan to continue taking classes following graduation, need to complete a program/major change form in the admissions office to update their intent and program of study. If not completed by the first day of the semester following graduation, their program of study will be updated to 'personal enrichment' which could have financial aid implications.

International Student Applications

International students must fulfill the same requirements as all incoming students and follow the same procedures in applying for admission, along with the following requirements:

1. Applicants must provide all documentation necessary for completion of paperwork associated with U.S. Immigration and Naturalization Service requirements.
2. A \$100 non-refundable application fee must be submitted with the official GCC Application for Admission.
3. Applicants must demonstrate an adequate English by taking the TOEFL (Test of English as a Foreign Language) and attaining a minimum score of 78 on the Internet Based Test (IBT).
4. Applicants must show documented evidence that they have adequate financial reserves to cover the expenses of attending Gogebic for one academic year or more.
5. Official transcripts or certificates of all subjects taken and the specific grades earned in each for secondary school and college studies must be provided. These documents must be written in English or accompanied by certified English translations.
6. Proof of health insurance must be provided.

Audit Applicants

Students seeking to exclusively audit classes must complete and follow all regular and special application procedures appropriate to their admission status. Permission to audit a course is given by the Vice President of Student Services and Athletics and the course instructor. Priority in registration will be given to students who are registering for credit.

SPECIAL ADMISSION STATUS

Applicants who have not completed the usual admissions requirements or who do not meet regular admission requirements but desire to take a limited course load in a given semester may do so as special students upon approval from the Vice President of Student Services and Athletics.

<p>Dual Enrollment</p>	<p>High school students who can demonstrate academic readiness for college level courses through college approved measurement instruments may be admitted to Gogebic Community College courses. This demonstration includes scoring into college level course work on one of the following state approved placement tests: EXPLORE, PLAN, ACT, Accuplacer, MME, PSAT, or SAT with the appropriate qualifying scores. All dual enrolled students must also have written approval from their high school prior to registering for college courses.</p>
<p>Early College</p>	<p>This is a five-year high school program designed to allow high school students to earn a high school diploma and an associate degree or substantial college credit through an additional fifth year of study, provided that they meet the minimum requirements in English and Math based on their program of study.</p>
<p>Guest Student</p>	<p>Guest applicants (students who are enrolled primarily at another college or a university and wish to take a limited number of courses at GCC) must submit a guest application form supplied by the Registrar’s Office of the college they are attending. A guest application is valid for one semester only. Students must provide prerequisite documentation of prior coursework, if necessary.</p>
<p>Home School Students</p>	<p>Please schedule a conference with the Admissions Director/Vice President of Student Services and Athletics.</p>

RESIDENCY REQUIREMENTS

A student’s residency classification is established when admitted to Gogebic Community College.

DISTRICT RESIDENT (Gogebic County, Michigan)

A district resident is a legal resident of Gogebic County. A legal resident is one whose permanent, primary residence or domicile is where s/he intends to return whenever absent from college. A dormitory/suite, apartment, or house rented only during college enrollment is not a permanent primary residence. Applicants meeting one or more of the following conditions at the time of admission will be classified with in-district residence:

- The applicant is a minor who lives with his/her parent or legal guardian provided that the parent or legal guardian has resided within Gogebic County for at least four (4) consecutive months immediately prior to the first day of the semester in which the applicant plans to enroll.
- The applicant is at least 18 years of age at the time of registration in the institution and has resided in Gogebic County at least (4) consecutive months immediately prior to the first day of the semester without being registered at a college or university during that period.
- The applicant is an employee of a business or industrial firm within Gogebic County, and the employer, by written agreement, agrees to pay directly to the college all tuition and/or fees of the sponsored student for employer-approved classes.

- The applicant is an alien who has filed Declaration of Intention to become a citizen of the United States and who otherwise meets the residence requirements of the district.

MICHIGAN RESIDENT (NON-DISTRICT)

Applicants who fail to qualify as in-district residents but meet one or more of the following conditions at the time of admission will be classified with out-of-district residency.

- The applicant is a minor who lives with his/her parent or legal guardian, provided that the parent or legal guardian has resided within the State of Michigan for at least four (4) consecutive months immediately prior to the first day of the semester in which the applicant plans to enroll.
- The applicant is at least 18 years of age at the time of registration in the institution and has resided in the State of Michigan at least four (4) consecutive months immediately prior to the first day of the semester without being registered at the college during that period.
- The applicant is an employee of a business or industrial firm within the State of Michigan and the employer, by written agreement, agrees to pay directly to the college all tuition and/or fees of the sponsored student for employer-approved classes.
- The applicant is an alien who has filed Declaration of Intention to become a citizen of the United States and who otherwise meets the residence requirements of the State of Michigan.

OUT-OF-STATE (Wisconsin Reciprocity Area)

Residents of Northern Wisconsin are eligible for special reduced out-of-state tuition rates. A listing of specific counties is available in the Vice President of Student Services Office.

OUT-OF-STATE

Applicants who do not qualify as district or Michigan residents will be classified as out-of-state.

INTERNATIONAL

Students who are not citizens of the United States of America will be classified as international.

Residency Status Information

- Time spent at GCC as a student does not count toward the four (4) consecutive months needed for residency.
- It is the student's responsibility prior to registration to inform the Vice President of Student Services Office of any change in residence or status that would affect his/her classification as a resident.

COLLEGE ENTRANCE EXAMINATION (CLEP) and ADVANCED PLACEMENT (AP)

Certain high schools offer selected students the opportunity to accelerate their educational programs by taking one or more subjects during their junior and senior years which are taught on the college level and cover the content of a college course. The College Entrance Examination Board gives a set of advanced placement examinations which cover the content of college courses. Gogebic Community College cooperates with the advanced placement program and awards credit for all advanced placement courses (CLEP and AP) passed. Courses are entered on the transcript, and students are credited with the appropriate credit hours. Since no letter grade is entered, the credits are not calculated as part of the GPA. The CLEP and AP examinations may be taken at any authorized testing center. The student must specify that the results of the tests be sent to Gogebic Community College (code number 1250).

ADVANCED PLACEMENT (AP) PROGRAM

College course credit will be granted to students who participate in the Advanced Placement program at their area high school and pass the AP examinations with an appropriate score. Only those AP courses

approved by GCC faculty will transfer in as college credit. For up-to-date score requirements visit the GCC website.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The CLEP is administered by the College Board. CLEP enables those who have reached the college level of education to assess the level of their academic achievement and to use the test results for college credit. Students planning to transfer to a university should consult that institutions CLEP policies before taking CLEP tests. Some institutions do not accept CLEP credits for some subjects, such as Biology and Chemistry. On the courses listed on the website will be considered for transfer if the final score is 50 or higher.

CREDIT BY EXAMINATION

Regularly enrolled students may, in some subject areas, be able to earn credit for a course offered by the college through successful completion of a comprehensive examination or series of examinations. Students who believe they have mastered a course through life experience, past training, or intelligence may, at the discretion of the Division Chairperson, instructor, and advisor, make application through the Vice President of Student Services Office to take the examination if one has been developed in that subject area. An examination fee of \$20 per credit is charged prior to the time of examination, and on the recommendation of the Division Chairperson and instructor, credit will be entered on the student's transcript. Special agreements are also in place with Intermediate School Districts creating alternate Credit by Examination procedures.

TRANSFER RESOURCES

COLLEGE AND UNIVERSITY TRANSFER REQUIREMENTS

Every American college and university have certain general education requirements of its own. The Transfer Coordinator maintains records of these requirements for regional schools and can advise the student preparing for transfer. Information can also be obtained from your faculty advisor.

In general, any student who receives an Associate of Arts or an Associate of Science degree from Gogebic Community College is not required to pursue further general education requirements at most four-year colleges and universities in Michigan. Students should check with the Transfer Coordinator or the transfer university to determine the effect of any special provisos established by the university on their transfer process.

Gogebic Community College participates in the Michigan Transfer Agreement (MTA) and will identify transcripts of students completing either of these two degrees with the statement, "Michigan Transfer Agreement Satisfied."

Gogebic Community College has formed articulation agreements with a number of colleges and universities. These academic agreements promote an ease in the transfer process while maximizing the number of GCC credits accepted in transfer. Please visit our website to view the established agreements with various colleges and universities.

Students who are interested in participating in this program or obtaining any other information on transfer procedures and agreements may contact the Transfer Coordinator at GCC.

All students must complete regular admission requirements before they will be permitted to register. Specific information concerning registration is sent to all currently enrolled students and incoming students.

New Student Registration Process for Degree-Seeking Students

1. Obtain letter of acceptance to GCC.
2. Complete skills assessment or submit ACT or SAT scores to Admissions, if taken within the last three years.
3. Meet with your Student Success advisor to choose course schedule, including COL 101 OR COL 102 course.
4. Register for classes.
5. Complete Part One: Online Orientation.
6. Attend Part 2: In Person Orientation Day.
7. Obtain GCC identification card.

ASSESSMENT

All freshmen and transfer students who are degree-seeking are able to complete the GCC academic skills assessment or submit ACT or SAT scores if taken within the last three (3) years prior to registering for classes. The assessment, ACT or SAT helps students to identify their math, algebra, reading and language usage skill levels. Assessment results are used to match each student's skills with the appropriate GCC courses, not to determine acceptance.

ORIENTATION/COLLEGE EXPERIENCE

All freshmen and transfer students are **REQUIRED** to participate in specified orientation activities. Orientation sessions provide students with opportunities to:

- explore their goals.
- learn more about the college and its resources.
- gain an understanding of GCC's policies, regulations and procedures.

Spring and Fall Orientation Days are kick-off sessions for COL 101 or COL 102—College and Transfer or Career Success. COL 101 and COL 102 are required courses for all degree seeking students enrolled in a degree program and attending GCC for the first time. These courses are designed to provide students with learning experiences to help ensure their educational and professional success.

ADVISING

The academic advising system at Gogebic Community College is coordinated through the Vice President of Student Services and Athletics Office. Guidance provisions consist of a two-part program at GCC from professional student success advisors and advisory services from individual faculty members. Together, these services are designed to assist students in matters relating to educational and vocational planning, adjustment to college, study habits and personal or social problems that may confront students during college attendance.

ROLE OF YOUR ADVISOR

You will be assigned an advisor after enrolling in a specific program of study. Your advisor will: (1) assist you prior to and during the registration process, so that you will enroll in courses relevant to your educational and vocational plans; (2) be available to assist you as you develop or revise your educational or vocational plans; (3) provide consultation for you regarding academic and personal concerns and make referrals, when necessary, to Student Services professionals. All official registration activity and changes in class schedules -- additions or drops-- must be approved by your advisor before official sanction is given by the Vice President of Student Services and Athletics.

YOUR ROLE

You are expected to assume responsibility for your future by becoming familiar with the requirements of your selected program of study. If pursuing a transfer curriculum, you are expected to become familiar with the requirements of the institution to which you plan to transfer. It is your responsibility to know your grade point average and to familiarize yourself with the GCC college catalog and student handbook. Advisors do not always have ready access to information on all of these matters; therefore, you must assume responsibility and see the Transfer Coordinator, division chairs, or Vice Presidents about information that cannot be obtained from your advisor.

ACADEMIC POLICY

ATTENDANCE

Punctuality and regular attendance are indispensable to success in any human endeavor, and class work in college is not an exception. During the first week of classes, each instructor will announce and provide in writing the attendance requirements for that class. Each instructor keeps an accurate attendance record of the students enrolled in the class and reports excessive absences to the Vice President of Student Services and Athletics throughout the semester. Excessive absences incurred by veterans receiving educational benefits will be reported to the Veterans' Administration as will those of students attending college under other programs requiring attendance reporting to the sponsoring agency.

Absences exceeding 1/16th of total class hours will be considered excessive.

RULES GOVERNING ABSENCES:

- When a student has permission and is an official representative of the college, absences are listed as official, and permission is granted for the student to make-up studies within two weeks.
- Absence and tardiness caused by factors beyond the student's control may be excused by the Vice President of Student Services and Athletics. The student may be permitted to make-up studies within two weeks.
- It is the responsibility of students who have been absent from classes to arrange make-up work with the instructor within three days after the absence has occurred. All make-up work must be completed two weeks after the student's return to class.

- Any student who registers late for a course may have already been absent from class meetings. Such absences are to be reported by the instructor. Rules governing such absences are the same as for any absence during the school year.

CLASSIFICATION OF STUDENTS

First-Year Freshman Less than 28 credits	Sophomore Twenty-eight or more credits
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INDEPENDENT STUDY

Opportunities for independent study are available to outstanding students, usually sophomores. Such study must be arranged by the supervising instructor and approved by the appropriate Division Chairperson, the Vice President of Academic Services, and the Vice President of Student Services. Independent study is designed to provide an opportunity for students to pursue special or advanced study under the direction of the faculty. Separate fees may apply.

DROPPING AND ADDING COURSES

- During the drop and add period at the beginning of each semester, a student may make changes in their schedule. All Drop/Add forms are obtained from and must be filed in the Vice President of Student Services Office.
- After the drop and add period, students may withdraw from a class up to the posted last day to withdraw by completing a Drop/Add form which must contain the signature of the instructor of the course dropped and the student's faculty advisor. Students will not be permitted to withdraw from a course after the published last day to withdraw.
- Students who officially withdraw from a class will receive a "W". Students who do not go through the official drop procedures will receive an "F" grade for courses not completed.
- Withdrawing from a course can have an effect on a student's current and future financial aid including veteran's benefits. It is in the student's best interest to consult the office of financial aid prior to withdrawing from a class.

PETITION FOR EXCEPTION TO COLLEGE REGULATIONS

Certain problems encountered by a student may result in a request to have an exception considered to an academic standard or to an academic regulation of the College. A student may request an exception to Gogebic Community College regulation by filing a written request with the Vice President of Student Services and Athletics within one week of the conclusion of the semester. The student will be notified in writing of the decision as soon as it is determined.

WITHDRAWING FROM COLLEGE

- A student finding it necessary to withdraw from college after the official drop and add period must complete a Drop/Add form and file a Withdrawal form with the Vice President of Student Services Office.
- Withdrawing from college can have an effect on current and future financial aid including veterans' benefits. It is in the student's best interest to consult the office of financial aid prior to withdrawing.
- A student can be administratively withdrawn from a course/class for the reason of non-attendance.

ACADEMIC PROGRESS

GRADE INFORMATION

DEAN'S LIST

Each semester, a Dean's List is issued and published listing all fulltime students who have earned a 3.5 average or higher semester GPA.

ADDITIONAL GRADING INFORMATION

- Final grades are recorded on the student's permanent record at the close of each semester. As grades are processed, students can view them on My GCC.
- The highest grade for any repeated course will be used for the calculation of the student's GPA.
- Audited and pass/fail courses do not count in the calculation of the student's GPA.
- The GPA of transfer credits does not count in the calculation of the student's GPA.
- The GPA of college credits earned by a student in high school count in the calculation of the student's GCC GPA.

INCOMPLETE GRADES

It is expected that students will fulfill course requirements to warrant a grade for each course at the end of the semester. Should a student receive an incomplete due to extenuating circumstances, such as severe illness or family emergency, the course is to be completed within 30 days unless extended in writing by the instructor and the Vice President of Student Services and Athletics. An incomplete will revert to a grade specified by the instructor if not made up within the time allotted.

REPETITION OF COURSES

When a student repeats a course, the record made in repetition will be compared to the first record, and the higher grade will count, thereby making it possible to improve the cumulative grade point average. The lower grade will continue to be displayed on the transcript, although it has been superseded by the higher grade in the cumulative grade point calculation. Each grade attempt will continue to be counted in the individual semester grade point calculation.

GRADE RE-EVALUATION POLICY

This policy assists the student whose grade point average from some prior period is significantly lower than the work the student has completed in current semesters, and because of this, the cumulative grade point average is not representative of the student's capabilities. A student may complete a petition in the Vice President of Student Services and Athletics office and must meet a series of conditions. Upon approval of the student's petition for grade point reevaluation, all course grades prior to re-enrollment will be removed from the calculation of grade point average (GPA).

GRADING SYSTEM

Grade	Points per credit
A	4
A-	3.67
B+	3.33
B	3
B-	2.67
C+	2.33
C	2
C-	1.67
D+	1.33
D	1
D-	0.67
F	0.00
Additional transcript notation	
I	Incomplete
W	Withdraw
WIP	Work in progress
P/F	Pass/Fail
CR	Credit given
NC	No credit given
O	Grade omitted per re-evaluation policy
AU	Audit
TR	Transfer credit
LE	Life experience credit
CX	Credit given through comprehensive exam

Passing credits may be carried forward to meet graduation requirements if current course content has remained substantially the same as the historical course of record. As part of the application process, the student must identify any courses that are to be considered for use in meeting current degree requirements.

STANDARDS FOR ACADEMIC PROGRESS

Gogebic Community College students must make satisfactory academic progress toward completion of their certificate or associate degree. The standards of academic progress for GCC students are maintaining a cumulative GPA of 2.0 or higher and completion of 67% of credits attempted. The academic progress of students is reviewed at the end of each academic semester.

ACADEMIC WARNING, PROBATION AND SUSPENSION INFORMATION

- A student will be placed on academic warning if the student’s term GPA falls below 2.0. Students who are placed on academic warning should meet with their Student Success Advisor to ensure they are making adequate progress towards their degree.
- A student will be placed on academic probation if the student’s cumulative GPA falls below 2.0 or the student does not complete 67% of the credits attempted. In addition, the student will be required to meet with their Student Success Advisor to complete an Academic Progress Plan prior to the beginning of the semester.
- If the student fails to attain a 2.0 cumulative GPA or 67% completion of attempted credits and/or fails to meet other parameters designed in the Academic Progress Plan for any probation semester, they will be suspended from enrollment at GCC for a period of one semester unless the advisor recommends otherwise.
- Students who have been placed on academic suspension have the right to appeal their status if there are extenuating circumstances for not meeting the standards of academic progress. The appeal must be filed with the Vice President of Students Services and Athletics by the deadline provided in the suspension letter. The Student Appeals committee will review the appeal.
- Students that are approved for an appeal will be placed on academic probation for the next term and will be required to meet the 2.0 GPA and/or complete 67% of the credit hours attempted for that term. Students will remain on academic probation until they have reached the required Overall 2.0 GPA and 67% completion rate.
- A student who has been academically suspended may apply for reinstatement after the suspension semester and will be placed on academic probation for the term in which they return.
- Guest students are not subject to the same Standards of Academic Progress. Guest students should work with their home institutions to ensure they are making satisfactory academic progress.

Academic Warning	Academic Probation	Academic Suspension
Term GPA falls below 2.0	Cumulative GPA falls below 2.0 and/or Not completing at least 67% of credits attempted	More than one semester with cumulative GPA below 2.0 and/or Not completing at least 67% of credits attempted

GRADUATION REQUIREMENTS

To earn a degree or certificate from Gogebic Community College, students must complete the following:

1. Complete an Application for Graduation: A degree or certificate will not be awarded unless a student has submitted an Application for Graduation and a degree audit has been performed by the Registrar. Students should apply once registered for their final semester of courses. Degrees are awarded at the end of the fall and spring semester.
2. Complete Degree and Program Requirement: Each degree type and program of study has a degree plan that outlines courses required to complete that degree or certificate. In some cases, course waivers or substitutions may be granted by the division chair or other administrator.
3. Maintain a GPA of 2.0: A minimum cumulative grade point average (GPA) of 2.0 is required to earn a degree or certificate. Some programs may have a higher GPA requirement.

GRADUATION WITH HONORS

Special recognition at graduation will be given to students under the following conditions:

- Students completing graduation requirements at GCC with a 3.75 cumulative GPA or better will graduate with High Honors.
- Students completing graduation requirements at GCC with a 3.5 to 3.74 cumulative GPA will graduate with Honors.

Honor point averages for those students transferring to Gogebic Community College from other colleges or universities are determined by only those grades earned at GCC.

While recognition at the commencement ceremony will be based upon cumulative grades prior to the final grading period, all grades earned at GCC will be included in the final determination of honors status to be recorded in the student's permanent record.

ADDITIONAL GRADUATION INFORMATION

- A student must take at least 16 credits from Gogebic Community College to earn a degree and one half of the credits from Gogebic Community College for certificate programs. Courses taken through consortium or collaborative programs are not included in the 16 credits.
- To earn a second associate degree from Gogebic Community College, 15 non-duplicative credits are required.
- A commencement ceremony is held once each year at the conclusion of the spring semester, typically mid-May. Students who have earned their degree or certificate after the previous fall semester or who will graduate after winter or summer are invited to participate.

STUDENT SERVICES

THE CENTER FOR ACADEMIC CHOICES, ENRICHMENT AND SUCCESS: ACES

The ACES Center, located on the 2nd floor of the technical building provides students with learning support services to promote their success in college, including a comprehensive tutorial program encouraging GCC students to advance their academic success by working together. Students learn to think problems through, link new knowledge with existing knowledge, talk about ideas and adapt their skills to new situations. The Tutoring Program creates an interactive learning environment where students switch roles as teachers and learners to stimulate intellectual development and boost their self-esteem. Tutoring services are offered to GCC students free of charge; schedules are available in the ACES Center.

Computer-aided and multimedia instruction options are available to help students improve their academic skills, supplement their traditional study programs, and enrich their educational development.

ACCESSIBILITY SERVICES

The mission of the Office of Accessibility is to provide equitable access to an education and campus life to students of all abilities who attend GCC. This includes coordinating support services and providing reasonable accommodations within the classroom and on campus. Students are encouraged to reach out to the Director of Accessibility Services to request accommodations, coordinate services, and advocate for their needs.

TRIO STUDENT SUPPORT SERVICES

The TRIO Student Support Services (SSS) program is a federally funded TRIO program that offers academic support services and individualized resources to 160 eligible participants each year. Students who apply to the SSS program and are eligible may be entitled to the following academic services at no cost:

- Supplemental academic advising
- Career exploration & portfolio development
- Cultural activities
- Professional tutoring
- Supplemental grant aid
- Campus visits to transfer institutions
- College survival workshops
- CAR103 Career and Life Skills course (2 credits)
- SSS advisory board membership

To qualify for the SSS program at GCC, students must declare the following status: first generation student (neither parent has received a four-year college degree; and/or meet specified income guidelines (see a staff member for income guidelines); and/or be an individual with a documented disability, such as a learning, visual, hearing, psychological, mobility, or systemic disability that limits one's ability to participate in college.

Contact the SSS staff at 307-1237 for further details and to obtain a program application.

SITUATIONAL INTERVENTION

Students occasionally experience situations where speaking with a staff member in a confidential setting may be helpful. As issues involving personal concerns, academic difficulties, social problems, vocational indecision, or other matters arise, students are encouraged to seek assistance from professional staff in the Student Services Department. Referral assistance is also provided to various community agencies for in- depth, ongoing personal counseling.

CAREER CENTER

The Career Center assists students with their effort to clarify employment goals and to find employment. GCC has a sincere desire to provide students with productive career campaigns and successful job placements; however, job placement cannot be guaranteed. The final responsibility for initiating a job search and acquiring a job remains with the student.

The Career Center, with staff assistance readily available, is a resource that enables students to gain a better understanding of various careers/occupations. Aptitude, academic, and interest inventory testing can be arranged by request and need.

Computerized career assessment tools are frequently utilized to assist students in resolving career selection issues.

INSTRUCTIONAL TECHNOLOGY

Academics works in conjunction with the Information Technology department to deliver instructional technology solutions to help best deliver course content. These solutions include a learning management software platform along with platform plug-ins, distance learning through web conferencing, cloud hosted video solutions, classroom technology, and student account and identity management.

STUDENT CONDUCT

Enrollment in Gogebic Community College carries with it obligations of conduct. The responsibility for maintaining good conduct rests upon each individual student, and it is expected that students will perform in a manner that is a credit to themselves and to the college. Students are responsible for familiarizing themselves with the rules and regulations of the college and observing the standards of conduct set by the college.

Whenever a student acts in such a manner that gives college officials reasonable cause to believe that the student presents a danger to himself, to others, or to college property, or if a student's activities adversely affect any legitimate college interest, that student shall be liable to disciplinary action and possible suspension or dismissal from college.

The college expects that each student will abide by the regulations governing student conduct. General policies and standards relating to conduct which all students are expected to respect and adhere to are covered in more detail in the Student Handbook. While the handbook and this catalog state some of the general regulations, such statements cannot be all inclusive, and individual student conduct violations may need to be determined on a case-by-case basis within the scope of the conduct policy.

STUDENT GRIEVANCE POLICY

All students at GCC have the right to due process for resolution of complaints and grievances.

A grievance is a written complaint by a student, alleging improper, unfair, arbitrary, or discriminatory action involving the interpretation, application, or alleged violation of College policies and procedures. A grievance action may be initiated by a student against another student, an instructor, an administrator, or a member of the classified staff.

It is the policy (Series No. 111) of Gogebic Community College not to discriminate on the basis of disability. Section 504 prohibits discrimination on the basis of disability in any program or activity receiving Federal financial assistance. Any person who believes they have been subjected to discrimination on the basis of disability may file a grievance under this procedure. It is against the law for GCC to retaliate against anyone who files a grievance or cooperates in the investigation of a grievance.

Title IX related incidents, which include behaviors that potentially constitute sexual or gender-based discrimination, harassment or misconduct, may use the Grievance Reporting Form to report the incident. Please review the Title IX Sexual Misconduct Policy grievance procedures for the applicable process. This policy and procedure can be found by following this link:

<https://www.gogebic.edu/studentlife/studentsupport/grievances.html>

SEXUAL HARASSMENT POLICY

Gogebic Community College is committed to providing a safe and non-discriminatory learning, living, and working environments for all members of the campus community.

In compliance with Title IX of the Education Amendments of 1972, GCC does not unlawfully discriminate on the basis of sex in any of its educational programs or activities that it operates, including against any employee, applicant for employment, student, or applicant for admission. Members of the GCC community have the right to be free from all forms of sexual harassment and misconduct, and all members of the GCC community are expected to conduct themselves in accordance with the College's Title IX Sexual Harassment Policy.

To ensure compliance with Title IX and other federal and state civil rights laws, the College has designated a Title IX Coordinator to monitor compliance with Title IX and ensure that reports of sexual or gender-based harassment or misconduct are appropriately investigated and addressed by the College. Any student, faculty, or staff member who has questions or concerns about their rights under Title IX or who believes that they have been the victim of sexual or gender-based harassment or misconduct, is encouraged to contact the College's Title IX Coordinator.

Any person may report sex discrimination, including sexual harassment, via email, phone, or mail at any time or in person during normal business hours using the contact information of the Title IX Coordinator or Deputy Coordinators. Anonymous reports can also be submitted electronically at <https://reports.ethicaladvocate.com/>.

Additional information can be located at <https://www.gogebic.edu/currentstudents/titleix.html>, or contact the Title IX Coordinator/Vice President of Student Services and Athletics.

DRUG-FREE CAMPUS

Under the Drug-Free Schools and Communities Act Amendments of 1989, Gogebic Community College has adopted and implemented policies that promote a drug and alcohol-free campus. Policy information is printed and distributed annually to all members of the college community. Students should be aware that in addition to the serious health, legal, and personal problems associated with the illicit use or abuse of alcohol and other drugs, there can be College disciplinary actions as well. Sanctions for violation of the law and/or College policy can include suspension or dismissal from the College. Confidential referral assistance is available for addressing difficulties related to alcohol and other drugs. For more information, please contact the Career Counselor in the ACES Center on the Ironwood Campus, or via phone at 906-307-1209.

See the Student Handbook on the GCC website for a complete list of policies:

<https://www.gogebic.edu/currentstudents/studenthandbook.html>

STUDENT "RIGHT TO KNOW"

Under Section 103 of the Student Right to Know and Campus Security Act, colleges are required to disclose completion and graduation rates to students entering the institution. GCC collects this information. Data is collected from the group experience of new, full-time students (with no prior college enrollment) who enter during the fall semester and are pursuing a certificate or degree.

RIGHT OF REVISION

The college reserves the right to change without notice any curriculum, courses, faculty, tuition, fees, policies and rules. If courses and curriculum changes take place after students commence a program of study, the college will make efforts to implement the changes in the student's best interest.

The Family Educational Rights and Privacy Act (FERPA) (20 U.S.C., 1232 g; 34CFR Part 99) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA protects the privacy of student records by requiring prior written consent before disclosing personally identifiable information to a third party.

FERPA gives parents certain rights with respect to their children's education records. These rights transfer to the student when he or she reaches the age of 18 or attends a school beyond the high school level.

Records created and maintained by the GCC Financial Aid Office are education records and may not be disclosed without the student's consent.

FERPA affords students certain rights with respect to their education records. These rights include:

- The right to inspect and review the student's educational records within 45 days of the date the College receives a request for access.
- The right to request amendment of any portion of the student's education record that the student believes is inaccurate or misleading.
- The right to consent to disclosures of personally identifiable information contained in the student's education record, except to the extent that FERPA authorizes disclosure without consent.
- The right to request that any or all of a student's directory information not be released by Gogebic Community College.
- The right to file a complaint with the U.S. Department of Education concerning alleged failures by Gogebic Community College to comply with the requirements of FERPA.

For additional information, technical assistance, questions, concerns, or should a student wish to file a complaint with Gogebic Community College, a student may contact: Vice President of Student Services and Athletics, Room T108 (906) 307-1212.

Co-curricular activities, also called extracurricular activities, are an important part of a student's college education. There are a variety of opportunities for participation in the various activities and organizations at GCC. In the inauguration of new activities, clubs, and organizations, students present organization plans to the Vice President of Student Services and Athletics and the Student Senate for approval. A faculty advisor is selected for each organization.

STUDENT IDENTIFICATION CARD

Upon registering and paying the required fees, each new student with six (6) or more credits will receive a Student Identification Card. This card is the student's permanent I.D. and will be validated annually. The card is required of all students when checking out materials in the library. Students with six (6) or more credits may use the card to ski free at Mt. Zion Ski Hill, use the Lindquist Student and Conference Center facilities during open hours, and for admission to college activities which include athletic, recreational, and social events, concerts, and lectures.

Misuse of this card will result in its revocation. A student who loses their student I.D. card may be charged \$10 for a replacement card.

ELIGIBILITY FOR ACTIVITIES

1. A student is qualified to hold office in a student organization and to participate in an activity by meeting the following requirements:
2. The student must be enrolled as a degree-seeking student passing in all credit classes in which enrolled at the time the student list for the activity is certified.
3. The student must be in good academic standing with a minimum cumulative and prior semester grade point average of 2.00.
4. Students who participate in varsity athletics must meet the NJCAA eligibility requirements. (See the INTERCOLLEGIATE ATHLETICS and Athletic Director.)
5. All students who pay the student activity fee and comply with items 1 to 3 above are eligible for participation and office- holding in student activities.

The following student organizations and events have been recognized and sanctioned by the Student Senate, the administration, and the Board of Trustees:

THE STUDENT SENATE

This organization provides students with experience in the art of self-governance. Through active participation in the Student Senate, members learn about the responsibilities and duties they share with their fellow students. The organization brings together various extracurricular activities of the college and promotes interest of the college. It fosters understanding between the faculty and the students as well as representing the students before the faculty and administration in addressing various issues.

PHI THETA KAPPA

Gogebic Community College has instituted the Alpha Rho Chi Chapter of the Phi Theta Kappa National Honor Society. To be eligible for active membership in Phi Theta Kappa, (1) a student must have completed at least 12 hours of work in courses leading to a degree at Gogebic Community College; (2) the student's cumulative GPA must be 3.5 or better; (3) the student must adhere to the school conduct code and possess recognized qualities of good citizenship; and (4) the student must be currently enrolled.

RECREATIONAL OPPORTUNITIES

Intercollegiate and intramural sports are recognized as an integral part of the student activities program and are meant to contribute to the students' total educational experience. The Student Services division brings together the development of the sport activities program in conjunction with student need, interest, and ability.

The program of intercollegiate and intramural athletics provides students an opportunity to develop:

1. An appreciation of recreational activities.
2. The skills necessary for playing various sports.
3. Better health and physical fitness, school spirit and sportsmanship.
4. Worthy use of leisure time.
5. Social contact.

INTERCOLLEGIATE ATHLETICS

Gogebic Community College a member of the National Junior College Athletic Association with their Samson teams competing independently within the NJCAA's Region XIII. The intercollegiate athletic program provides intercollegiate competition for students in women's and men's basketball, women's volleyball and Esports. The college competes with other two-year colleges from Michigan's Upper Peninsula, Northern Wisconsin, Northern Minnesota, North Dakota and Eastern Montana well as several four-year colleges and universities within those states. Esports is governed by the National Junior College Athletic Association Esports and competes with other programs, at the two-year and four-year levels, across the country and parts of Canada.

An athlete is allowed two years of competition in community college. If graduated at the end of two years, an athlete may transfer to most colleges and universities and be eligible immediately. Competition in a community college does not jeopardize future eligibility in a four-year college or university. Students who wish to compete in intercollegiate athletics should contact the Athletic Director.

MILITARY AND VETERAN SERVICES

At GCC we are committed to serving those that served. Military and Veteran Services at GCC provides guidance and mentorship for veterans, those still serving and their family members. Services include:

- Dedicated Student Success Advising
- Academic support
- Career services
- Counseling and accessibility services
- GI benefits and in-state tuition
- Student Veterans of America (SVA)

Financial aid at a glance

Office of Student Financial Aid

Room T-104

Phone (906) 307-1206

Email: fao@gogebic.edu

Federal School Code: 002264

The Financial Aid Office works to provide financial assistance to qualified students through federal and state grant programs, federal loans, campus employment, and scholarships.

Federal student aid comprises of grants and loans that are offered through the US Department of Education and is available to students enrolled in an eligible program. School expenses, such as tuition and fees, room and board, books and supplies, and transportation are taken into consideration by financial aid. Most federal aid is need based. The most common types of aid are grants, loans, and federal work-study. For additional information, see www.gogebic.edu/financialaid.

Gogebic Community College participates in a variety of federal aid programs which includes the following:

- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant
- Federal Work-Study Program
- William D. Ford Federal Direct Loan (Direct Loan) Program
- Veterans Educational Benefits

Gogebic Community College also participates in several MI State grant programs:

- Children of Veterans Tuition Grant
- Fostering Futures Scholarship
- Michigan Achievement Award
- Michigan Competitive Scholarship
- Police Officer's and Fire Fighters Survivor Tuition Grant
- Michigan Reconnect
- Tuition Incentive Program

Additional information on state scholarships and grants is located at

<https://www.michigan.gov/mistudentaid/students-families>

Gogebic Community College has several scholarship opportunities provided through the Gogebic Community College Foundation and other local providers. Scholarships may be need-based, merit and/or based on areas of interest. Review and apply for scholarships at <https://gogebic.academicworks.com>

Financial Aid Eligibility Requirements

Eligibility for most federal student aid programs is based on financial need. The information a student provides on their Free Application for Federal Student Aid (FAFSA) determines their eligibility for federal student aid. Basic eligibility requirements indicate that students must:

- Demonstrate financial need (for most programs)
- Be a U.S. citizen or eligible noncitizen (for most programs)
- Have a valid Social Security number (SSN) with the exception of students from the Republic of the Marshall Islands, Federal States of Micronesia or the Republic of Palau.
- Be enrolled and working toward a degree or certificate in an eligible program.
- Maintain Satisfactory Academic Progress.
- Sign the certification statement on the Free Application for Federal Student Aid (FAFSA) form stating that:
 1. You are not in default on a federal student loan and
 2. You do not owe money on a federal student grant and

3. You will use the federal student aid only for educational purposes.
- Show you're qualified to obtain a college or career school education by having a high school diploma or recognized equivalent such as a General Educational Development (GED) certificate.
- Completing a high school education in a homeschool setting, approved under state law (or-if state law does not require a homeschooled student to obtain a completion credential-completing a high school education in a homeschool setting that qualifies as an exemption from compulsory attendance requirements under state law) or
- Be enrolled at least half-time (6 credit hours) in an eligible program for Direct Loan Program Funds.

Application Procedures

Apply for Financial Aid by completing the Free Application for Federal Student Aid (FAFSA) directly with the Department of Education (DoE).

1. Gather all the documents needed to apply. This includes your Social Security number, your parent's Social Security number, your driver's license number if you have one, federal income tax returns, W-2 forms, records of your untaxed income and information on cash, savings and checking balances, investments, etc. The full list is located at <https://studentaid.gov/apply-for-aid/fafsa/filling-out> . You can find your tax transcript through the IRS's Get Transcript service at irs.gov/transcript.
2. Complete the FAFSA before June 30, 2024. There are NO exceptions to the deadline date. Apply as soon as possible to meet school and state aid deadlines. The fastest and easiest way to apply is through <https://studentaid.ed.gov/sa/fafsa> If you used the Internal Revenue Service data Retrieval Tool (IRS DRT) when filling out your FAFSA form, you may not have to verify that information.
3. Check your data. The Department of Education will send you your Student Aid Report (SAR), which will contain your Expected Family Contribution (EFC). This number is used to determine your federal student aid. Information on how and when you will get your SAR is online at <https://studentaid.gov/apply-for-aid/fafsa/review-and-correct/sar-student-aid-report>. Your SAR might also contain a note indicating that you've been selected for verification. Find out what to do if you've been selected for verification. If you have been selected for verification, we need more information before we can determine your financial aid eligibility. Verification is the process your school used to confirm that the data reported on your FAFSA form is accurate. If you're selected for verification, your school will request additional documentation that supports the information you reported.
4. Check your "To Do List." on My GCC. If we need more information from you, we will contact you by mail or email and add items to your "To Do List." Be sure to keep your address current with the Admissions Office and check your "To Do List" in My GCC often for any updates. Students can access financial aid information, and checklists for financial aid processes via My GCC. Failure to address holds and "to do" items by published deadlines can result in delays or ineligibility for aid.
5. Watch for an Award Offer. Award Offers are sent after a review of your SAR outlining your financial aid eligibility. Award Offers are sent when a student's financial aid file is complete. If you were selected for the verification process and didn't submit all required documentation, your financial aid file is incomplete and therefore, we cannot determine your eligibility.

Census Date and Financial Aid Awards

The census date is set by the college and typically marks the end of the add/drop period. On this day, the college takes a “snapshot” of all students’ enrollment which becomes the “official enrollment” that is used for both reporting and financial aid eligibility.

Generally, the classes you are enrolled in and attending as of census date will determine the amount of financial aid grant money you will receive. (Loans are not affected by census date.) If you are enrolled and attending less than full-time as of census date, your aid will likely be less than what was reported to you in your initial aid offer or email. This is because students are initially awarded based on the expectation of full-time enrollment. The aid is then adjusted on census date to their actual enrollment.

If you increase or decrease your enrollment level through the enrollment census date, your financial aid will be adjusted, as appropriate, to ensure that it is the appropriate amount given for your enrollment level.

If you decrease your enrollment after the first scheduled class but on or before the census date, your aid will be decreased as well to match your enrollment. However, you may owe tuition and fee charges to the school because of the refund policy. Students in this situation will be responsible for any balance owed the Business Office.

Additionally, since Pell eligibility begins on the first day of classes and is calculated day to day, a student who drops all their classes during the add/drop period (and before the census date) will be considered a Return to Title IV (R2T4)

If you decrease your enrollment level after the census date, your grant aid will not be reduced. This means, for example, that a student who is enrolled in 14 credits as of the census date, and who later drops a 4-credit class, will not have his/her aid reduced to the 3/4-time level. Rather, the aid will remain at the full-time level and for Satisfactory Academic Progress purposes, the student will be held accountable for completing a full-time course load. If a student has loans, however, and drops below 6 hours, any future disbursements will be canceled per federal regulations.

Bookstore Charges

Students with anticipated credit balances on their student account, based on anticipated financial aid (Pell Grant), will be allowed to charge books in advance of receiving financial aid. Items charged in the bookstore are paid when a student’s aid is disbursed. If for any reason, the student is not awarded enough Financial Aid to cover the amount of the bookstore charges, the student is fully responsible for repayment of any charges incurred.

Disbursements

The Financial Aid Office will credit funds to student accounts according to a disbursement schedule set up each semester. Check the Financial Aid website at www.gogebic.edu/fadates for the dates on which funds will be applied to student accounts.

As a reminder, the Business Office has up to 14 business days to issue student refunds.

Withdrawals and Return of the Title IV (Financial Aid) Funds

Gogebic Community College is required only to determine the amount of Title IV funds a student has earned as of the date the student ceases enrollment. The amount of Title IV funds earned by the student is based on the amount of time the student was actually enrolled; it has no relationship to the student’s incurred institutional charges.

Federal Regulations define that a student is considered to have withdrawn when they do not complete all scheduled days required to complete the semester. Students enrolled in courses that do not span the entire

semester are considered to have withdrawn if at the time of a withdrawn course(s) the student is not actively attending other courses. Students enrolled in courses that do not span the entire semester are not considered to have withdrawn if at the time of withdrawing from the course(s) a written confirmation of intent to attend a future course(s) within the current semester is provided. The written confirmation of intent must be provided at the time of withdrawal.

Title IV funds are awarded to a student under the assumption that the student will attend school for the entire period for which the assistance is awarded. When a student withdraws, the student may no longer be eligible for the full amount of Title IV funds that the student was originally scheduled to receive.

If a recipient of Title IV grant or loan funds withdraws from a school after beginning attendance, the amount of Title IV grant or loan assistance earned by the student must be determined. If the amount disbursed to the student is greater than the amount the student earned, unearned funds must be returned.

If the amount disbursed to the student is less than the amount the student earned, and for which the student is otherwise eligible, the student is eligible to receive a post-withdrawal disbursement of the earned aid that was not received.

Please feel free to contact the Office of Student Financial Aid if you have any questions concerning this provision.

Ineligible Programs and Courses

Financial aid will not pay for classes not in your program of study. Also, financial aid will not pay for the following programs: Certified Nursing Assistant, Cosmetology Instructor, Nail Technician, Emergency Medical Services Specialized Study, Early College and Ski Lift Maintenance/Operating Training.

Refund of Surplus Financial Aid Funds

The Finance Department will issue refunds by direct deposit (ACH) or by check to students based on credit balances within 14 days after their financial aid is credited to their student account. The Business Office will deduct tuition, fees and book charges from the student's account before refunding the remaining balance. Please check the Financial Aid website at www.gogebic.edu/fadates for the dates on which the Business Office generates student refunds.

Academic Standards for Financial Aid Recipients (SAP)

Federal and state regulations require that students make satisfactory and measurable academic progress in their academic work in order to continue to be eligible for federal and state financial aid.

Satisfactory academic progress is measured in three distinct ways:

1. **Course Completion Rate-** Students must successfully complete at least 67 percent of all cumulative credit hours attempted at GCC. A successful completion is defined as earning a grade of D-or better. Withdrawals (official or unofficial), incompletes, repeated classes and remedial courses are included in hours attempted. Students who do not comply with the requirement will be put on a one-semester warning but will still receive financial aid for that semester. If 67 percent completion rate is not achieved by the end of that semester, they will be restricted and will no longer be eligible for financial aid until good standing is restored.
2. **Cumulative Grade Point Average (GPA)** Students must have a 2.00 cumulative GPA to graduate from the college, therefore, must maintain a 2.00 cumulative GPA. The GPA calculation for SAP includes developmental courses that are not included in the college's GPA calculation. Students who do not comply with the requirements will be put on a one-semester warning but will still receive financial aid for that semester. If a 2.00 GPA is not achieved by the end of that semester, they will be restricted and will no longer be eligible for financial aid until good standing is restored.

3. **Program Time Frame to Complete Degree-** Students may pursue completion of a degree program on a full- or part-time basis, but the federal government requires that students make progress toward degree completion in a timely fashion. Progress toward completing a degree is measured not by calendar time, but by the total number of attempted hours allowed to complete a degree. Students must be able to complete their program of study within 150 percent of the hours required for the program. Once a student's attempted hours reach 100 percent of the hours required for the program, the student will be placed on warning status. When the student's attempted hours reach 110 percent, the student is placed on restricted status and is not eligible for financial aid at the college until it is confirmed that the program can be completed within 150 percent of the hours required. Students who cannot complete their program of study within 150 percent of the hours required are placed on restricted status and are no longer eligible to receive federal or state aid at the college.

Note: A student with a program time frame calculation that moves from below 100 percent to 110 percent and greater within the same semester will be placed directly on restricted status and will not have a warning period. Included in the count of attempted hours is all attempted course work taken at GCC transfer credit accepted from other institutions and any Advanced Placement or CLEP credit.

All withdrawal grades, failing grades and incompletes, as well as repeated courses and remedial course work, are considered hours attempted and are included in the maximum time frame.

Satisfactory, Warning and Restriction Status

A student will be considered in good satisfactory status if the student meets the requirements as described above. A student will be placed on warning status for failing to meet GPA and/or course completion rate requirements and/or program time frame falls between 100 percent and 110 percent as described above but will be allowed to receive financial aid. A student will be placed on restricted status for failing to meet requirements 1, 2 or 3 as described above and will not be eligible to receive financial aid.

Appeal Process

Any student placed on Satisfactory Academic Progress (SAP) restricted status has the right to appeal. All students requesting a SAP Appeal should complete the following steps:

1. Provide a detailed statement explaining the circumstances resulting in your failure to meet Satisfactory Academic Progress standards (including third party documents as applicable).

All appeals must be complete and provide detailed information about extenuating circumstances. Extenuating circumstances include: personal illness/accident, serious illness or death within the immediate family, auto accident or other situation beyond the reasonable control of the student.

- Third-party documentation is required when applicable with each appeal. Documentation may include, but is not limited to, copies of medical records, accident reports and/or letters from an Academic Success Advisor, work supervisor or other counselor. Appeals for additional degrees will be considered on a case-by- case basis.
 - Appeals must be submitted in the term for which the student is seeking financial aid. Appeal forms will not be accepted unless all documentation is included with the form.
 - Appeals must include a statement explaining the reason for not meeting the SAP standards and what changes have been made to ensure future success.
 - All appeal decisions are final.
2. Meet with a Student Success Advisor and complete a SAP Academic Planning Form. Students with approved appeals will be placed on a probation status for one term. At the end of the probation period, students who meet the terms of the probation will remain eligible for aid for the subsequent semester. Students who do not meet the terms of their probation are returned to restricted status.

Verification

Verification is used to confirm that the data reported on your FAFSA form is accurate. If you're selected for verification, we will request additional documentation that supports the information you reported. If a student's application is selected for verification, and the student does not submit the required documentation requested by the school, the student is not eligible to receive federal student aid. The student also might not receive aid from other non-federal sources. Students should submit all requested documentation by deadlines published by the Office of Student Financial Aid. Any discrepancies found between information provided on the FAFSA and the data provided on verification documents will have to be resolved. The Office of Student Financial Aid will make necessary corrections to your FAFSA and, if necessary, adjust your financial aid awards. Any discrepancies found between the information provided on the FAFSA and the data provided on verification documents will have to be resolved. The Office of Student Financial Aid will make necessary corrections to your FAFSA and, if necessary, adjust your financial aid awards.

Verification Items may include:

- Family size
- Certain untaxed income and benefits
- High school completion status
- Identity/statement of educational purpose
- Certain Federal Income Tax information (you may find your tax transcripts through the IRS's get transcript service at www.irs.gov/individuals/get-transcript)

Applicants are strongly encouraged to utilize the FUTURE Act Direct Data Exchange (FA-DDX) during the application process. This tool allows tax information to be electronically transferred from the IRS website onto the FAFSA application. If the FA-DDX is not utilized, and federal tax returns were required to be filed, a copy of a Federal Tax Transcript, along with parent's transcripts for dependent students, may be required.

Repeated Course Policy for Financial Aid

The Financial Aid Office is required to monitor and adjust a student's enrollment level for Title IV aid if, or when, they repeat coursework for credit that they have already earned.

- A student may receive aid when repeating a course for the first time.
- A student may receive aid when repeating a course that was previously failed, regardless of the number of times the course was attempted and failed.
- A student may receive aid to repeat a previously passed course one additional time. For this purpose, a passing grade is defined as D- or better.
- If a student retakes a course that is not aid eligible, the credit hours will be excluded from the total enrollment for the semester.
- Students will receive an e-mail notification from our office if they are enrolled in a course that would need to be excluded from their eligible enrollment.

This rule applies whether or not a student received federal financial aid in earlier enrollments of the course.

Financial Aid Online

For news, updates, and additional information about applying, receiving, and maintaining your financial aid awards, please visit the Financial Aid Office website at www.gogebic.edu/financialaid. Students can access financial aid status information via My GCC.

COST OF ATTENDANCE

(Subject to change by action of the GCC Board of Trustees)

The Board of Trustees establishes tuition rates. Students will pay the rate as established by the Board of Trustees. See *Board Policy Series No. 411*.

*Some occupational programs have a differential tuition charge per credit hour in addition to the regular per credit tuition rate.

Courses offered as CED (continuing education) and some workshops are offered on a cost plus basis as determined by the administration and available at the time of registration. Students will pay the established rates for these offerings.

FEES

(Subject to change by action of the GCC Board of Trustees)

Student Services and access fee - Students are assessed a \$21 fee per credit as a student service and access fee. This fee provides registration, advising and engagement activities to all students. The fee is also used to maintain, upgrade, and support technology use on and off campus.

Course and Laboratory Fees - A schedule of course and lab fees is posted on the GCC website.

Contact Hour Charge – An added tuition charge is assessed for any course which has instructional contact hours greater than the credit hour value of a course. The fee for excess contact hours is currently set at the in-district tuition rate, but is subject to change as tuition rates change. This rate is set the same for all students regardless of residency status. The maximum number of contact hours a student may be charged each semester is set at three, limiting the current overall contact hour charge.

Example 1. MTH 110 College Algebra is a four credit course, which typically meets four days a week for one hour of instruction each day. There are four hours of instructor contact per week. In this course, the credit value of the course (4) is equal to the weekly hours of instruction (4). Since the credits equal the contacts, there is no additional contact hour charge for this course.

Example 2. BIO 101 Principles of Biology I is a four credit course which meets each week for three hours of lecture and three hours of lab, for a total of six instructional contact hours per week. In this course, the credit value of the course (4) is less than the weekly hours of instruction (6) by two (2) hours. There is a charge added to the student’s bill for these two extra contact hours.

Transcript Fee - Students may obtain a transcript of their academic record at GCC either from the college’s website through Parchment or by completing a transcript request form in the Vice President of Student Services and Athletics office. Both methods require a \$5 fee per copy.

Other – Special fees exist for directed studies, independent studies, credit by examination, and other similar considerations.

- Special charges may be assessed for untimely payment of any charges at GCC. Please consult the Business Office for details.

Tuition Refund Policy

A student who drops from a class on or before the fifth business day after the start of classes is entitled to a 100% refund of the tuition and fees. In the event a course is cancelled, all tuition and fees are refunded.

A student who drops from a class after the close of the fifth business day shall receive no refund. Refunds will not be issued to students based on non-attendance, absenteeism, or disciplinary reasons.

Tuition Refund Appeal

Students who withdraw from class after the official drop period due to mitigating circumstances may submit an appeal requesting a refund equivalent to the amount of tuition and fees paid in connection with the class(es) by completing the Tuition Refund Appeal. If the student is receiving financial assistance (sponsored billing, financial aid, veteran/military benefits), a tuition refund may not be issued due to program requirements.

Requests for a refund must be submitted using the Tuition Refund Appeal no later than the last day of the semester of the class involved. An appointed committee will review appeals within ten business days. After a decision has been reached, the student will be notified using the email provided on their Tuition Refund Appeal.

If a student's Tuition Refund Appeal is granted and the student is a federal financial aid recipient, their financial aid may be reduced or removed and could result in a Return to Title IV (R2T4). This includes any financial aid overages that have been received and/or bookstore charges.

Submitting a Tuition Refund Appeal does not relieve a student from their current obligation to Gogebic Community College. A student is responsible for all charges assessed on their student account pending a decision. Any outstanding charges on the student's account after the Tuition Refund Appeal has been processed is the student's responsibility.

<p>Occupational Certificate</p>	<ul style="list-style-type: none"> • Commercial Driving License Class A • Corrections Officer Program • Entrepreneurship • Medical Office Professional 	<ul style="list-style-type: none"> • Occupational Program. • 16-30 credits.
<p>Certificate</p>	<ul style="list-style-type: none"> • Accounting Specialty • Auto Technology • Building Trades • CIT Network Administration • CIT Computer Programming • Corrections Officer Program • General Business • Lab Technician • Manufacturing Technology • Medical Assistant • Medical Coding and Billing Specialist • Nursing-LPN • Welding 	<ul style="list-style-type: none"> • Occupational Program. • Minimum of 31 credits in prescribed program.
<p>Associate of Applied Science</p>	<ul style="list-style-type: none"> • CIT Computer Programming • Construction Technology • Early Childhood Education • Forestry Technology • Medical Coding and Billing Specialist • MRI Technologist • Nursing-ADN 	<ul style="list-style-type: none"> • Applied Occupational Program. • Minimum of 61 credits in prescribed program. • At least 30 credits of specialized occupational courses. • Some courses may be transferable.
<p>Associate of Applied Business</p>	<ul style="list-style-type: none"> • Applied Management • General Business 	
<p>Associate of Applied Technology</p>	<ul style="list-style-type: none"> • Auto Technology • Ski Area Management • Mechanical Engineering Technology 	
<p>Associate of Arts</p>	<ul style="list-style-type: none"> • Business Administration • Criminal Justice • General Education • History • Psychology • Secondary Education • Teacher Education • Social Work 	<ul style="list-style-type: none"> • Transfer Programs. • All courses are transferable. • Satisfies the Michigan Transfer Agreement. • Minimum of 63 credits in prescribed program. • Two credits may be used in physical education courses.
<p>Associate of Science</p>	<ul style="list-style-type: none"> • Biological Sciences • Engineering • General Science • Mathematics • Natural Resources • Physics 	

GENERAL EDUCATION

The General Education curriculum at GCC encourages the exploration of the skills embedded in communication, math and science, humanities and social sciences. Students should expect to participate within challenging learning communities that develop the skills necessary to thrive in an everchanging global society.

	<i>Applied Associates Requirements Minimum of 15 credits</i>	<i>Associates for Transfer Requirements Minimum of 30 credits</i>
<p>Communication The General Education Communication curriculum focuses on skill development vital to the success of GCC students. These skills include written, oral, visual, interpersonal, intercultural, and group skills. Students will learn to research and communicate technical concepts and information professionally and ethically.</p>	<ul style="list-style-type: none"> • ENG 101 or ENG 105 	<ul style="list-style-type: none"> • ENG 101 • ENG 102 or other approved communications course
<p>Science and Math The General Education Science and Mathematics curriculum focuses on the quantitative reasoning skills necessary to address the multitude of challenges presented in college and beyond. Students will explore fundamental scientific principles and concepts as they work to critically think through complex problems.</p>	<ul style="list-style-type: none"> • One course in Mathematics, MTH 100 or higher • One course in Science or Technology 	<ul style="list-style-type: none"> • One course in College Level Mathematics • Two courses in Natural Sciences from two disciplines, including one with laboratory experience
<p>Humanities The General Education Humanities curriculum focuses on students developing an understanding of what it means to be human by studying, applying, and analyzing important works and ideas in literature, philosophy, arts, and history.</p>	<ul style="list-style-type: none"> • One courses in Humanities. • Includes select ART, DRA, ENG, HST, HUM, MUS, PHI coursework. 	<ul style="list-style-type: none"> • Two courses in Humanities from two disciplines • Includes select ART, DRA, ENG, HST, HUM, MUS, PHI coursework.
<p>Social Science The Social Science general education program assists students in acquiring empirical knowledge of those aspects of human experience that are embedded in psychology, sociology, political science, economics, geography and history. Students will develop an understanding of the structures and processes of social institutions and individual behavior within cultures.</p>	<ul style="list-style-type: none"> • One courses in Social Sciences • Includes select CJC, ECO, GEG, HST, PLS, PSY, SOC coursework 	<ul style="list-style-type: none"> • Two courses in Social Sciences from two disciplines • Includes select ECO, GEG, HST, PLS, PSY, SOC coursework

The General Education Humanities curriculum focuses on students developing an understanding of what it means to be human by studying, applying, and analyzing important works and ideas in literature, philosophy, arts, and history.

The following courses are approved Humanities courses for General Education.

ART

ART 220 - Art Appreciation

DRAMA

DRA 101 - Introduction to Theater

DRA 102 - Introduction to the Art of the Movie

DRA 202 - Film Appreciation

HUMANITIES

HST 229 – African American History

HUM 201 – Introduction to the Humanities

HUM 250 – Humanities Special Topics

LITERATURE

ENG 201 - English Lit. (Beginnings to 18th Century)

ENG 202 - English Lit. (18th, 19th and 20th Centuries)

ENG 211 - American Literature (1600-1860)

ENG 212 - American Literature (1860 to Present)

ENG 221 - Introduction to Literature

ENG 222 - Special Topics in Literature

ENG 223 - Modern Literature

ENG 224 - Women in Literature

ENG 225 - Mythology

ENG 226 - Contemporary World Literature

ENG 227 - The Bible as Literature

ENG 228 - The Literature of Fantasy & Science Fiction

ENG 229 – Black Literature

ENG 230 – Literature for Children

ENG 231 – Reading Short Fiction

ENG 240 - Creative Writing

ENG 244 – Creative Writing: Fiction

ENG 245 – Creative Nonfiction

ENG 246 – Creative Writing: Poetry

ENG 260 – Reading American Popular Culture

MUSIC

MUS 102 - Music Appreciation

MUS 125 – Music Through the Generations

PHILOSOPHY

PHI 105 - Critical Thinking and Ethics

PHI 201 - Introduction to Philosophy

WESTERN CIVILIZATION

HST 101 – History of Western Civilization to 1750

HST 102 – History of West. Civilization 1750 to

Present

WORLD CIVILIZATION

HST 103 – History of World Civilization to 1650

HST 104 – History of World Civilization from 1450

SOCIAL SCIENCE ELECTIVES

The Social Science general education program assists students in acquiring empirical knowledge of those aspects of human experience that are embedded in psychology, sociology, political science, economics, geography, and history. Students will develop an understanding of the structures and processes of social institutions and individual behavior within cultures.

The following courses are approved Social Science courses for General Education.

ECONOMICS

ECO 101 – American Economy

ECO 201 – Macroeconomics

ECO 202 – Microeconomics

EDUCATION

EDU 201 – Introduction to Education

GEOGRAPHY

GEG 101 – Introduction to Geography

GEG 111 – World Regional Geography

HISTORY

HST 150 – History of the Gogebic Range

HST 160 – Pacific Century

HST 170 – Americas

HST 201 – United States History to 1877

HST 202 – United States History from 1865

HST 226 – Native American History

HST 229 – African American History

POLITICAL SCIENCE

PLS 101 – Introduction to American Government

PLS 102 – State and Local Government

PSYCHOLOGY

PSY 101 – General Psychology

PSY 111 – Honors General Psychology

PSY 202 – Child Development and Psychology

PSY 204 – Social Psychology

PSY 210 – Lifespan Development

PSY 225 – Psychology of Personality

PSY 231 – Adolescent Development and Learning

PSY 295 – Abnormal Psychology

SOCIOLOGY

SOC 101 – Introduction to Sociology

SOC 102 – Social Problems

SOC 112 – Honors Social Problems

SOC 201 – Marriage and Family Life

The following courses are designated as Social Science courses at this college and can be used to meet requirements of specific programs. They are, however, not recommended as general transfer electives:

CRIMINAL JUSTICE - CJC 101, 102, 103, 104, 105, 110, 210, 211, 215, 225, 235

EARLY CHILDHOOD EDUCATION - ECE 100, 110, 111, 195, 210, 220, 230, 240, 290, 295

The following courses are included within the transfer guarantee guidelines established in the Gogebic Community College Quality Assurance Policy. All students in transfer programs should carefully check the requirements of the school to which they will be transferring and work closely with GCC's Transfer Coordinator.

ACC 201 Principles of Accounting	ENG 212 American Lit (1860 – Present)	MTH 151 Calculus and Analytic Geometry II
ACC 202 Principles of Accounting	ENG 221 Introduction to Literature	MTH 152 Calculus III
ANT 103 Introduction to Anthropology	ENG 222 Readings in Literature	MTH 210 Intro to Linear Algebra
ANT 105 Cultural Anthropology	ENG 223 Modern Literature	MUS 102 Music Appreciation
ART 220 Art Appreciation	ENG 224 Women in Literature	MTH 211 Introduction to Statistics
ART 221 Art History	ENG 225 Mythology	MTH 220 Intro to Ordinary Differential Equations w/Linear Alg.
AST 101 Introductory Astronomy	ENG 226 Contemporary World Literature	MUS 125 Music Through the Generations
BIO 101 Principles of Biology	ENG 227 The Bible as Literature	PEH Activity Classes OK up to 2 credit max
BIO 102 Biological Diversity	ENG 228 The Literature of Fantasy and Science Fiction	PED Activity Classes OK up to 2 credit max
BIO 105 Anatomy and Physiology*	ENG 230 Literature of Children	PED 203 American Red Cross Emergency Response
BIO 110 Principles of Ecology	ENG 240 Creative Writing	PHI 105 Critical Thinking and Ethics
BIO 122 Botany	ENG 244 Creative Writing: Fiction	PHI 201 Introduction to Philosophy
BIO 150 Field Biology	ENG 245 Creative Nonfiction	PHY 101 Physical Science
BIO 215 Introduction to Microbiology	ENG 246 Creative Writing: Poetry	PHY 105 Introductory Astronomy
BIO 250 Human Anatomy	ENG 260 Reading Amer Popular Lit.	PHY 107 Introduction to Meteorology
BIO 251 Human Physiology	ENG 270 Document Design for Print and Web*	PHY 201 Elements of Physics I
BUS 204 Business Law	ENV 101 Human Ecology*	PHY 202 Elements of Physics II
BUS 210 Marketing	GEG 101 Introduction to Geography	PHY 251 General Physics I
BUS 245 Introduction to Management	GEG 111 World Regional Geography	PHY 252 General Physics II
CHM 101 General, Organic, and Biochemistry I	GER 101 Elementary German I	PHY 261 Statics
CHM 102 General, Organic, and Biochemistry II	GER 102 Elementary German II	PHY 262 Dynamics
CHM 151 General/Inorganic Chem I	GLG 101 Fund. of Earth Science	PLS 101 Intro to American Government
CHM 152 General/Inorganic Chem II	GLG 102 Physical Geology	PLS 102 State and Local Government
CHM 201 Organic Chemistry I	HST 101 History of West. Civilization I	PSY 101 General Psychology
CHM 202 Organic Chemistry II	HST 102 History of West. Civilization II	PSY 202 Child Development and Psychology
DRA 101 Introduction to Theater	HST 103 History of World Civilization I	PSY 204 Social Psychology
DRA 102 Intro to Art of the Movie	HST 104 History of World Civilization II	PSY 210 Lifespan Psychology
DRA 202 Film Appreciation	HST 170 Americas	PSY 225 Psychology of Personality
DRA 230 History of the Theater	HST 201 United States History to 1865	PSY 231 Adolescent Development & Learning
ECO 101 The American Economy	HST 202 US History 1865 to Present	PSY 295 Abnormal Psychology
ECO 201 Macroeconomics	HST 226 Native American History	SCI 110 Integrated Science*
ECO 202 Microeconomics	HUM 201 Introduction to the Humanities	SOC 101 Introduction to Sociology
EDU 201 Intro to Education	MTH 108 Practical Mathematics*	SOC 102 Social Problems
EGR 101 Engineering Graphics	MTH 110 College Algebra	SOC 201 Marriage and Family Life
EGR 102 Descriptive Geometry	MTH 112 Trigonometry	SPE 101 Public Speaking
ENG 101 English Composition I	MTH 121 Principles of Elem Math I	SPE 105 Interpersonal Communications
ENG 102 English Composition II	MTH 122 Principles of Elem Math II	
ENG 201 English Literature (Beginnings to 18th Century)	MTH 150 Calculus and Analytic Geometry I	
ENG 202 English Literature (18th, 19th, 20th Century)		
ENG 211 American Lit (1600-1860)		

*Please discuss the transferability of this course with your advisor.

Allied Health

Degrees	Programs
Associate of Applied Science	MRI Technologist Nursing
Certificate	Medical Assisting
CED	Certified Nursing Assistant (CNA) Emergency Medical Technician Advanced Emergency Medical Technician

Associate Degree Nursing (ADN) Program Information

Overview

The Associate Degree Nursing Program prepares students to provide care, education, support and guidance regarding health conditions to patients, their families and the public. Registered Nurses provide care in a variety of settings including acute care, long term care, and community health. The program is approved by the Michigan State Board of Nursing. *Graduates are eligible to apply to the National Council Licensure Examination (NCLEX-RN) for licensing as a registered nurse.*

Academic Policies

Prior to acceptance into the nursing program students must:

- Complete Accuplacer re-evaluation of English and Math for any assessment scores greater than three years old OR for college coursework that is greater than 5 years old.
- Place into appropriate math course. Demonstrate mastery of relevant mathematical learning outcomes.
- Complete the following coursework with a cumulative GPA of 3.0 or higher:
 - English Composition (ENG 101) or Technical English (ENG 105)
 - General Psychology (PSY 101)
 - Human Anatomy (BIO 250)
- Complete of COL 102: College and Career Success
- BIO 250 and BIO 251 must be completed within the last 7 years and must be complete with a minimum of a B- or higher.
- Hold a current certification as a Certified Nursing Assistant in any state. Successful completion of a CNA class will be accepted for students with a current CMA Certification or EMT License.

Additional information

- Students can repeat a pre-requisite class a maximum of 2 times in 5 years. The higher of the two grades will be considered in the cumulative GPA.
- Students must earn a grade of 80% or higher in nursing coursework to remain in the program.
- Students will complete a comprehensive nursing math assessment in August. Students who do not pass the assessment with an 80% or higher must complete a Math Bootcamp class in August before starting Nursing coursework.
- Prior to graduation students must complete at least one Humanities Course and one Communications Course with a “C” or higher.
- Students must complete the nursing portion of the program in an appropriate time frame. Students withdrawing or failing withdrawal must follow the readmission policy found in the student handbook.
- Students must pass an annual criminal background check, drug screen, and meet clinical agency immunization requirements.

Registered Nurses provide direct care for individuals and families. This care requires the nurse to meet specific technical standards in order to perform nursing functions. To be considered for admission to the program or continue in the program, students must be able to meet the Nursing Technical Standards available on the GCC Nursing Website. Additionally, students are required to adhere to the policies and procedures found in the Allied Health Handbook, as well as the Gogebic Community College Handbook. ***Students should contact the Allied Health Office or visit the program website at <http://www.gogebic.edu> for the most current requirements.***

Nursing Associate of Applied Science

LPN CIP Code 513901

ADN CIP Code 513801

Overview

Start working as a Registered Nurse in as little as 2 ½ years! GCC Nursing students graduate with the skills necessary to confidently care for acute and chronically ill patients in a wide variety of hospital and community settings.

YEAR ONE	First Semester Fall Courses			
	Human Physiology	BIO 251	4	
	Fundamental Concepts of Nursing Practice Across the Lifespan	NUR 140	7	
	Clinical Experience of Fundamental Concepts	NUR 141	1	
	Clinical Reasoning in Current Nursing Practice	NUR 142	2	
	Dosage Calculation	NUR 143	1	
	Second Semester Spring Courses			
	Concepts of Nursing Practice in the Care of Patients with Uncomplicated Conditions	NUR 144	9	
	Clinical Experience of Nursing Practice I	NUR 145	4	
	Practical Nursing Exit Course <i>Optional</i> <i>For students who wish to complete the NCLEX-LPN Examination and receive a certificate</i>	NUR 150	3	
Total Credits		31		

Year Two or LPN to Rn Advance Standing Track

Students currently licensed as an LPN prior to acceptance into the Core Nursing Classes may enter on the Advanced Track, starting at Year Two.

YEAR TWO OR ADVANCE STANDING	Third Semester Fall Courses			
	Concepts of Nursing Practice Care of Adults with Stable/Unstable Conditions	NUR 240	5	
	Clinical Experience of Nursing Practice	NUR 241	4	
	Transition to RN <i>Advanced Standing Students only</i>	NUR 242	1	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
	Fourth Semester Spring Courses			
	Concepts of Nursing Practice Care of Patients Across Lifespan Complex Conditions	NUR 244	4	
	Clinical Experience of Complex Patients	NUR 245	4	
	Transition to Nursing Practice	NUR 246	2	
	Communications Elective	Choose from ENG 102, ENG 270, SPE 101 or SPE 105	3-4	
Total Credits		43/65		

Medical Assisting Certificate

CIP Code 510801

Overview

The Medical Assisting program is offered through a state-wide partnership with other Michigan Community Colleges in the Michigan Workforce Training and Educations Collaborative (MWTEC). Consult the CMA advisor for a detailed list of coursework offered through the consortium. Graduates of the program are eligible to take the national Registered Medical Assistant Exam.

*HEED and MEDA courses are offered online through MWTEC and Southwest Michigan College. These courses are offered through the Canvas Learning Management System.

As of the publication date of the 2023-2024 catalog the revised CMA program is pending final approval. Speak with your advisor for updates.

CERTIFICATE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Anatomy and Physiology	BIO 105	4	
	Medical Terminology	HED 105	2	
	Clinical Procedures	MEDA 210*	5	
	Second Semester Spring Courses			
	Introduction to Electronic Health Records	HEED 175*	3	
	MA Pharmacology	MEDA 211*	3	
	Diagnostic and Lab Procedures	MEDA 212*	4	
	Medical Office Administration	MEDA 220*	3	
	Insurance Claims Processing	MEDA 221*	3	
	Third Semester Summer Courses			
	Disease Overview	HEED 137*	3	
	Medical Assisting Internship	MEDA 245*	4	
Medical Assistant Seminar	MEDA 251*	1		
Total Credits			39	

EMS Paramedic Program

CIP Code 510904

The EMS Paramedic Program is currently on hiatus at GCC. Watch for updates in the coming year.

MAGNETIC RESONANCE IMAGING TECHNOLOGIST (MRI) ASSOCIATE OF APPLIED SCIENCE

CIP Code 51.0920

Overview

This program provides a thorough foundation in MRI procedures, pathophysiology, and physics. When this education is combined with a sound base of clinical practice that meets national programmatic accreditation standards, a superior graduate capable of meeting professional workforce needs results. The MRI program is designed not only to foster the skills and knowledge necessary for competent practice in MRI, but also places emphasis on professional attitudes, values and behaviors that encourage the professional growth of the individual student, thus assuring graduates of a place on the medical imaging team. The MRI program prepares students to become eligible to complete the MRI certification exam administered by the American Registry of Radiologic Technologists (ARRT).

*MRI courses are offered online through Michigan Workforce Training and Education Collaborative (MWTEC) and Mid-Michigan College.

YEAR ONE	Fall Courses			
	College and Career Success	COL 102	1	
	English Composition I	ENG 101	3	
	College Algebra	MTH 110	4	
	Human Anatomy	BIO 250	4	
	General Psychology	PSY 101		
	Spring Courses			
	Human Physiology	BIO 251	4	
	Medical Terminology	HED 105	2	
	English Composition II OR Interpersonal Communication	ENG 102 OR SPE 105	3	
	Technical Physics	PHY 121	4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
	Summer Courses			
	MRI Professional Prospectus	MRI 200*	1	

YEAR TWO	Fall Courses			
	Computer Applications in Medical Imaging	MRI 201*	3	
	MR Physics I	MRI 220*	3	
	MR Procedures and Pathophysiology I	MRI 230*	3	
	MRI Clinical Practice I	MRI 261*	3	
	Spring Courses			
	MR Physics II	MRI 222*	3	
	MR Procedures and Pathophysiology II	MRI 232*	3	
	MRI Image Analysis	MR 240*	3	
	MRI Clinical Practice II	MRI 262*	3	
	Summer Courses			
	MRI Clinical Practice III	MRI 263*	3	
	MRI 295 MRI Certification Exam Preparation	MRI 295*	3	
	Total Credits		69	

Applied Technology

Degrees	Programs
Associate of Applied Science	Construction Technology
Associate of Applied Technology	Automotive Technology Mechanical Engineering Technology Ski Area Management
Certificate	Automotive Technology Building Trades Cosmetology Electric Line Technician Manufacturing Technology Welding
Occupational Certificate	Commercial Motor Vehicle-CDL License

Automotive Technology Certificate and Associate of Applied Technology Program

CIP Code 470604

Overview

GCC Automotive Technology students have the opportunity to choose between the certificate program and the Associate of Applied Technology degree program.

The 2-year certificate program covers the theory, diagnosis, and repair of the automobile. It is designed for those students who want to gain the skills to become automotive repair technicians. It opens the door to several related employment possibilities in heavy equipment, marine, trucking, and aircraft industries with some additional training.

YEAR ONE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	Automotive Industry Fundamentals	AUT 102	3	
	Electrical/Electronic Systems I	AUT 107	5	
	Engine Performance Fundamentals	AUT 121	5	
	Second Semester Spring Courses			
	Electrical/Electronic Systems II	AUT 108	5	
	Suspension Steering & Wheel Align	AUT 231	4	
	Brakes and Braking Systems	AUT 232	4	
Total Credits			27	

YEAR TWO	Third Semester Fall Courses			
	Advanced Engine Performance	AUT 122	4	
	Manual Drive Trains and Axles	AUT 124	4	
	Heating/Air Conditioning/Electrical Systems	AUT 241	5	
	Fourth Semester Spring Courses			
	Engine Repair	AUT 101	5	
	Automatic Transmissions and Transaxles	AUT 123	5	
	Introduction to Hybrid Vehicles	AUT 244	3	
	Total Credits			53

The Associate Degree program includes all of the elements of the certificate program with the addition of general education courses. This program allows for additional employment options in automotive management and business.

ADDITIONAL REQUIREMENTS	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Mathematics	MTH 100 or higher	3-4	
	Introduction to Business	BUS 101	3	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
	Social Science Elective	Choose from select courses with the prefix CJC, GEG, PLS, PSY, SOC, HST.	3-4	
Total Credits			68-71	

Commercial Motor Vehicle Occupational Certificate

CIP Code 490205

Overview

GCC offers training in a variety of vehicles including sleeper cabs, a day cab, logging loader rail trailer, dry van trailer and both manual and automated shifting transmissions.

Both programs offer extensive classroom training, hands-on vehicle activities, and behind-the-wheel practice in preparation for commercial driver license tests. Topics covered include, but not limited to safety, Federal Motor Carrier Safety Administration (FMCSA) regulations, truck mechanical parts and components, vehicle inspection procedures, basic truck maneuvers, driving techniques, trucking industry practices and additional content.

Class A Tractor Trailer Program

OCCUPATIONAL CERTIFICATE	Classroom Basic Training	CMV 160	5	
	Non-Driving Practicum	CMV 170	4	
	Driving Class	CMV 180	7	
Total Credits			16	

Class B Straight Truck Program

The Class B Straight Truck Program is currently on hiatus at GCC. Watch for updates in the coming year.

Building Trades Certificate and Construction Technology Associates Program

Building Trades CIP Code 460201

Construction Tech CIP Code 151001

Overview

The Building Trades Certificate Program offers coursework and training designed to provide a wide variety of experience in the building construction fields. The program includes hands on experience during the construction of a residential home.

Both programs prepare students to take the 60-hour state required pre-licensure Michigan Residential Builders Exam. This exam is required for any student looking to become a licensed contractor.

CERTIFICATE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	Mathematics	MTH 106 or higher or BUS 100	3-4	
	CAD Concepts OR Intro to 2D AutoCAD	EGR 103 OR DWG 105	2-4	
	Construction Practices I	BLD 101	5	
	Construction Practices II	BLD 102	5	
	Construction Practices III	BLD 201	5	
	Complete 10-hour OSHA Safety Training		-	
	Second Semester Spring Courses			
	Plans/Specs/Codes	BLD 104	3	
	Mechanical/Electrical Installation	BLD 120	5	
	Construction Practices IV	BLD 205	5	
	Introduction to Business	BUS 101	3	
	Total Credits		37-40	

The Construction Technology Associate of Applied Science builds off the coursework and training from the Building Trades Certificate. This program also includes hands on experience during the construction of a residential home.

APPLIED ASSOCIATES	<i>Completion of Building Trades Certificate</i>		37-40	
	Third Semester Fall Courses			
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Accounting I	ACC 150	4	
	Architectural Drafting/Design	DWG 201	4	
	Business Elective	Choose from BUS 130, BUS 133, BUS 136, BUS 204, BUS 210, BUS 215.	3	
	Fourth Semester Spring Courses			
	Business Communications	BUS 203	3	
	Second course in Mathematics	MTH 106 or higher or BUS 100	3-4	
	Social Sciences Elective	Choose from select courses with the prefix CJC, GEG, PLS, PSY, SOC, HST.	3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
	Business Elective	Choose from BUS 130, BUS 133, BUS 136, BUS 204, BUS 210, BUS 215.	3	
	Total Credits		66-72	

Cosmetology Certificate

CIP Code 120401

Overview

Cosmetology is a three-semester program, combining theory with a practical internship. Many respected advanced educators visit the school to give demonstrations in their subject of expertise. Field trips are also taken to experience in-salon situations as well as trade shows and seminars.

The cosmetology program is approved by the Michigan Board of Licensing and Regulation and prepares students to take the State Licensing Board Examination. A completely equipped cosmetology laboratory and classroom is utilized by students under the direction of a licensed cosmetology instructor.

State regulations require completion of a minimum of 1,500 hours of training and at least 75% average grade in each subject before the student is eligible to take the licensing exam.

CERTIFICATE	First Semester Courses			
	College and Career Success	COL 102	1	
	Lab I	COS 101	10	
	Theory I	COS 102	6	
	Second Semester Courses			
	Lab II	COS 103	10	
	Theory II	COS 104	6	
	Third Semester Courses			
	Lab III	COS 105	10	
	Theory III	COS 106	6	
	Total Credits			49

Additional Training Programs

Manicuring

Manicuring Lab	COS 114	7	
Theory	COS 115	3	
Total Credits			10

Cosmetology Instructor Training Program

Cosmetology Instructor Lab	COS 116	7	
Cosmetology Instructor Training	COS 117	6	
Total Credits			10

Electric Line Technician Certificate

CIP Code 46.0303

Overview

Electric line technicians work for contractors, public utilities, municipal utilities, electric cooperatives, and electric transmission companies, installing poles, towers, wires, and cables. They use power equipment to dig holes for installing poles and towers, and for digging trenches to install underground cables and wire. They climb poles and towers or use truck-mounted buckets to connect wires, install transformers and perform maintenance on street light systems, electrical distribution, and high voltage transmission lines. These technicians may also build substations, install circuit breakers, switches, and other equipment required to provide electric service to residential, commercial and industrial customers.

Program Learning Outcomes

Graduates of Gogebic's Electric Line Technician program will:

- Demonstrate a thorough understanding of safety protocols and procedures related to electrical line work, ensuring compliance with industry standards and regulations to mitigate hazards and promote a culture of safety.
- Possess the technical skills necessary to install, maintain, and repair electrical distribution and transmission systems, including overhead and underground lines, transformers, and associated equipment.
- Be proficient in diagnosing and troubleshooting electrical faults and issues in distribution and transmission systems, utilizing appropriate testing equipment and methodologies to identify and resolve problems efficiently.
- Demonstrate proficiency in climbing utility poles, safely navigating heights, and utilizing rigging techniques to perform aerial work in accordance with industry best practices.
- Work effectively as part of a team, communicating clearly and coordinating efforts with coworkers to complete projects on time and to the required standards.
- Provide excellent customer service, addressing inquiries, concerns, and service requests from customers in a professional and courteous manner, while representing the company in a positive light.
- Understand and adhere to relevant regulations, codes, and standards governing electrical line work, ensuring that installations and maintenance activities meet legal and industry requirements.

Curriculum is currently under development.

Manufacturing Technology and Mechanical Engineering Technology Program

CIP Code 151306

Overview

The Manufacturing Technology Certificate is a one-year program in which students will learn basic design and manufacturing skills in order to enter the workforce. Topics include (but are not limited to) materials and lean manufacturing processes, designing in AutoCAD and SolidWorks, basic CNC programming, and quality control.

CERTIFICATE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	Introduction to 2D Auto CAD	DWG 105	4	
	Engineering Graphics	EGR 101	2	
	English Composition I OR Technical English OR Interpersonal Communications	ENG 101 OR ENG 105 OR SPE 105	3	
	Math for the Engineering Technologies	MTH 106	4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
	Second Semester Spring Courses			
	Intro to Computers & Microsoft Office	CPL 200	2	
	Industrial Drafting	DWG 102	4	
	Introduction to 3D Solid Works	DWG 106	3	
	Descriptive Geometry	EGR 102	2	
	Introduction to CNC-QC	AMD 100	3	
	Technical Physics <i>Mechanical & Thermodynamics</i>	PHY 121-T	3	
Total Credits		34-35		

Continue to an Associate of Applied Technology in Mechanical Engineering Technology

Mechanical Engineering Technologists bridge the world of the theoretical engineer and the practical approach of the skilled workforce. Mechanical Engineering Technologists are expected to apply current technologies and principles from machine and product design, production and material and manufacturing processes. Students learn skills in hands-on application labs and courses that explore the fundamentals of mechanics, mathematics, physics, materials technology, and computer-aided design.

APPLIED ASSOCIATES	<i>Completion of Manufacturing Technology Certificate</i>		34-35	
	Third Semester Fall Courses			
	Strength of Materials	DWG 200	3	
	Architectural Design	DWG 201	4	
	Tool Design	DWG 202	4	
	Intro to Automated Manufacturing Design	AMD 101	3	
	Social Science Elective	Choose from select courses with the prefix CJC, GEG, PLS, PSY, SOC, HST.	3-4	
	Fourth Semester Spring Courses			
	Advanced 3D SolidWorks	DWG 107	3	
	Machine Design	DWG 203	3	
	Geometric Dimensioning and Tolerancing	DWG 206	3	
	Industrial Seminar	IND 200	6	
	Total Credits		66-69	

Ski Area Management Associate of Applied Technology

CIP Code 310301

Overview

The Ski Area Management Program at GCC is one of the nation's most comprehensive training programs for individuals interested in pursuing a career in the snow sport industry. Technical and academic study is combined with a practical internship which is conducted at major resorts throughout Coast to Coast. Students spend their freshman year and the first eight weeks of their sophomore year completing prerequisite courses. During this period, the Mt. Zion Recreation Complex is utilized as a training laboratory. Mt. Zion is our college-owned and operated winter sport complex located on campus which is open to the public.

Co-op

The Cooperative Work Experience assignment (Co-op) is the capstone of the Ski Area Management Program. All sophomore Students participate in the five-month internship where they gain important operational experience in an actual resort environment.

YEAR ONE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	Introduction to Ski Area Management	SAM 100	3	
	Ski Area Layout	SAM 101	3	
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Ski Equipment Mechanics	SAM 104	2	
	Snowmaking Fundamentals	SAM 106	2	
	Fundamentals of Ski Instruction	PED 220	1	
	Accounting	ACC 150 OR ACC 201	4	
	Second Semester Spring Courses			
	Ski Lift Construction and Design	SAM 103	3	
	Ski Area Maps	SAM 105 <i>8 week course</i>	1	
	Slope Grooming Fundamentals	SAM 107 <i>8 week course</i>	2	
	Responding to Emergencies	PED 202	2	
	Limited Elective	Choose from PSY 101, SOC 101 or HST 104.	3	
	Limited Elective	Choose from BUS 101, BUS 130, BUS 133, BUS 210, BUS 215, BUS 230, ACC 151, ACC 202, ECO 201, ECO 202, ENG 102, ENG 270	3-4	
Limited Elective		3-4		
Total Credits		36-38		

YEAR TWO	Third Semester Fall Courses			
	Ski Area Operation/Cost Analysis	SAM 200	3	
	Risk Management and Related Issues	SAM 202	2	
	Interpersonal Communications	SPE 105	3	
	Applied Industrial Skills	SAM 205	2	
	Co-op Work Experience (2nd 8 weeks)	SAM 230	3	
	Introduction to Computers & Microsoft Office OR Microsoft Office Essentials	CPL 200 OR BUS 161	2-4	
	Fourth Semester Spring Courses			
	Co-op Work Experience	SAM 231	12	
	Total Credits		62-67	

Welding Certificate

CIP Code 480508

Overview

The Welding Certificate Program offers a new, regionally recognized state-of-the-art training facility that includes advanced welding and fabrication systems in a safe and open learning environment. Students work in hands-on classes to earn pipe and plate welding certifications, program and operate robotic welders as well as other CNC equipment while earning college credits. Training is self-paced and includes support from dedicated instructors with industry experience and AWS credentials.

CERTIFICATE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	Introduction to Welding & Industrial Safety	WLD 100	2	
	Welding Symbols and Blueprint Reading	WLD 110	2	
	Thermal Cutting and Welding Processes	WLD 120	4	
	Shielded Metal Arc Welding (SMAW)	WLD 140	3	
	Metal Fabrication and Rigging	WLD 150	3	
	Second Semester Spring Courses			
	Mathematics for the Engineering Technologies	MTH 106	4	
	Gas Metal/Flux Cored Arc Welding (GMAW)/(FCAW)	WLD 160	5	
	Metallurgy	WLD 170	2	
	Gas Tungsten Arc Welding (GTAW)	WLD 180	3	
	Weld Inspection and Testing	WLD 220	1	
	Pipe and Plate Qualification	WLD 240	2	
Total Credits		32		

Business

Degrees	Programs
Associate of Arts	Business Administration
Associate of Applied Business	Applied Management General Business
Associate of Applied Science	CIT Computer Programming Medical Coding and Billing
Certificate	Accounting Specialty General Business Medical Coding and Billing CIT Network Administration CIT Computer Programming
Occupational Certificate	Entrepreneurship Medical Office Professional

Business Administration Associate of Arts

CIP Code 520201

Overview

This Business Administration Program is designed for students who plan to pursue a baccalaureate degree. The students take their first two years at Gogebic Community College and transfer to a college or university to complete their business studies. This program aims to broadly cover general business topics and pre-requisites in preparation for transfer to a 4-year college or university.

YEAR ONE	First Semester Fall Courses			
	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	College Algebra	MTH 110	4	
	Principles of Accounting I	ACC 201	4	
	Macroeconomics	ECO 201	3	
	Second Semester Spring Courses			
	English Composition II	ENG 102	3	
	Introduction to Statistics	MTH 211	3	
	Principles of Accounting II	ACC 202	4	
	Microeconomics	ECO 202	3	
Social Science Elective	Choose from select courses with the prefix GEG, PLS, PSY, SOC, HST.	3-4		
Total Credits			31-32	

YEAR TWO	Third Semester Fall Courses			
	Business Law	BUS 204	3	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
	General Science or Lab Science <i>One lab science required for degree</i>	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI.	3-4	
	Transfer Elective	Electives from any transfer category.	3-4	
	Transfer Elective		3-4	
	Fourth Semester Spring Courses			
	Marketing	BUS 210	3	
	Introduction to Management	BUS 245	3	
	General Science or Lab Science <i>One lab science required for degree</i>	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI. <i>2nd elective must come from different discipline.</i>	3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI. <i>2nd elective must come from different discipline.</i>	3-4	
	Transfer Elective	Electives from any transfer category.	3-4	
	Total Credits			63-69

Accounting Specialty Certificate

CIP Code 520302

Overview

Accounting is an important function in all organizations. Accountants can expect to solve problems using a standard process to keep financial records complete and to check the accuracy of figures, calculations, and postings pertaining to business transactions. This program aims to expose students to different elements of accounting and to develop the problem-solving skills necessary to work with financial data.

CERTIFICATE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	Principles of Accounting I	ACC 201	4	
	Introduction to Business	BUS 101	3	
	Payroll Accounting	ACC 160	2	
	QuickBooks Accounting	ACC 205	2	
	Mathematics	MTH 108 or higher OR BUS 100	3-4	
	Second Semester Spring Courses			
	Income Tax Accounting - Personnel	ACC 170	2	
	Income Tax Accounting - Business	ACC 171	2	
	Principles of Accounting II	ACC 202	4	
	Cost Accounting	ACC 216	4	
	Microsoft Essentials	BUS 161	4	
	Total Credits			31-32

Continue for a second year and earn your Associate of Applied Business: General Business.

ASSOCIATE OF APPLIED BUSINESS	<i>Credits from Accounting Specialty Certificate</i>			31-32
	Third Semester Fall Courses			
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Business Communications	BUS 203	3	
	Humanities OR Social Science Elective	Choose from courses with the prefix ART, CJC, DRA, ENG 200 or higher, GEG, HST, HUM, MUS, PHI, PLS, PSY, SOC.	3-4	
	Business Elective	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	3	
	Transfer Elective	Elective from any transfer category.	3-4	
	Fourth Semester Spring Courses			
	Professionalism	BUS 200	1	
	Business Elective	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	11	
	Business Elective			
	Business Elective			
	Transfer Elective	Elective from any transfer category.	3-4	
	Total Credits			61-66

Applied Management Associate of Applied Business

CIP Code 529999

Overview

The Associate of Applied Management is designed for students who have completed at least 30 credits of vocational, occupational, or technical specialization and wish to receive an Associate Degree to advance their careers in managerial roles.

TWO SEMESTERS	First Semester Fall Courses		
	Credits from vocational, occupational, or technical specialization <i>Certificate of completion in any occupation program from GCC or transferred from another college. (i.e. Automotive, Building Trades, Cosmetology, Welding)</i> <i>Thirty approved credits from an associate's degree program may also be used.</i>		30
	English Composition I OR Technical English	ENG 101 OR ENG 105	3
	Mathematics	MTH 108 or higher OR BUS 100	3-4
	Accounting I OR Principles of Accounting I	ACC 150 OR ACC 201	4
	Introduction to Business	BUS 101	3
	Business Elective	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	3
	Second Semester Spring Courses		
	Microsoft Essentials	BUS 161	4
	Professionalism <i>Spring Only</i>	BUS 200	1
	Business Communications	BUS 203	3
	Introduction to Management	BUS 245	3
	Accounting II OR Principles of Accounting II	ACC 151 OR ACC 202	4
	Humanities OR Social Science Elective	Choose from courses with the prefix ART, CJC, DRA, ENG 200 or higher, GEG, HST, HUM, MUS, PHI, PLS, PSY, SOC.	3-4
Total Credits		64-66	

Entrepreneurship Occupational Certificate

CIP Code 520701

Overview

Entrepreneurship education at Gogebic Community College is designed to help prepare students for effective new venture creation and management. Students interested in Entrepreneurship will study the needs of new and emerging ventures and existing businesses. Students pursuing Entrepreneurship are challenged to pursue development of their own business ideas and opportunities and will develop their own business plan.

OCCUPATIONAL CERTIFICATE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	Accounting I OR Principles of Accounting I	ACC 150 OR ACC 201	4	
	Introduction to Business	BUS 101	3	
	Intro to Computers & Microsoft Office	CPL 200	2	
	Entrepreneurship	BUS 215	3	
	Business Elective	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	3	
Total Credits			16	

Continue for three additional semesters and earn your Associate of Applied Business: General Business.

ASSOCIATES PF APPLIED BUSINESS	Second Semester Spring Courses			
	Accounting II OR Principles of Accounting II	ACC 151 OR ACC 202	4	
	Microsoft Essentials	BUS 161	4	
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Mathematics	MTH 108 or higher OR BUS 100	3-4	
	Business Elective	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	2	
	Third Semester Fall Courses			
	Humanities OR Social Science Elective	Choose from courses with the prefix ART, CJC, DRA, ENG 200 or higher, GEG, HST, HUM, MUS, PHI, PLS, PSY, SOC.	3-4	
	Business Communications	BUS 203	3	
	Business Electives	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	5	
	Transfer Elective	Electives from any transfer category.	3-4	
	Fourth Semester Spring Courses			
	Professionalism	BUS 200	1	
	Business Electives	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	11	
	Transfer Elective	Electives from any transfer category.	3-4	
	Total Credits			61-65

General Business Program Certificate and Associate of Applied Business

CIP Code 520101

Overview

This program is designed with the concept that the student, with their advisor, designs a program to fit the individual's needs. The plan allows a student to receive a broad business background as well as a field of specialization and provides for electives outside the field of business.

YEAR ONE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Mathematics	MTH 108 or higher OR BUS 100	3-4	
	Accounting I OR Principles of Accounting I	ACC 150 OR ACC 201	4	
	Introduction to Business	BUS 101	3	
	Second Semester Spring Courses			
	Microsoft Essentials	BUS 161	4	
	Business Communications	BUS 203	3	
	Accounting II OR Principles of Accounting II	ACC 151 OR ACC 202	4	
	Business Elective	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	3	
	Humanities OR Social Science Elective	Choose from courses with the prefix ART, CJC, DRA, ENG 200 or higher, GEG, HST, HUM, MUS, PHI, PLS, PSY, SOC.	3-4	
Total Credits			31-33	

YEAR TWO	Third Semester Fall Courses			
	Business Elective	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	12	
	Business Elective			
	Business Elective			
	Business Elective			
	Transfer Elective	Electives from any transfer category.	3-4	
	Fourth Semester Spring Courses			
	Professionalism	BUS 200	1	
	Business Elective	Choose from business courses with the prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	11	
	Business Elective			
	Business Elective			
	Business Elective			
Transfer Elective	Electives from any transfer category.	3-4		
Total Credits			61-65	

Medical Office Professional and Medical Coding & Billing Specialist Program

Med Office Pro CIP Code 510710

Med Code and Billing CIP Code 510713

Overview

The Medical Office Professional and Medical Coding & Billing Specialist Program combines a one-semester Medical Office Professional occupational certificate with additional requirements to complete the Medical Coding and Billing Specialist certificate and/or Associate of Applied Science.

Medical Office Professional Occupational Certificate

The Medical Office Professional program prepares students to perform administrative duties that support healthcare staff such as scheduling appointments, billing patients, compiling, and recording medical charts, reporting, and correspondence.

Occupational Certificate	College and Career Success	COL 102	1	
	Medical Office Procedures	HIT 108 <i>Fall only</i>	2	
	Intro. to Health Information Management	HIT 110 <i>Fall only</i>	4	
	Medical Terminology	BUS 116 <i>Fall only</i>	4	
	Microsoft Office Essentials	BUS 161	4	
	Professionalism (2nd 8 weeks)	BUS 200	1	
Total Credits			16	

Medical Coding & Billing Specialist Certificate and Associate of Applied Science

Medical coders and billing specialists play a vital role in the financial viability of healthcare organizations. The online Medical Coding and Billing Specialist program prepares students for entry-level positions in the healthcare industry performing medical coding and processing health care insurance claims.

CERTIFICATE	<i>Completion of Occupational Certificate</i>		16	
	Anatomy and Physiology	BIO 105	4	
	Disease Process & Pharmacology	HIT 205 <i>Spring only</i>	4	
	ICD-10-CM/PCS	HIT 226 <i>Spring only</i>	4	
	Medical Coding and Billing Capstone	HIT 103 <i>Fall only</i>	3	
	Health Care Insurance (2nd 8 weeks)	HIT 212 <i>Fall only</i>	3	
	Ambulatory Care Coding	HIT 215 <i>Fall only</i>	4	
	CCA Review (2nd 8 weeks)	HIT 216 <i>Fall only</i>	2	
Total Credits			40	

ASSOCIATE OF APPLIED SCIENCE	<i>Completion of Medical Coding and Billing Certificate</i>		40	
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Business Math	BUS 100	4	
	Social Science Elective	Choose from select courses with the prefix CJC, ECO, GEG, PLS, PSY, SOC, HST.	3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI	3-4	
	Business Electives	Choose from business courses with prefix ACC, BUS, CIT, CPL, CSC, ECO, HIT.	6-8	
Total Credits			61-63	

- In order to demonstrate the minimum level of competency for Medical Office Professional and Medical Coding and Billing, the student needs to obtain a C (75%) in the following coursework (BIO 105, HIT 103, HIT 110, HIT 108, BUS 116, HIT 205, HIT 226, HIT 215, and HIT 212).
- Upon completion of the Medical Coding and Billing certificate, students will be eligible to write for a national exam.

Computer Information Technology

CIT Computer Programming Certificate and Associate of Applied Science

CIP Code 110201

Computer programmers are the creative minds behind computer programs. They develop the applications that allow people to do specific tasks on a computer or other devices. Computer Programmers develop, create, and modify general computer application software or specialized utility programs. They analyze user needs and develop software solutions. Computer Programmers can work individually but usually work as part of a team.

CERTIFICATE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	Computer Science	CSC 101	4	
	Programming I	CIT 170	4	
	HTML Programming	CIT 260 1 st 8 weeks	2	
	JavaScript Programming	CIT 265 2 nd 8 weeks	2	
	Second Semester Spring Courses			
	College Level Mathematics	MTH 108 or higher	4	
	Programming II	CIT 190	4	
	Java Programming	CIT 200	4	
	Business Communications	BUS 203	3	
	Related Studies Electives	Choose from courses with prefix AMD, BUS, CIT, DWG or EGR	3-4	
	Total Credits		34-35	

Complete your Associate in Applied Science with the following courses:

APPLIED ASSOCIATES	<i>Completion of Certificate</i>		34-35	
	Business Comm II	BUS 205	3	
	Advanced Topics in Computer Science	CIT 280	4	
	Social Science Elective	Choose from select courses with the prefix CJC, ECO, GEG, PLS, PSY, SOC, HST.	3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI	3-4	
	Science / Math Elective	Choose from courses with prefix BIO, CHM, ENV, GLG, PHY, SCI or MTH 108 or higher.	3-5	
	Related Studies Electives	Choose from courses with prefix ACC, AMD, BUS, CIT, CPL, DWG or EGR.	17	
	Total Credits		67-71	

Computer Information Technology
CIT Network Administration Certificate

CIP Code 111001

Network administrators are responsible for the day-to-day operation of computer networks. They install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. They monitor the network to ensure network availability to all system users and may perform necessary maintenance to support network availability.

CERTIFICATE	College and Career Success	COL 102	1	
	Computer Science	CSC 101	4	
	HTML Programming	CIT 260 <i>Fall only 1st 8 weeks</i>	2	
	IOT-Internet of Things	CIT 160 <i>Fall only</i>	4	
	Programming I	CIT 170 <i>Fall only</i>	4	
	Networking Fundamentals	CIT 250 <i>Spring only 1st 8 weeks</i>	4	
	Advancing Topics in Computer Science	CIT 280 <i>Spring only</i>	4	
	Server Administration	CIT 252 <i>Spring only 2nd 8 weeks</i>	4	
	Total Credits		27	

Computer Information Technology

CIT Network Security Certificate and Associate of Applied Science Computer Networking

Network Security Certificate CIP Code 111003

Networking AAS CIP Code 110901

The CIT Network Security and Computer Networking Program is currently on hiatus at GCC. Watch for updates in the coming year.

Communications & Humanities

Degrees	Programs
Associate of Arts	General Education

General Education Associate of Arts

CIP Code 240102

Overview

This program is designed for those interested in pursuing an associate of arts degree but have not yet chosen a field of specialization. The specific course taken will depend on student background and interest. The first year of the program satisfies the Michigan Transfer Agreement.

YEAR ONE	First Semester Fall Courses			
	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	College Level Mathematics	MTH 108 or higher	4	
	General Science or Lab Science	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI..	3-4	
	Humanities Elective	Choose from select transfer courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS or PHI.	3-4	
	Social Science Elective	Choose from select transfer courses with the prefix ECO, GEG, PLS, PSY, SOC or HST.	3-4	
	Second Semester Spring Courses			
	English Composition II	ENG 102	3	
	Lab Science	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI. <i>Second science course must come from different discipline.</i>	4	
Humanities Elective	Choose from select transfer courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI. <i>Second humanities course must come from different discipline.</i>	3-4		
Social Science Elective	Choose from select transfer courses with the prefix ECO, GEG, PLS, PSY, SOC or HST. <i>Second social science course must come from different discipline.</i>	3-4		
Total Credits			30-35	

YEAR TWO	Third Semester Fall Courses			
	Transfer Elective	Electives from any transfer category.	15-19	
	Transfer Elective			
	Transfer Elective			
	Transfer Elective			
	Fourth Semester Spring Courses			
	Transfer Elective	Electives from any transfer category.	15-19	
	Transfer Elective			
Transfer Elective				
Transfer Elective				
Total Credits			63-68	

Mathematics

Degrees	Programs
Associate of Science	Mathematics

Mathematics Associate of Science

CIP Code 270101

Overview

Mathematicians today are engaged in a wide variety of activities, ranging from the creation of new mathematical theories, to solving economic, scientific, engineering, and business problems using mathematical knowledge and computational tools. The Gogebic Community College Mathematics curriculum is designed to provide the general education courses that are required to transfer to a university for bachelor's degree completion.

YEAR ONE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Calculus & Analytic Geometry I	MTH 150	5	
	Calculus & Analytic Geometry II	MTH 151	4	
	Macroeconomics	ECO 201	3	
	Microeconomics	ECO 202	3	
	Introduction to Statistics	MTH 211	3	
	Social Science Elective	Choose from select courses with the prefix GEG, PLS, PSY, SOC, HST.	3-4	
Total Credits			28-29	

YEAR TWO	Calculus III	MTH 152	4	
	Ordinary Diff Equations w/ Linear Algebra	MTH 220	4	
	General Physics I OR General Inorganic Chemistry I	PHY 251 OR CHM 151	5	
	General Physics II OR General Inorganic Chemistry II	PHY 252 OR CHM 152	5	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI. <i>Two courses must come from two different disciplines.</i>	3-4	
	Humanities Elective		3-4	
	Transfer Electives	Electives from any transfer category.	11	
	Total Credits			63-70

Science

Degrees	Programs
Associate of Science	Biological Science Engineering General Science Natural Resources Physics
Associate of Applied Science	Forestry Technology
Certificate	Lab Science Technician

Biological Science Associate of Science

CIP Code 300101

Overview

Biological scientists study living organisms and their relationship to the environment. Most specialize in some area of biology. The Gogebic Community College biology curriculum is designed to provide the general education courses required to transfer to a university for bachelor's degree completion.

ASSOCIATE OF SCIENCE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Mathematics Elective	College Level Math (MTH 150 or MTH 211 recommended.)	3-5	
	Social Science Elective	Choose from select courses with the prefix ECO, GEG, PLS, PSY, SOC, HST.	3-4	
	Social Science Elective	<i>Two courses must come from two different disciplines.</i>	3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 200 or higher, HST, HUM, MUS, PHI.	3-4	
	Humanities Elective	<i>Two courses must come from two different disciplines.</i>	3-4	
	Principles of Biology	BIO 101 <i>Fall only</i>	4	
	Biological Diversity	BIO 102 <i>Spring only</i>	4	
	General & Inorganic Chemistry I	CHM 151 <i>Fall only</i>	5	
	General & Inorganic Chemistry II	CHM 152 <i>Spring only</i>	5	
	Biology Electives	Choose from courses with prefix BIO, at least one course must be 200-level or higher.	8	
	Science / Math Electives	Choose from courses with prefix BIO, CSC, CHM, ENV, FOR. GLG, PHY, SCI or MTH 108 or higher.	10-12	
	Transfer Electives	Electives from any transfer category.	5-6	
Total Credits			63-72	

Engineering Associate of Science

CIP Code 140101

Overview

Engineers utilize the principles of science and mathematics to the solutions of practical and technical problems. Engineers within each specialization have knowledge and training that can be applied to many scientific fields. The study is organized to provide for mastery of fundamental mathematical and scientific principles, understanding of engineering methods, and knowledge of social and economic factors.

The Gogebic Community College engineering curriculum is designed to provide the general education courses that are required to transfer to a university for bachelor's degree completion.

YEAR ONE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Calculus & Analytic Geometry I	MTH 150	5	
	Calculus & Analytic Geometry II	MTH 151	4	
	General Physics I	PHY 251	5	
	General Physics II	PHY 252	5	
	Engineering Graphics	EGR 101	2	
	Advanced CAD	DWG 106	3	
	Macroeconomics	ECO 201	3	
Total Credits			34	

YEAR TWO	Calculus III	MTH 152	4	
	Ordinary Diff Equations w/ Linear Algebra	MTH 220	4	
	Introduction to Engineering	PHY 110	3	
	Statics	PHY 261	5	
	Mechanics of Materials	PHY 263	3	
	General & Inorganic Chemistry I	CHM 151	5	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI. <i>Two courses must come from two different disciplines.</i>	3-4	
	Humanities Elective		3-4	
	Social Science Elective	Choose from select courses with the prefix GEG, PLS, PSY, SOC, select HST.	3-4	
	Total Credits			64-70

Forestry Technology Associate of Applied Science

CIP Code 030511

Overview

The forestry program at Gogebic Community College prepares individuals to assist foresters in the management and production of forest resources. This program will instruct you on woods and field skills, tree identification, timber measurement, logging and timber harvesting, forest propagation and regeneration, forest firefighting, resource management, equipment operation and maintenance, record-keeping, sales and purchasing operations, and personnel supervision.

This program prepares the student to be able to join the workforce as forestry technicians or transfer to a university to pursue a four-year degree.

YEAR ONE	College and Career Success	COL 102	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Botany	BIO 122	4	
	Practical Math OR College Algebra	MTH 108 OR MTH 110	4	
	Introduction to Statistics	MTH 211	3	
	Natural Resources Seminar	FOR 105	1	
	Field Technique	FOR 107	1	
	Vegetation of North America	FOR 112	4	
	Forestry Ecology	FOR 113	3	
	Wildlife Habitat	FOR 226	3	
	Social Science Elective	Choose from select courses with the prefix GEG, PLS, PSY, SOC, HST.	3-4	
Total Credits			33-34	

YEAR TWO	Intern Experience	FOR 200	2	
	Soil Science	FOR 203	4	
	Intro to GIS	FOR 204	4	
	Timber Harvesting	FOR 207	2	
	Multi-Resource Assessment	FOR 209	3	
	Computer Science	CSC 101	4	
	Practices of Silviculture	FOR 221	4	
	Land Measurements/GPS	FOR 227	1	
	Forest Health	FOR 228	3	
	Wildland Fire	FOR 243	3	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
Total Credits			66-68	

General Science Associate of Science

CIP Code 260101

Overview

The General Science Program is designed for those interested in pursuing a science-based degree but have not yet chosen a field of specialization. The specific courses taken will depend on the student's background and interest. The program can be individualized through your advisor with a specific transfer institution in mind.

ASSOCIATE OF SCIENCE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	College Level Mathematics	MTH 110 or higher	4-5	
	Lab Science or Math Elective	Choose from transfer lab science courses with prefix BIO, CHM, ENV, GLG, PHY or SCI. or college level math course MTH 108 or higher. <i>Two courses must come from two different disciplines. 24 credits typically translates into six courses.</i>	24	
	Lab Science or Math Elective			
	Lab Science or Math Elective			
	Lab Science or Math Elective			
	Lab Science or Math Elective			
	Lab Science or Math Elective			
	Social Science Elective	Choose from select courses with the prefix ECO, GEG, PLS, PSY, SOC, HST. <i>Two courses must come from two different disciplines.</i>	3-4	
	Social Science Elective		3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI. <i>Two courses must come from two different disciplines.</i>	3-4	
	Humanities Elective		3-4	
	Transfer Elective	Electives from any transfer category.	15-19	
Total Credits			63-67	

Lab Science Technician Certificate

CIP Code 41.0000

Overview

This certificate program prepares graduates for entry-level technician work in various laboratory settings. Students will learn to safely apply standard laboratory practices in conducting procedures related to sample preparation, chemical and biological analysis, and equipment operation and maintenance. Students will also develop technical and professional skills related to interpreting and reporting experimental results. Instruction in computer science and applications will provide graduates with a firm foundation from which to grow and be successful in high-tech environments.

CERTIFICATE	First Semester Fall Courses			
	College and Career Success	COL 102	1	
	English Composition I	ENG 101	3	
	Fundamental Science Concepts	SCI 105	3	
	Fundamental Lab Methods	SCI 106	2	
	Principles of Biology	BIO 101	4	
	Second Semester Spring Courses			
	Science Seminar	SCI 120	2	
	Computer Science	CSC 101	4	
	General, Organic & Biological Chemistry	CHM 101	4	
	Practical Math or Lab Science Elective	Choose from MTH 108 or courses with prefix BIO, CHM, FOR, GLG, PHY	4-5	
	Human Ecology or Social Science Elective	Choose from ENV 101 or courses with prefix SOC, PSY, ECO, PLS)	3-4	
Total Credits		30-32		

Natural Resources Associate of Science

CIP Code 030101

Overview

Forests and rangelands serve a variety of needs from supplying wood products, livestock forage, minerals, and water, to serving as sites for recreational activities and providing habitats for wildlife. Foresters and conservationists manage, develop, use, and help protect these and other natural resources.

ASSOCIATE OF SCIENCE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Public Speaking	SPE 101	3	
	College Algebra	MTH 110	4	
	Introduction to Statistics	MTH 211	3	
	Social Science Elective	Choose from select courses with the prefix CJC, ECO, GEG, PLS, PSY, SOC, HST. <i>Two courses must come from two different disciplines.</i>	3-4	
	Social Science Elective		3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 200 or higher, HST, HUM, MUS, PHI. <i>Two courses must come from two different disciplines.</i>	3-4	
	Humanities Elective		3-4	
	Principles of Biology	BIO 101 <i>Fall only</i>	4	
	Biological Diversity	BIO 102 <i>Spring only</i>	4	
	General, Organic, and Biochemistry OR General & Inorganic Chemistry I	CHM 101 OR CHM 151	4-5	
	Natural Resources Seminar	FOR 105 <i>Spring only</i>	1	
	Introduction to Geographic Information Systems for Natural Resource Management	FOR 204 <i>Fall only</i>	4	
	Human Ecology	ENV 101	3	
	Science / Math Electives	Choose from courses with prefix BIO, CSC, CHM, ENV, FOR. GLG, PHY, SCI or MTH 108 or higher.	11	
Transfer Electives	Electives from any transfer category. <i>CSC 101 Recommended</i>	3-6		
Total Credits			63-71	

Physics Associate of Science

CIP Code 400801

Overview

Physicists explore and identify basic principles governing the structure and behavior of matter, the generation and transfer of energy, and the interaction of matter and energy. Most physicists work in research and development but may also design research equipment or work within engineering disciplines.

YEAR ONE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Calculus & Analytic Geometry I	MTH 150	5	
	Calculus & Analytic Geometry II	MTH 151	4	
	Macroeconomics	ECO 201	3	
	General Physics I	PHY 251	5	
	General Physics II	PHY 252	5	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
Total Credits			32-33	

YEAR TWO	Introduction to Engineering	PHY 110	3	
	Statics	PHY 261	3	
	Mechanics of Materials	PHY 263	3	
	Calculus III	MTH 152	4	
	Ordinary Diff Equations w/ Linear Algebra	MTH 220	4	
	General Inorganic Chemistry I	CHM 151	5	
	General Inorganic Chemistry II	CHM 152	5	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 200 or higher, HST, HUM, MUS, PHI. <i>2nd humanities course must come from different discipline.</i>	3-4	
	Social Science Elective	Choose from select courses with the prefix GEG, PLS, PSY, select HST.	3-4	
Total Credits			63-70	

Social Science

Degrees	Programs
Associate of Arts	Criminal Justice History Psychology Social Work Teacher Education Secondary Education
Associate of Applied Science	Early Childhood Education
Certificate	Corrections Officer
Occupational Certificate	Corrections Officer

Corrections Officer Program

CIP Code 430102

Overview

The Corrections Officer Certificate Program prepares graduates for jobs in a prison setting as a corrections officer. Corrections officers ensure the safety and security of incarcerated persons. Correctional officers may be expected to maintain order within the prison institution, enforce rules and regulations, escort prisoners within the facility and in transit, and supplement counseling and programming for prisoners.

Occupational Certificate	Introduction to Corrections	CJC 101	3	
	Correctional Institutions/Facilities	CJC 102	3	
	Criminology	CJC 103	3	
	Diversity and Inclusivity in Public Safety	CJC 104	3	
	Legal Issues	CJC 105	3	
	College and Career Success	COL 102	1	
Total Credits			16	

CERTIFICATE	<i>Complete requirements of Occupational Certificate</i>		16	
	English Composition I OR Technical English	ENG 101 OR ENG 105	3	
	English Composition II OR Communications Course	ENG 102 OR SPE 101 OR SPE 105	3	
	Math Elective	Math 108 or higher	3-5	
	General Psychology	PSY 101	4	
	Introduction to Sociology OR Social Problems	SOC 101 OR SOC 102	3	
	Responding to Emergencies	PED 202	2	
	Total Credits			31-34

Criminal Justice Associate of Arts

CIP Code 430107

Overview

The Criminal Justice program prepares students to succeed in modern criminal justice and social justice careers. Students will investigate current crime and social justice problems and solutions, identify strategies to prevent, reduce, and manage crime, develop effective communication and active listening strategies, and demonstrate the ability to work with a diverse population.

YEAR ONE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Introduction to Corrections	CJC 101	3	
	Criminology	CJC 103	3	
	Diversity and Inclusivity in Public Safety	CJC 104	3	
	Introduction to Criminal Justice	CJC 110	3	
	Introduction to Sociology OR Social Problems	SOC 101 OR SOC 102	3	
	College Level Mathematics	MTH 108 or higher	4-5	
	General Science or Lab Science <i>One lab science required for degree</i>	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI.	3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
Total Credits			32-35	

YEAR TWO	Correctional Institutions/Facilities	CJC 102	3	
	Criminal Justice Elective	Choose from: CJC 105 Legal Issues	3	
	Criminal Justice Elective	CJC 206 Intro to Homeland Security CJC 210 Law Enforcement Function	3	
	Criminal Justice Elective	CJC 211 Police Ethics CJC 215 Juvenile Justice	3	
	Criminal Justice Elective	CJC 225 Community Based Corrections CJC 235 Criminal Law CJC 250 Special Topics	3	
	Intro to American Government	PLS 101	3	
	General Psychology	PSY 101	4	
	General Science or Lab Science <i>One lab science required for degree</i>	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI. <i>2nd elective must come from different discipline.</i>	3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI. <i>2nd elective must come from different discipline.</i>	3-4	
	Transfer Elective	Electives from any transfer category.	3-4	
	Total Credits			63-69

History Associate of Arts

CIP Code 540101

Overview

The Associate of Arts degree in History is designed for students to explore important historical periods that cover social movements, wars, religion, technology, political movements, etc. The study of History allows students to gain insight into pivotal people and events that influenced modern civilization; while providing students with critical thinking and effective communication skills that allow them to appreciate diversity and make well-reasoned assessments of how the past has informed the present, and vice versa. A History degree is preparation for careers in education, law, journalism, media, government, historical research, and communication.

YEAR ONE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Western Civilization I OR World Civilization I	HST 101 or HST 103	4	
	Western Civilization II OR World Civilization II	HST 102 or HST 104	4	
	Intro to American Government	PLS 101	3	
	College Level Mathematics	MTH 108 or higher	4-5	
	General Science or Lab Science <i>One lab science required for degree</i>	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI.	3-4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HUM, MUS, PHI.	3-4	
	Transfer Elective	Electives from any transfer category.	3-4	
Total Credits			31-35	

YEAR TWO	World Regional Geography	GEG 111	3	
	U.S. History to 1877	HST 201	3	
	U.S. History from 1865	HST 202	3	
	History Elective	Choose from courses with prefix HST 200 or higher	3	
	History Elective		3	
	Public Speaking	SPE 101	3	
	General Science or Lab Science <i>One lab science required for degree</i>	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI. <i>2nd elective must come from different discipline.</i>	3-4	
	Transfer Elective	Electives from any transfer category.	8-9	
Total Credits			64-69	

Psychology Associate of Arts

CIP Code 420101

Overview

Psychology is a scholarly discipline, a scientific field, and a professional activity. Its overall focus is on the study of behavior and related mental and physiological processes. As a science, it is a focus of research through which investigators collect, quantify, analyze and interpret data describing behavior. As a profession, psychology involves the practical application of knowledge, skills and techniques for the solution or prevention of individual or social problems.

The Psychology program at Gogebic Community College is designed to provide students with the core courses required for an Associate Degree that will transfer to a college or university for a Baccalaureate Degree.

YEAR ONE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	General Psychology	PSY 101	4	
	Psychology of Personality	PSY 225 <i>Spring only</i>	3	
	Introduction to Sociology	SOC 101	3	
	College Level Mathematics	MTH 108 or higher	4-5	
	General Science or Lab Science	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI.	3-4	
	Lab Science	<i>Two courses must come from two different disciplines.</i>	4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
Total Credits			31-33	

YEAR TWO	Social Psychology	PSY 204 <i>Fall only</i>	3	
	Abnormal Psychology	PSY 295 <i>Fall only</i>	4	
	Lifespan Development	PSY 210 <i>Spring only</i>	3	
	Social Problems	SOC 102	3	
	Intro. to American Government	PLS 101	3	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI. <i>2nd elective must come from different discipline.</i>	3-4	
	Transfer Elective	Electives from any transfer category.	12	
	Total Credits			63-66

Social Work Associate of Arts

CIP Code 440701

Overview

Social Workers help individuals and families cope with problems and serious conflicts such as homelessness or inadequate housing, unemployment, lack of job skills, handicaps, substance abuse, child or spousal abuse, divorce, etc. Through direct counseling, social workers help clients bring their concerns into the open and help them to consider solutions or find resources.

YEAR ONE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	Introduction to Social Work	SWK 101 <i>Spring Only</i>	3	
	General Psychology	PSY 101	4	
	Psychology of Personality	PSY 225 <i>Spring Only</i>	3	
	Introduction to Sociology	SOC 101	3	
	College Level Mathematics	MTH 108 or higher	4-5	
	General Science or Lab Science <i>Recommend BIO 105</i>	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI.	3-4	
	Lab Science	<i>Two courses must come from two different disciplines.</i>	4	
Total Credits			31-33	

YEAR TWO	Social Psychology	PSY 204 <i>Fall only</i>	3	
	Abnormal Psychology	PSY 295 <i>Fall only</i>	4	
	Lifespan Development	PSY 210 <i>Spring only</i>	3	
	Social Problems	SOC 102	3	
	Intro. to American Government	PLS 101	3	
	Macroeconomics	ECO 201	3	
	History Elective	Choose from HST 224, HST 226 or HST 229.	3	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI. <i>2nd elective must come from different discipline.</i>	3-4	
	Humanities Elective		3-4	
	Transfer Elective <i>Recommend MTH 211</i>	Electives from any transfer category.	3-4	
Total Credits			63-64	

Early Childhood Education Associate of Applied Science

CIP Code 131210

Overview

Early childhood educators play an important role in shaping who a child will become. They are the link between home and school, communicating with parents and meeting the needs of both children and families. This program is designed to prepare teachers and assistant teachers to work effectively with children in preschool programs.

YEAR ONE	First Semester Fall Courses			
	College and Career Success	COL 102		1
	English Composition I	ENG 101		3
	Intro to Education	EDU 201		3
	ECE Course	Even Years ECE 230	Odd Years ECE 210 ECE 240	3
	ECE Course			3
	Second Semester Spring Courses			
	English Composition II OR Communications Course	ENG 102 OR SPE 101 OR SPE 105		3
	Children's Literature	ENG 230		3
	General Psychology	PSY 101		4
	Practicum I	ECE 195		3
	ECE Course	Even Years ECE 110	Odd Years ECE 220 ECE 290	3
	ECE Course			3
	Total Credits			32

YEAR TWO	Third Semester Fall Courses			
	Intro to Sociology OR Social Problems	SOC 101 <i>Fall only</i> OR SOC 102 <i>Spring only</i>		3
	Mathematics	MTH 108 or higher		3-4
	Transfer Elective	Elective from any transfer category		3-4
	Lab Science Elective	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI.		3-4
	ECE Course	Even Years ECE 230	Odd Years ECE 210 ECE 240	3
	ECE Course			3
	Fourth Semester Spring Courses			
	Practicum II	ECE 295		3
	Child and Adolescent Psychology	PSY 202		3
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.		3-4
	Social Science Elective	Choose from select courses with the prefix CJC, ECO, GEG, PLS, PSY, SOC, HST.		3-4
	ECE Course	Even Years ECE 110	Odd Years ECE 220 ECE 290	3
	ECE Course			3
Total Credits			62-67	

Teacher Education Associate of Arts

CIP Code 131202

Overview

The coursework and cooperative experiences in the Teacher Education Program is designed to develop individuals who are interested in pursuing a career in teaching. Students will develop their own teaching philosophy and practice through immersive in-classroom and practical experiences in partner schools with a semester-long cooperative work experience.

YEAR ONE	First Semester Fall Courses			
	College and Transfer Success	COL 101	1	
	Intro to Education	EDU 201	3	
	English Composition I	ENG 101	3	
	College Level Math	MTH 108 or higher <i>Excluding MTH 121 and MTH 122</i>	4	
	General Psychology	PSY 101	4	
	Second Semester Spring Courses			
	English Composition II	ENG 102	3	
	Lifespan Development OR Child and Adolescent Psychology	PSY 210 <i>Spring only</i> OR PSY 202	4	
	Lab Science	Choose from transfer lab courses with prefix BIO, CHM, ENV, GLG, PHY or SCI. <i>Two courses must come from two different disciplines.</i>	4	
Document Design for Print & Web	ENG 270	3		
Total Credits			29	

YEAR TWO	Third Semester Fall Courses			
	World Regional Geography	GEG 111	3	
	Intro. to American Government	PLS 101	3	
	Affective Teaching	EDU 202	3	
	Lab Science	Choose from transfer lab courses with prefix BIO, CHM, ENV, GLG, PHY or SCI. <i>Two courses must come from two different disciplines.</i>	4	
	History of American Education	HST 230	3	
	Fourth Semester Spring Courses			
	Teaching Seminar	EDU 290A	3	
	Co-op Work Experience	EDU 290	10	
	Humanities Elective <i>Recommended ENG 230</i>	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
Total Credits			61-62	

Secondary Education Associate of Arts

CIP Code 131205

Overview

Secondary education schoolteachers help students delve more deeply into subjects introduced in elementary school and learn more about the world and about themselves. To work in a public school, students must obtain licensure. Each state has different requirements for obtaining a teacher's license—most require a Baccalaureate degree within a specialized area such as Mathematics, History, English, Science, etc., a teaching internship, and the passing of a state-administered exam.

YEAR ONE	College and Transfer Success	COL 101	1	
	English Composition I	ENG 101	3	
	English Composition II	ENG 102	3	
	General Psychology	PSY 101	4	
	Intro. to American Government	PLS 101	3	
	College Level Mathematics	MTH 108 or higher	4-5	
	Introduction to Education	EDU 201 <i>Fall only</i>	3	
	General Science or Lab Science	Choose from transfer courses with prefix BIO, CHM, ENV, GLG, PHY or SCI.	3-4	
	Lab Science	<i>Two courses must come from two different disciplines.</i>	4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 201 or higher, HST, HUM, MUS, PHI.	3-4	
Total Credits			31-34	

YEAR TWO	Public Speaking	SPE 101	3	
	Lifespan Development	PSY 210 <i>Spring only</i>	4	
	Humanities Elective	Choose from select courses with the prefix ART, DRA, ENG 200 or higher, HST, HUM, MUS, PHI. <i>2nd elective must come from different discipline.</i>	3-4	
	Transfer Electives	Work with the Education Advisor to determine the optimal coursework needed for transferring to your selected bachelor's degree program.	18-24	
	Transfer Electives			
Total Credits			63-69	

COURSE DESCRIPTIONS

Course descriptions on the following pages include the following information:

1	2	3
	4	
Prerequisite	5	6

- Course abbreviation and Course number.
Courses numbered 100-199 are normally freshmen courses; they may be elected by sophomores. Courses numbered 200-299 are sophomore courses; they may be elected by freshmen with the necessary prerequisites. Courses numbered below 100 may not be used to fulfill degree or certificate requirements.
- Title of the course.
- Credit hours. Credit hours are listed outside of the parentheses. Within the parentheses are: total contact hours of lecture and laboratory experience per week. The number appearing to the left of the hyphen denotes lecture hours and the number to the right of the hyphen denotes lab hours.
Examples:
 - 3 (3-0) means the course has a three-credit hour value and meets three hours a week for lecture, with no lab.
 - 4 (3-2) means the course has a four-credit hour value and meets three hours a week for lecture, with two hours a week for lab.
 - If a course is listed as having variable (VAR) credits, contact hours, or lab hours, students must check with their advisors.
- Brief description of the content of the course
- Prerequisites and co-requisites.
Some courses have prerequisites or co-requisites listed. A prerequisite must be taken prior to entering a course; a co-requisite may be taken prior to, or must be taken concurrently with, the course. In individual cases, prerequisites or co-requisites may be waived upon approval of the instructor.
- Denotes when the course is typically offered.
F=Fall, S=Spring, F/S=Fall and Spring, OT=Other
FE=Fall Even, FO=Fall Odd, SE=Spring Even, SO=Spring Odd

Note: Course numbers, titles, credit hours, class and lab hours, and descriptions are subject to change before expiration of this catalog.

ACCOUNTING (ACC)

The primary content of ACC courses is directly related to a Business-Related occupational program.

ACC 150 ACCOUNTING I 4 (4-0)

A practical accounting course that introduces the concepts of double entry bookkeeping, special journals, general and subsidiary ledgers, work sheets, financial statements and year-end closing procedures. This course is designed for someone who has no prior accounting experience. Accounting is the "language of business" and students will learn to understand the impact economic events have on a company. *Students who have completed one or two years of high school bookkeeping with above average grades should consult with the accounting instructor about placement in Principles of Accounting 201 rather than in Accounting 150.*

Prerequisite None

F

ACC 151 ACCOUNTING II 4 (4-0)

A practical study of the manner in which the accounting processes apply to sole proprietorships, partnerships, and corporations. The topics covered include merchandise operations, inventories, cash accounting, receivables, notes, depreciation and control accounting. A computerized practice set is included to give students practical experience in keeping books for a small business.

Prerequisite ACC 150

S

ACC 160 PAYROLL ACCOUNTING 2 (2-0)

A study of the methods of computing wages and salaries, keeping payroll records, and making government reports. Practice in completion of government forms and filing of periodic reports included.

Corequisite ACC 150 or ACC 201

F

ACC 170 INCOME TAX ACCOUNTING - PERSONAL 2 (2-0)

A course covering an overview of federal and state personal income tax. The course is non-technical coverage of information needed in preparing returns for individuals and sole proprietorships. Practice problems focus on mastering tax concepts and calculations. Some coverage of completion of federal income tax forms is also included.

Prerequisite ACC 150 or ACC 201

S

ACC 171 INCOME TAX ACCOUNTING - BUSINESS 2 (2-0)

A course covering an overview of federal and state business income tax. The course is non-technical coverage of information needed in preparing returns for small businesses,

partnerships and corporations, including special provisions and requirements. Practice problems focus on mastering tax concepts and calculations. Some coverage of completion of necessary tax forms is included.

Corequisite ACC 151 or ACC 201

S

ACC 201 PRINCIPLES OF ACCOUNTING I 4 (4-0)

The Principles of Accounting I course is designed as an introduction to the development of financial accounting principles. This course fulfills the needs of college students transferring to another college or university and planning a career in the following disciplines: Accounting, business administration, liberal arts, marketing, management, law, computer information technology, & other disciplines. Topics covered include: The accounting cycle, asset valuation, income determination, & financial reporting

Prerequisite None

F

ACC 202 PRINCIPLES OF ACCOUNTING II 4 (4-0)

The Principles of Accounting II (ACC202) course is a continuation of the financial principles developed in Accounting 201. We will expand our study of proprietorships to include partnerships & corporations. Students will be introduced to cash flow statements, managerial accounting, cost accounting, income tax accounting, budgeting, decision making, and cost-volume-profit analysis. This course fulfills the needs of students transferring to other colleges or universities and those seeking two-year vocational business degrees.

Prerequisite ACC 201

S

ACC 205 QUICKBOOKS COMPUTERIZED ACCOUNTING 2 (2-0)

This course uses computerized accounting practice sets with the QuickBooks software to introduce accounting on the microcomputer. General ledger, accounting cycle, accounts payable, accounts receivable, and payroll applications are covered. Students will be responsible for completing assigned work in the QuickBooks computer system.

Corequisite Recommended ACC 150 or ACC 201

F

ACC 216 COST ACCOUNTING 4 (4-0)

An introductory course in accounting principles for manufacturing enterprises. Concepts include accounting for materials, labor and overhead in job-order, process, standard and direct costing systems. The course considers the application of costs to its products and operations in order to successfully manage business operations.

Corequisite ACC202

AUTOMATED MANUFACTURING DESIGN (AMD)

The primary content of AMD courses is directly related to the Mechanical Engineering Technology occupational program.

AMD 100 INTRODUCTION TO CNC/QC 3 (2-2)

This course will provide introductory basic instruction in the areas of computer numeric control (CNC) and quality control (QC). Students will be introduced to the basic concepts of CNC programming for a milling machine using standard G&M codes. Laboratory opportunities will provide experience on running the programs on the CNC milling machine. Quality control concepts will be studied with emphasis being placed on statistical process control (SPC) as used in a manufacturing environment. Students should be versatile in math and CAD.

Prerequisite None

AMD 101 INTRO TO AUTOMATED MANUFACTURING 3 (2-2)

This course serves as an introduction to computers in industry and computer aided manufacturing. Attention focuses on CNC equipment and programming using standard industry codes and software. Students should be versatile in math and CAD.

Prerequisite DWG 106, Math 106

ANTHROPOLOGY (ANT)

ANT 105 INTRODUCTION TO CULTURAL ANTHROPOLOGY 3 (3-0)

A study of what it means to be human. The course will examine principles of social organization and explore how languages affect cultural values. Applications of theory, together with ethnographic examples will provide students with an understanding of diverse world views and knowledge of contemporary issues in different societies. Topics such as sexuality and gender, marriage and family economics, religion, art, and politics will be investigated throughout the world. *This fulfills a social science requirement.*

Prerequisite None

ART (ART)

ART 220 ART APPRECIATION 3 (3-0)

A study of the aesthetics and creative processes involved in major art forms. *This course fulfills a humanities requirement.*

Prerequisite None

AUTOMOTIVE TECHNOLOGY (AUT)

The primary content of AUT courses is directly related to an Automotive Technology occupational program.

AUT 101 ENGINE REPAIR 5 (4-3)

Students are prepared for practical experience in engine maintenance, service and fundamental knowledge in engine theory and repair. Principles, design, construction, operation and service procedures are studied. Development of work skills and proficiency in engine rebuilding are emphasized. Students

learn to disassemble, clean, inspect, service and assemble an engine.

Prerequisite None

AUT 102 AUTOMOTIVE INDUSTRY FUNDAMENTALS 3 (2-3)

This course will introduce students to the basics of the Automotive Industry. Orients students to the automotive service industry. Students will learn in group settings using collaborative methods to research service information attainment, vehicle design and operation. Students will prepare to independently perform engine and vehicle chassis and drive train inspections and maintenance.

Prerequisite None

AUT 107 ELECTRICAL/ELECTRONIC SYSTEMS 5 (4-3)

The study of basic electrical principles, schematic diagrams, circuit operation and analysis, followed by practice using professional trouble- shooting procedures and equipment such as voltmeters, ohmmeters, ammeters or other appropriate test equipment. Coverage includes the battery, lighting system, charging circuit, regulator, starting circuit, fusing and indicating devices with an introduction to alternator rebuilding, starter rebuilding and accessory repair. Diagnosis and repair of all electrical systems is stressed. Students also receive advanced training in SIMI Conductors Micro Processors and other on-board electronic systems.

Prerequisite None

AUT 108 ELECTRICAL SYSTEMS II 5 (4-3)

Course Description: A continuation of AUT 107. Coverage includes the lighting system, fusing, indicating devices and accessory repair. Diagnosis and repair of all electrical systems is stressed. Students also receive advanced training in Semi-Conductors Micro Processors and other on-board electronic systems.

Prerequisite None

AUT 121 ENGINE PERFORMANCE – FUNDAMENTALS 5 (4-3)

This course will introduce students to the basics of engine performance. The proper use of service information is covered along with general engine diagnosis, entry level engine related service, emission system diagnosis, electrical principles, and entry level fuel system service.

Prerequisite AUT 107 and 108

AUT 122 ADVANCED ENGINE PERFORMANCE – ADVANCED 4 (4-3)

This course will carry the student beyond basic tune-up into the world of computer-controlled systems. Students will study the engine sensors that feed data to an on-board microprocessor. They will learn how the microprocessor processes and then uses data to make a host of real time decisions concerning the correct delivery of fuel, ignition, and emission controls to

achieve maximum fuel economy and minimum emissions output. Students will get hands on training on late model cars to reinforce classroom theory. The use of scan tools, computer self-diagnostics, and electrical principles will also be covered.

Prerequisite AUT 107 and AUT 108

AUT 123 AUTOMATIC TRANSMISSIONS AND TRANSAXLES 5 (4-4)

A study of the design and construction of the automatic transmission; its diagnosis and testing as well as maintenance and overhaul will be covered. Automatic transaxle diagnosis, testing, maintenance and overhaul will also be stressed.

Prerequisite None

AUT 124 MANUAL DRIVE TRAINS AND AXLES 4 (3-3)

This course will study the design, construction, servicing and overhaul procedures used on standard transmissions: 4-wheel drive, drive lines, axles and clutches used in today's automobiles. Emphasis will be on proper diagnosis and repair techniques.

Prerequisite None

AUT 231 SUSPENSION STEERING AND BRAKES 4 (3-3)

A study of automotive suspension and brake systems including nomenclature, theory of operation, applicable hydraulic principles, service and repair procedures, steering geometry and wheel alignment as they apply to safety, repair service and correction. The purpose of new and improved safety features, such as disc brakes, dual master cylinders, power brakes, and anti-skid devices, will be discussed and service procedures will be practiced. Electrical principles will be covered, also.

Prerequisite None

AUT 232 BRAKING SYSTEMS 4 (3-3)

AUT 232 is a course that covers theory, repair, and adjustment of hydraulic and Antilock Braking Systems (ABS) brake systems and related machining equipment. While learning basic electrical principles, students will learn in this class through hands on experience how to diagnose problems with ABS and Electronic Stability Control in addition to rebuild and bleed advanced braking systems. As with all automotive classes, students have the opportunity to take NATEF end of program testing. If passed, students will be granted two-year ASE certification that will enable them to be more marketable as entry level technicians.

Prerequisite None

AUT 241 HEATING/AIR CONDITIONING/ELECTRICAL SYSTEMS 5 (3-3)

Principles, design, construction, installation, troubleshooting, removal and service of various models of automotive air conditioners and heating systems are examined in this course. Emphasis is on safety procedures and practices in disassembly and recharge of air conditioning systems.

Prerequisite None

AUT 244 INTRODUCTION TO HYBRID VEHICLES 3 (3-2)

Intended for both the entry level and experienced technicians, this course introduces basic hybrid vehicle safety and maintenance. Upon completion, learners will be able to identify a hybrid vehicle, locate and identify the major components and locate, identify, and remove the safety disconnect Hybrid Vehicle High Voltage system following manufacturer and industry standards. This course includes basic electrical principles.

Prerequisite None

BIOLOGY (BIO)

BIO 101 PRINCIPLES OF BIOLOGY 4 (3-3)

This course is designed as an introduction to the principles of Biology. Emphasis will be placed on cell structure, metabolism, reproduction, genetics and biotechnology. Modern techniques of molecular biology and biotechnology will be used in the laboratory.

Prerequisite Recommended ENG 101

Corequisite Recommended ENG 101

BIO 102 BIOLOGICAL DIVERSITY 4 (3-3)

This course will explore the vast area of biological diversity. Particular attention will be given to the evolution, classification, anatomy and physiology of the plant and animal kingdoms, and ecological interactions.

Prerequisite Recommended ENG 101

Corequisite Recommended ENG 101

BIO 105 ANATOMY AND PHYSIOLOGY 4 (4-0)

A comprehensive study of all the systems of the human body, focusing on structures and their functions. Anatomical structure will be studied by organ systems with emphasis on the relationship between form and function. Systematic topics include levels of organization, support and movement, integration and coordination, transport, absorption and excretion, and the development of human life.

Prerequisite None

BIO 110 ECOLOGY 4 (3-3)

An introduction to the relationships of organisms to each other and to their environments. Major topics include the interactions of individuals with the physical environment as well as the dynamics of populations, and the structure and function of communities and ecosystems. Laboratory exercises include field work, experimentation, and analysis of data.

Technical Math Placement and BIO 101

Prerequisite Recommended College Level Math Placement and ENG 101 and BIO 102

Corequisite Recommended MTH 108 or MTH 110.

BIO 122 BOTANY 4 (3-3)

This course will discuss and investigate the field of Botany. The focus will be on the structure, function reproduction, and classification of plants, and algae, as well as the relationship to current ecological, agricultural, and other human issues.

Prerequisite None

BIO 150 FIELD BIOLOGY 4 (3-3)

Field studies of the ecology, morphology, and evolutionary relationships of organisms in the ecosystems of northern Michigan and Wisconsin. This course will focus extensively on the methods utilized by biologists to collect field data on native and invasive organisms and examine their roles in the greater ecological community. Specimen collection, identification, and preservation, as well laboratory reports on student findings are an integral part of this course.

Prerequisite Recommended Basic Math Placement, ENG 101

Corequisite Recommended ENG 101

BIO 215 INTRODUCTION TO MICROBIOLOGY 4 (3-3)

A course in the identification, morphology, distribution and physiology of microorganisms important in the home, agriculture, industry and medical sciences. The laboratory deals with techniques basic to the study of microorganisms.

Prerequisite BIO 101 (completed with a C or higher)

Recommended CHM 101 and College Level Math Placement and ENG 101

BIO 250 HUMAN ANATOMY 4 (3-3)

A study of the structure of the human body. Lectures emphasize structures of all the systems of the human body (Integumentary, skeletal, muscular, nervous, sense organs, endocrine, cardiovascular, respiratory, digestive, and urinary). Laboratory work includes study of the human skeleton, dissection of the cat, sheep brain, beef/sheep heart, and beef/sheep kidney.

Prerequisite Recommended BIO 101 and High School Chemistry or CHM 101

BIO 251 HUMAN PHYSIOLOGY 4 (3-3)

A study of the function, regulation, control, and interrelationships of all the organ systems of the human body. Major divisions covered include human cell, muscular system, nervous system, sense organs, endocrine system, cardiovascular system, vascular system, respiratory system, digestive system, urinary system, water and electrolyte balance, reproductive system.

Prerequisite BIO 250 (completed with a C or higher.)

Recommended BIO 101 and High School Chemistry or CHM 101

BUILDING CONSTRUCTION (BLD)

The primary content in BLD courses is directly related to a Construction Technology occupational program.

BLD 101 CONSTRUCTION PRACTICES I 5 (2-5.5)

This course is an introduction to surveying, masonry, and carpentry trades with special emphasis in the proper use, care and maintenance of hand tools and machinery. It will also focus on safe working practices in shop and field conditions. Instruction will include principles of building layout, theory and field work which will include forming and pouring of basement footings, sidewalks, foundation walls, slabs and construction of block foundations, masonry walls, chimneys and piers. The student will learn to read a site plan, operate a builder's level and transit, take and reduce field notes, determine elevations, and stake lot/foundation/building elevations, lines, and corners.

Prerequisite None

BLD 102 CONSTRUCTION PRACTICES II 5 (2-5.5)

This course is a continuation of Building Construction I. Students will be introduced to the various building construction materials. The use and care of hand and power tools used in industry will be covered. Special emphasis will be given to safety. Students will be involved with floor framing, wall framing and roof framing and the application of roofing materials.

Prerequisite BLD 101

BLD 104 PLANS, SPECS, AND CODES 3 (3-0)

Content includes planning the electrical, plumbing, and heating systems of a residential home in accordance with specifications using the guidelines of the National Electrical Code and BOCA building code. Blueprint reading will be used to coordinate the mechanical prints with the erection of the building.

Prerequisite None

BLD 120 MECHANICAL-ELECTRICAL INSTALLATIONS 5 (2-5.5)

Introduces the mechanics and installation of the plumbing, heating, and electrical wiring for a residential building, students will first receive laboratory experiences in typical installations and then work on the actual plumbing, heating, and electrical installations on the job site.

Prerequisite BLD 101

BLD 201 CONSTRUCTION PRACTICES III 5 (2-5.5)

This is a continuation of Construction Lab II, placing emphasis on actual wall layout in conjunction to windows, doors, and partitions. Layout of cabinets and interior fixtures will be included. Stairways and insulation are installed at this time. Floor, wall, and ceiling framing loads in reference to beam and truss sizes will be discussed.

Prerequisite None

BLD 203 SPECIFICATIONS AND ESTIMATES 4 (3-3)

A study of the various building components with costs determined for both labor and materials using a current pricing handbook. Cost estimates for a building utilizing masonry, carpentry, plumbing, heating, electricity, etc., prepared from a complete set of blueprints.

Prerequisite None

BLD 205 CONSTRUCTION PRACTICES IV 5 (2-5.5)

A continuation of Construction Practices III, with student involvement in the finish carpentry of a residential home. Interior carpentry will involve interior wall finishes, installation of interior and exterior doors and windows. Manufacturing and installation of cabinetry, all trim, locks and hardware, the various types of exterior wall finishes (may include brick) are studied, as well as the installation of garage doors.

Prerequisite BLD 201

BLD 220 CABINET MAKING 5 (2-5.5)

Cabinet making will be offered to the two-year building construction students or to students that have acquired entry level knowledge and skills. The course will be designed to have the students in the course custom build all kitchen and bathroom cabinets for the college residential home project. The course will also include closet shelving, trim work, and any built-in cabinet, including finishing and installation.

Prerequisite 2-year student or departmental permission

BUSINESS (BUS)

The primary content of BUS courses is directly related to a Business-Related occupational program.

BUS 100 BASIC BUSINESS MATH 4 (4-0)

Business Mathematics covers basic business mathematical procedures as applied to practical business problems. It includes a review of basic mathematical fundamentals and processes, and practical applications of percentages, ratios, discount, payroll, interest, banking and insurance, depreciation, financial statements, tax problems, as well as corporate and special business applications.

Prerequisite None

BUS 101 INTRODUCTION TO BUSINESS 3 (3-0)

An introduction to the various functions of business. This course provides students with an overview of business in an increasingly global society. Students will complete the course with knowledge of the general business environment, economic systems, business ethics, and technology and information systems. In addition, students will learn the fundamentals of economics, business ownership, entrepreneurship, finance, management, and marketing. Key themes woven throughout the course include explorations of career options, and development of business problem-solving skills.

Prerequisite None

BUS 102 INTRODUCTION TO FINANCE 3 (3-0)

This course will introduce students to the broad discipline of finance. Students will study three different areas of finance: financial institutions, investments, and financial management. Attention is focused on learning the roles of financial institutions, stock market investing, investment returns and managing risk, bonds and yields, financial leverage, Investing, and break even analysis .

Prerequisite MTH 100

BUS 105 KEYBOARDING ESSENTIALS 2 (2-0)

This course is designed for beginner skill level students to develop and build keyboarding skills and improve keying proficiency.

Prerequisite None

BUS 116 MEDICAL TERMINOLOGY 4 (4-0)

This is an online course which involves development of medical vocabulary and skill in spelling, pronouncing, and defining medical terms. Students learn to divide words into their component parts recognizing the basic combining forms, suffixes and prefixes. Abbreviations, major disease conditions, procedures and laboratory tests are also reviewed.

The primary content of this course is directly related to an Allied Health/Business occupational program. This course does not meet the requirements for the Nursing program.

Prerequisite None

BUS 130 SALESMANSHIP 3 (3-0)

This course is designed to provide students with a guide to general sales and various sales techniques. It will provide students with a better understanding of a professional sales approach to prospecting, communicating, presenting solutions to meet customer needs and closing deals. In addition, students will discover the importance of developing long-run, win-win customer relationships and effectively leading the sales force in today's highly competitive business environment.

Prerequisite None

BUS 133 CUSTOMER SERVICE SKILLS 3 (3-0)

This course is designed to provide students with a guide to the "soft skills" and the "self-management" skills needed to deliver excellent customer service and support in any industry. It provides the student with a better understanding of effective problem solving of customer complaints, increasing customer retention and loyalty, and improving verbal, nonverbal, and digital communications skills.

Prerequisite None

BUS 136 BUSINESS ETHICS 3 (3-0)

This course is designed to help business students improve their ability to make ethical decisions in business by providing them

with a framework that they can use to identify, analyze, and resolve ethical issues in business decision making. An emphasis is placed on the importance of understanding that individual values and ethics are important in this process. By studying business ethics, students begin to understand how to cope with conflicts between their personal values and those of the organization.

Prerequisite None

BUS 161 MICROSOFT ESSENTIALS 4 (3-3)

This course provides the student with a solid understanding and working ability with computers and office automation software. Basic and intermediate topics covered include Windows Operating System, Microsoft Word, Excel, Teams, Outlook, and other computer organization/operations. Students will obtain skills in all topic areas through hands-on examples and computer laboratory assignments.

Prerequisite None

BUS 165 OPERATIONS MANAGEMENT 3 (3-0)

This course addresses operations planning, scheduling, inventory and other resource management. Sections on time management and total quality management are included.

Prerequisite None

BUS 200 PROFESSIONALISM 1 (1-0)

Course topics will include employability and job retention skills, professionalism, ethical behavior, and personal habits. Students will be asked to present themselves in a positive and professional manner through the completion of various activities in the workshop. Students will have the opportunity to build their skills through the completion a personal portfolio that will prepare them for entering the workforce. Students will create a professional resume and cover letter that will be used to look for employment opportunities. Student will be exposed to sources to look for jobs, be required to research companies and practice interview techniques with the completion of mock interviews. Additionally, students will be exposed to self-analysis in developing their corporate persona. Students will learn the importance of personal hygiene, dressing and behaving for success. Telephone and email etiquette, stress management, time management, accepting diversity and dining etiquette will also be practiced in the course.

Prerequisite None

BUS 203 BUSINESS COMMUNICATIONS 3 (3-0)

A study of effective business communications with an emphasis on the planning and writing of business letters and reports. The course includes a review of English fundamentals.

Prerequisite ENG 101 or ENG 105

BUS 204 BUSINESS LAW 3 (3-0)

What constitutes a valid and hence enforceable contract? Topics covered are: capacity, accent, consideration, statute of

frauds, along with principal and agent relationships. This course is an introduction to the laws and regulations that impact business operations.

Prerequisite None

BUS 205 BUSINESS COMMUNICATIONS II 3 (3-0)

This course is designed to enable you to become a more competent communicator. This course will provide you with grounding in skills essential to human communication including: public presentation, organizational communication, small group communication, and interpersonal communication.

Prerequisite BUS 203

BUS 210 MARKETING 3 (3-0)

Social foundations, managerial marketing, economic conditions, planning, demand forecasting, market segmentation, determinants of consumer behavior, product concept of strategy, pricing strategy, and channel policy.

Prerequisite None

BUS 215 INTRODUCTION TO ENTREPRENEURSHIP 3 (3-0)

This course is a contemporary approach to entrepreneurship and small business management. Students follow the process of starting and managing a small business. Coverage includes foundations of entrepreneurship, building the business plan, putting the plan to work, and the ethical, legal, and regulatory environment.

Corequisites BUS 101 and ACC 150 or ACC 201

BUS 224 ORGANIZATIONAL BEHAVIOR 3 (3-0)

This course is a study of individual behavior and group dynamics in organizational settings. In addition to addressing traditional topics like motivation, leadership, teamwork, and communication, an emphasis is placed on more contemporary issues such as ethical considerations, especially with regard to an international business environment; organizational citizenship behaviors, managing employee behavior in virtual organizations and teams, and the new psychological contract between employees and organizations.

Prerequisite None

BUS 230 PRINCIPLES OF SUPERVISION 3 (3-0)

This course is designed to prepare students to be effective supervisors and leaders. It provides students with a better understanding of a wide variety of management functions, including planning, organizing. Students will have the opportunity to learn about various types of organizations through cases and other examples to enforce the learning concepts.

Prerequisite None

BUS 240 INTERNATIONAL BUSINESS 3 (3-0)

Designed to increase students' awareness of global markets. An overview of economic, social, cultural, and other variables affecting the international marketplace. Includes exchange rates, allocation of resources, import and export controls, and balance of payments.

Prerequisite BUS 101 or ECO 201

BUS 245 INTRODUCTION TO MANAGEMENT 3 (3-0)

This course is an introduction to the practical concepts used for organizational management. The course will cover the basic managerial process of making things happen; meeting the competition; organizing people, projects, and processes; and leading. Additional selected topics of interest to managers will also be examined.

Prerequisite None

BUS 250 BUSINESS SPECIAL TOPICS 1-4 VAR

Seminar courses exploring special topics relevant to business that will be offered on various semesters. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. Special topics courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

BUS 285 HUMAN RESOURCE MANAGEMENT 3 (3-0)

This course focuses on the challenges organizations face in building and maintaining a workforce that provides them with a competitive advantage. The course addresses the human resource areas throughout an employee's life cycle, including recruiting, training, compensation, performance management, and benefits.

Prerequisite None

BUS 296- WORKSHOP IN BUSINESS (vari) (.25-299 1)

From time to time, GCC offers workshops, seminars, and short courses of varying lengths and on a variety of business topics. Topics might include special interest training and updating for businesses, teleconference opportunities, and trend information for businesses. With the approval their advisor and of the Vice President of Student Services, students can apply credits from these workshops to certificate and degree requirements.

Prerequisite Permission of advisor and instructor

CAREER (CAR)

CAR 100 CAREER SELF AWARENESS & DEVELOPMENT 1 (1-0)

This course is designed to assist individuals in assessing strengths, weaknesses, helps, and hurdles in preparation for a

career. The course will also enhance persons in exploration of potential careers and planning for one's selected career. This course could benefit a person attempting to select a career or a person wanting to affirm a career choice.

Prerequisite None

CAR 103 CAREER AND LIFE SKILLS 2 (2-0)

This course is designed, through many proven strategies, to help students create greater success in career, college, and in life. By participating in class activities, focused conversations, and guided journal writings, students will dramatically advance their ability to improve their outcomes in career, college, and in life. This course focuses on students accepting personal responsibility, discovering self-motivation, mastering self-management, employing interdependence, gaining self-awareness, adopting lifelong learning, developing emotional intelligence, and staying focused through crisis.

Prerequisite must be a TriO SSS participant

CHEMISTRY (CHM)

CHM 101 GENERAL, ORGANIC, AND BIOCHEMISTRY 4 (3-3)

This course is intended for non-science/engineering majors and nursing students. It offers the opportunity to gain a better understanding of the world in which we live by exploring the principles of chemistry and the molecular basis of life. This course emphasizes the qualitative understanding of chemical principles covered in a freshman general chemistry course, with some application of these principles to quantitatively solving problems. Organic and biochemistry topics will be integrated where applicable. The accompanying laboratory offers reinforcement of the lecture topics by providing hands-on experience in working with chemicals and scientific instrumentation.

Prerequisite Technical Math placement
Recommended SCI 105/106 or 110 or One-year high school chemistry

CHM 102 GENERAL, ORGANIC, AND BIOCHEMISTRY II 4 (3-3)

This course will apply basic chemical principles learned in CHM 101 to the study of organic and biochemistry. It will begin with the nomenclature and physical and chemical properties of organic compounds and proceed to apply these principles to understanding the molecular basis of life, including the study of DNA, enzymes, metabolism, nutrition, body fluids, and xenobiotics. The accompanying laboratory offers reinforcement of the lecture topics.

Prerequisite CHM 101

CHM 151 GENERAL AND INORGANIC CHEMISTRY 5 (4-3)

This course provides a foundation for science majors and pre-professional students to understand the properties of

matter in terms of its atomic and molecular constitution. Emphasis is on the qualitative comprehension of chemical principles and the application of those principles to quantitatively addressing problems. Topics include chemical reaction types, including acid base and redox reactions, stoichiometry, atomic structure, periodic relationships, thermochemistry, chemical bonding and intermolecular forces, molecular geometry and solid structure. The accompanying laboratory offers reinforcement of the lecture topics and/or introduction of additional concepts by providing hands-on experience in working with chemicals and scientific instrumentation.

Prerequisite CHM 101 or One year of high school chemistry with a B or higher AND College Level Math Placement .

CHM 152 GENERAL AND INORGANIC CHEMISTRY II 5 (4-3)

A continuation of CHM 151. Topics include acid-based laws, phase changes, solutions, chemical kinetics, equilibrium, and thermodynamics, acid-base equilibria and buffers, electrochemistry, and nuclear chemistry.

Prerequisite CHM 151 (completed with a C or higher) and concurrently enrolled in MTH 110 or higher.

CHM 201 ORGANIC CHEMISTRY I 4 (3-3)

This course endeavors to explain what is currently known about the basic properties and reactions of organic matter. The chemistry of carbon compounds, including their structure, nomenclature, stereochemistry, preparation, reaction, properties, and analysis, will be introduced on a level appropriate for science, engineering, and pre-professional students. Reaction mechanisms will focus on the alkene and alkyne functional groups during the first semester. The accompanying laboratory offers hands-on experience in synthesizing, isolating, and analyzing a variety of organic compounds using some of the basic experimental techniques employed by the organic chemist.

Prerequisite CHM 151-152 (completed with a C or higher)

CHM 202 ORGANIC CHEMISTRY II 4 (3-3)

Continuation of Chemistry 201. The material covered will include substitution and elimination reactions, the chemistry of benzene, class I and II carbonyl chemistry, and an introduction of organometallic chemistry. Emphasis will be on reactions, multi-step synthesis, theory, and mechanisms. The accompanying laboratory offers hands-on experience in synthesizing, isolating, and analyzing a variety of organic compounds using some of the basic experimental techniques employed by the organic chemist. Theory of mass spectrometry, IR and NMR will be introduced during the laboratory period.

Prerequisite CHM 201 (completed with a C or higher)

COLLEGE EXPERIENCE (COL)

COL 100 COLLEGE AND CAREER READINESS 3(3-0)

This course will help students transition to college by providing key information and addressing important non cognitive skills. This course will familiarize students with the tools to build and implement important academic skills, learn how to study smarter, optimize time, learn proven test taking strategies, and set academic, transfer and career goals. Career preparation will include resume and cover letter writing, interview skills, and employability soft skills, along with focusing on overall student success and wellness.

Prerequisite None

COL 101 COLLEGE AND TRANSFER SUCCESS 1(1-0)

College Orientation activities are integrated into COL 101. This course will help incoming students transition to college by providing key information and addressing important non cognitive skills. This course will familiarize students with the college environment, provide students with the tools to build important academic skills, learn how to study smarter, optimize time, learn proven test taking strategies, and set academic, transfer and career goals.

Prerequisite None

COL 102 COLLEGE AND CAREER SUCCESS 1(1-0)

College Orientation activities are integrated into COL 102. This course will help incoming students transition to college by providing key information and addressing important non cognitive skills. This course will familiarize students with the college environment, provide students with the tools to build important academic skills, learn how to study smarter, optimize time, learn proven test taking strategies, and set academic and career goals. A comprehensive approach to career preparation will include resume and cover letter writing, interview skills, and employability soft skills.

Prerequisite None

COMMERCIAL MOTOR VEHICLE (CMV)

CMV 110 CLASS B STRAIGHT TRUCK BASIC CLASSROOM TRAIN 5 (5-0)

This course will focus on the knowledge and skills needed to become a qualified Class B straight truck professional driver. Topics will include, but not be limited to safety, FMCSA regulations, trucking industry practices, vehicle parts and components including air brakes, pre-trip inspection, speed and space management, cargo securement and documentation, axle weights, basic vehicle maneuvering, straight, offset, alley-dock backing using GOAL, shifting, turning, basic hazardous materials training, trip-planning, distracted driving, hours of service regulations and recording, emergency equipment, post-accident procedures, driver injury prevention, driver health and wellness, lifestyle, whistleblower

protection, CSA for drivers, general FMCSA driver qualifications, career portfolio development and interaction with law enforcement. This course will help students learn trucking industry practices and gain knowledge and skills to prepare for their Commercial Learner's Permit (CLP) state tests and subsequent Commercial Driver's License (CDL) skills state tests.

Prerequisite

- Be at least 18 years old (MI/WI); 21 years old—other states.
- Hold a valid driver's license.
- Must be able to pass U.S.–D.O.T. physical and U.S. – D.O.T. pre-employment drug screen.
- Must be able to meet FMCSA driver qualification requirements

Corequisite CMV 120

CMV 120 CLASS B STRAIGHT TRUCK NON-DRIVING PRACTICUM 4 (0-4)

This course will offer students hands-on experience in Class B straight truck nondriving activities. Topics will include, but not be limited to safety, FMCSA regulations, trucking industry practices, truck parts and components, pre-trip inspection procedures, air brakes, cargo securement, emergency equipment and procedures, axle weights, tires, and general maintenance. This course will help students learn about trucking industry practices, and gain knowledge and skills to prepare for the Commercial Learner's Permit (CLP) state tests and subsequent Commercial Driver's License (CDL) skills state tests.

Corequisite CMV 110

CMV 130 CLASS B STRAIGHT TRUCK DRIVING CLASS 7 (0-7)

This course will focus on driving Class B straight trucks. Activities and maneuvers will be performed in the driving range lot and on roadways and highways. Topics will include, but not be limited to safety, FMCSA regulations, pre-trip inspection procedures, truck parts and components, air brake checks, slow vehicle maneuvering, shifting, straight, offset and alley dock backing using GOAL, turning, cargo securement, roadway and highway driving including visual search and commentary driving techniques, city and rural driving, accelerating/decelerating, lane changes and merges, speed and space management, intersection safety, roadside stops, proper turning, obedience of signs and signals, and overall safe operation of the vehicle. This course will help students learn trucking industry practices and gain knowledge and skills to prepare for the Class B Commercial Driver's License (CDL) skills state tests.

Note: Students will be subject to random drug testing while in this class.

- Prerequisite*
- Be at least 18 years old (MI/WI); 21 years old–other states.
 - Valid Commercial Learner’s Permit (CLP)
 - Valid U.S.- D.O.T. /FMCSA Medical Card
 - Negative results pre-employment drug screen
 - Successful completion of CMV-120
 - Successful standing in CMV-110

Corequisite CMV 110

CMV 160 CLASS A TRACTOR TRAILER BASIC CLASSROOM TRAIN 5 (5-0)

This course will focus on the knowledge and skills needed to become a qualified Class A tractor-trailer professional driver. Topics will include, but not be limited to safety, FMCSA regulations, trucking industry practices, vehicle parts and components including air brakes, pre-trip inspection, speed and space management, cargo securement and documentation, coupling and uncoupling, axle weights, basic vehicle maneuvering, straight, offset, alley-dock backing using GOAL, shifting, turning, basic hazardous materials training, trip-planning, distracted driving, hours of service regulations and recording, emergency equipment, post-accident procedures, driver injury prevention, driver health and wellness, lifestyle, whistleblower protection, CSA for drivers, general FMCSA driver qualifications, career portfolio development and interaction with law enforcement. This course will help students learn trucking industry practices and gain knowledge and skills to prepare for their Commercial Learner’s Permit (CLP) state tests and subsequent Commercial Driver’s License (CDL) skills state tests.

- Prerequisite*
- Be at least 18 years old (MI/WI); 21 years old–other states.
 - Hold a valid driver’s license.
 - Must be able to pass U.S.–D.O.T. physical and U.S. – D.O.T. pre-employment drug screen.
 - Must be able to meet FMCSA driver qualification requirements

Corequisite CMV 170

CMV 170 CLASS A TRACTOR TRAILER NON-DRIVING PRACTICUM 4 (0-4)

This course will offer students hands-on experience in Class A tractor-trailer nondriving activities. Topics will include, but not be limited to safety, FMCSA regulations, trucking industry practices, truck parts and components, pre-trip inspection procedures, air brakes, coupling and uncoupling, cargo securement, emergency equipment and procedures, axle weights, tires, and general maintenance. This course will help students learn about trucking industry practices, and gain knowledge and skills to prepare for the Commercial Learner’s Permit (CLP) state tests and subsequent Commercial Driver’s License (CDL) skills state tests.

Prerequisite CMV 160

CMV 180 CLASS A TRACTOR TRAILER TRUCK DRIVING CLASS 7 (0-7)

This course will focus on driving Class A tractor-trailer vehicles. Activities and maneuvers will be performed in the driving range lot and on roadways and highways. Topics will include, but not be limited to safety, FMCSA regulations, pre-trip inspection procedures, truck parts and components, air brake checks, slow vehicle maneuvering, shifting, straight, offset and alley dock backing using GOAL, turning, coupling and uncoupling, cargo securement, roadway and highway driving including visual search and commentary driving techniques, city and rural driving, accelerating/decelerating, lane changes and merges, speed and space management, intersection safety, roadside stops, proper turning, obedience of signs and signals, and overall safe operation of the vehicle. This course will help students learn trucking industry practices and gain knowledge and skills to prepare for the Class A Commercial Driver’s License (CDL) skills state tests.

Note: Students will be subject to random drug testing while in this class

- Prerequisite*
- Be at least 18 years old (MI/WI); 21 years old–other states.
 - Valid Commercial Learner’s Permit (CLP)
 - Valid U.S.- D.O.T. /FMCSA Medical Card
 - Negative results pre-employment drug screen
 - Successful completion of CMV-170
 - Successful standing in CMV-160

Corequisite CMV 160

COMMUNICATIONS (COM)

COM 105 INTERPERSONAL COMMUNICATIONS 3 (3-0)

Introduction to the theory and practice of interpersonal communication. The focus of the course is on learning and practicing the skills needed to improve the quality of interpersonal communication.

Prerequisite None

COM 106 PUBLIC SPEAKING 3 (3-0)

Basic course in the field of speech. A laboratory-type student participation course with emphasis on learning-by-doing. An introduction is given on the nature, function, and scope of public speaking as a means of communication. Emphasis is placed on the preparation and presentation of speeches using the extemporaneous method. Includes informative and persuasive speeches, panel discussion, impromptu speaking, and pantomime. Selected speeches are audio and/or videotaped. The student speaker receives a written critique by the instructor for each speech presented. Occasionally peer group evaluation is also used.

Prerequisite None

COMPUTER INFORMATION TECHNOLOGY (CIT)

The primary content of CIT courses is directly related to a Computer Technology occupational program.

CIT 160 IOT - INTERNET OF THINGS 4 (4-0)

In this introductory college course, students will embark on a journey into the fusion of technology and connectivity that is transforming the way we interact with the world. Students will delve into the architecture of IoT systems, understanding how interconnected devices communicate and collaborate to collect and exchange data. Through hands-on projects and real-world case studies, participants will gain proficiency in circuits, deploying sensors, and microcontrollers.

Prerequisite None

CIT 170 PROGRAMMING I 4 (4-0)

An introduction to computer programming using the microcomputer. Students learn current techniques in structured program design and programming methodologies, along with basic programming algorithms, and methods of testing, debugging, and documenting computer programs.

Pre/Corequisite Keyboarding, MTH 103 or Equivalent

CIT 175 COMPUTER REPAIR I 4 (4-0)

Students will gain a fundamental understanding of supporting and troubleshooting and computer hardware with hands-on activities. Students will work in the Computer Repair Shop and solve real problems with real customer computers. In addition to the hands-on experiences in the shop, students will study the concepts of computer hardware and peripheral devices.

Prerequisite None

CIT 180 COMPUTER REPAIR II 4 (4-0)

This course will provide students with a comprehensive understanding of current PC operating systems in the areas of primary user and administration tasks as well as installation, configuration, troubleshooting, and network management. Student will work in the Computer Repair Shop. The focus is on planning and hardware selection for installing the operating system, setting up network connectivity, configuring user environments, and managing security.

Prerequisite CIT 175 or Permission of Instructor

CIT 190 PROGRAMMING II 3 (2-2)

This course provides an introduction to the fundamentals of the PHP programming language and string parsing and manipulation. The course is for the beginning programmer with previous programming experience. The focus is on the basics of PHP and string parsing. Student will learn string parsing techniques with real-world examples of today's applications.

Prerequisite CIT 170 or Permission of Instructor

CIT 200 INTRODUCTION TO JAVA PROGRAMMING 4 (3-3)

This course provides an introduction to the fundamentals of the Java Programming language. Topics include systematic development of algorithms and programs, programming style and design, techniques for testing, debugging, and documenting programs, the software cycle, and structured and object-oriented approaches.

Prerequisite None

CIT 250 IT FUNDAMENTALS 4 (3-2)

IT Fundamentals lays a foundation and introduces the basics in the I.T. world for the students. Students will be able to demonstrate how software and applications are made for a system as well as how the hardware of a computer and a network are built. Students will also understand the basics of networks, the internet, and the infrastructure behind them. Along the way, students will examine how programming languages work and how to secure data on all types of hardware and software. This course prepares the students to take the industry recognized CompTIA IT Fundamentals exam.

Prerequisite CSC 101 and CIT 160.

Recommended CIT 175

CIT 251 FUNDAMENTALS OF NETWORKING II: CYBERSECURITY 4 (2-4)

This course covers the necessary knowledge and skills to successfully implement and manage computers attached to a local area network in a small to medium size business. Emphasis is on network standards, terminology, planning, implementation and troubleshooting of Windows based business networks. Enterprise class security is emphasized. Integrating other operating systems into a Windows environment is also covered.

Prerequisite CIT 250

Recommended CIT 175

CIT 252 SERVER ADMINISTRATION 3 (3-0)

This course equips learners with the skills necessary to manage and maintain server systems. Topics covered include server operating systems, networking, hardware, virtualization, storage, security, and automation. By the end of the course, students will be able to install, configure, troubleshoot, and secure server environments.

Prerequisite CIT 251

CIT 256 ROUTING AND FIREWALLING 3 (3-0)

This course focuses on securing a business network and protecting the computing assets behind a firewall. Students will also learn how to implement public facing computing services like web sites, E-mail, Virtual Private Networks, and other public services securely. Stateful packet inspection, network address translation, and secure port forwarding are also covered.

Prerequisite CIT 252

CIT 257 WIRELESS NETWORKS 1 (1-0)

This course focuses on deploying, securing, and maintaining wireless business networks. Major topics include implementing wireless networks, providing public wireless access, and wireless network design. Students will learn how to perform site surveys, spectrum analysis, and how to maximize wireless network performance.

Prerequisite CIT 256

CIT 258 NETWORK THREAT DETECTION AND PENETRATION TESTING 2 (2-0)

This course focuses on computer network threats and how to identify and protect against them. Students will implement Intrusion Detection Systems that monitor networks for malicious activities or policy violations. Students will also perform penetration testing on their own networks to detect possible threats before they can be exploited.

Prerequisite CIT 257

CIT 260 HTML PROGRAMMING 2 (2-0)

This course provides students with the HTML programming skills necessary for web page and web site development. Both introductory and intermediate topics are covered. Students will progress by developing simple personal web pages and commercial web sites. All development will use the most current HTML standards.

Prerequisite None

CIT 265 JAVASCRIPT PROGRAMMING 2 (2-0)

This course requires knowledge of HTML and CSS and is an ideal transition from HTML to more advanced web technologies and Web 2.0 tools. As students explore the fundamentals of JavaScript, they gain an understanding of how to implement interactivity, special effects, and enhanced functionality in web development.

Prerequisite CIT 260

CIT 280 ADVANCED TOPICS IN COMPUTER SCIENCE 4(2-4)

Students can work as individuals or in groups to solve software development and design problems. Students may choose programming language based on previous class work and interests. This course will give students a broad overview of the software lifecycle and the development process.

It will provide students with an understanding of how software engineering helps to manage software development within a division of labor. Requires weekly reports and demonstration of skills through regular project checkpoints.

Prerequisite CIT 190 OR CIT 200

COMPUTER LITERACY (CPL)

CPL 100 COMPUTER LITERACY – INTRODUCTION 1 (0-1)

Provides an awareness of computers and the effects of this technology on our culture, our jobs, and our lives. Individuals will gain knowledge of Computer terminology and current capabilities, limitations, and potential of computers. Lab activities include introduction to word processing, spreadsheets, database management, computer graphics, and maintenance.

Prerequisite None

CPL 100 or equivalent experience is the prerequisite for all CPL 10x. Equivalent experience can be determined by answering YES to ALL the following questions:

- Have you ever used a computer before?
 - Are you comfortable using a keyboard?
 - Are you comfortable using a mouse?
 - Do you understand basic computer terminology?
Folders, Filenames,
 - Devices, Hardware, Software
 - Can you Create, Open, Print, and Save a file?
 - Can you manage computer files, folders, and disks?
 - Do you have any experience using Microsoft Windows 10?
-

CPL 101 COMPUTER LITERACY - DATABASE 1 (0-1)

Designed to develop the basic understanding and use of a database management system. Topics include those activities needed to design and create a typical database: the use of procedures to create, search, sort, and edit the database, and to create and print forms and formatted output.

Prerequisite CPL 100 or equivalent experience

CPL 102 COMPUTER LITERACY - COMPUTER GRAPHICS 1 (0-1)

This course is a beginning course in Computer Graphics for all types of students. It will include topics in type selection and manipulation, business orientated graphic applications, presentation graphics, and graphic arts techniques.

Prerequisite CPL 100 or equivalent experience

CPL 104 COMPUTER LITERACY - SPREADSHEETS 1 (0-1)

A hands-on introduction to spreadsheets using the Microsoft Excel software. Its main objective is to provide each student with a working knowledge of spreadsheet software.

Prerequisite CPL 100 or equivalent experience

CPL 105 COMPUTER LITERACY - WORDPROCESSING 1 (0-1)

An introductory computer literacy course designed to teach the student basic word processing skills on a microcomputer to create, edit, store, and print documents using Microsoft Word software.

Prerequisite CPL 100 or equivalent experience

CPL 108 COMPUTER LITERACY - POWERPOINT 1 (0-1)

An introductory course for the uses and functions of Windows presentations. Emphasis is on basic concepts and the fundamentals of creating useful presentations and application to practical business problems.

Prerequisite CPL 100 or equivalent experience

CPL 109 COMPUTER LITERACY – FrontPage 1 (0-1)

Course introduces basic World Wide Web concepts, including HTML and the elements of a Web page. The projects in the course illustrate essential Web page development concepts.

Prerequisite CPL 100 or equivalent experience

Students having taken a CPL 10x course must use the SAME SOFTWARE when progressing to a higher level CPL 11x course i.e. CPL 105 Introduction to Microsoft Word must be taken before CPL 115 Intermediate Microsoft Word

CPL 111 INTERMEDIATE DATABASE TOPICS 1 (0-1)

Develops the skills needed to effectively work with advanced database topics, procedures, and functions. Topics include: managing, design, and development of large databases; multiple databases; using special functions; creating command files; graphics screen display and debugging techniques.

Prerequisite CPL 101

CPL 112 DESKTOP PUBLISHING 1 (0-1)

Introduces students to Desk Top Publishing techniques and software. Aldus Pagemaker will be utilized to train students in various page design layout principles. Designed to educate students to the benefits of DTP, types of software, and basic designing principles.

Prerequisite CPL 100 or equivalent experience

CPL 114 INTERMEDIATE SPREADSHEET TOPICS 1 (0-1)

Continuation of CPL 104. Develops skills to manage advanced spreadsheet topics and includes advanced formulas and functions, macro development, printing and displaying graphs, and other advanced topics.

Prerequisite CPL 104

CPL 115 INTERMEDIATE WORDPROCESSING 1 (0-1)

Continuation of CPL 105. An intermediate level course in word processing using Microsoft Word. Applications include spelling

and thesaurus activities, macros, merging, and sorting. Advanced formatting and editing techniques are also covered.

Prerequisite CPL 105

CPL 121 ADVANCED DATABASE TOPICS 1 (0-1)

Develop advanced techniques used in database management including planning, building and testing database files, developing command level procedures, developing programming strategies, debugging programs, and developing programs for printing reports.

Prerequisite CPL 111

CPL 125 ADVANCED WORDPROCESSING TOPICS 1 (0-1)

Advanced computer literacy course designed to have the student apply the Microsoft Word features previously learned in job-like applications. Some advanced features not previously covered will be introduced.

Prerequisite CPL 115

CPL 200 INTRODUCTION TO COMPUTERS & MICROSOFT OFFICE 2 (2-0)

This course introduces students to the most important features that the latest version of Windows and Microsoft Office have to offer. Students use hands-on projects to learn the key features of Windows, Word, PowerPoint, Excel and Access.

Prerequisite None

CPL 196-299 WORKSHOP IN COMPUTER LITERACY VAR, .50-1

Customized training in topics related to any aspect of computer literacy, including database, spreadsheets, word processing, desktop publishing, and other areas.

Prerequisite CPL 100 or equivalent experience

COMPUTER SCIENCE (CSC)

CSC 101 COMPUTER SCIENCE 4 (4-0)

Students learn to design and evaluate solutions and to solve problems through the development of algorithms and programs while engaging with fun essential computing tools and multidisciplinary opportunities. (This is not a Programming course though it does include programming)

COSMETOLOGY (COS)

The primary content of COS courses is directly related to the Cosmetology occupational program.

COS 101 COSMETOLOGY LAB I 10 (0-22.5)

A laboratory course which provides practice in natural nail care, skin care, hair removal, hair and scalp analysis, shampoo and rinses, finger waving, basic wet and dry hairstyling techniques, hair sculpting, permanent waving and basic hair color. Students will be globally conscious in their design decisions when analyzing the diverse types of hair textures,

colors, face and body shapes. Students will learn to communicate effectively with a diverse clientele base and analyze and assess for each unique need and desire. Students will be assessed through verbal question and answers and written multiple choice tests at the completion of each subject. Students will also be examined through hands-on demonstrations at the completion of the course.

Prerequisite: None

COS 102 COSMETOLOGY THEORY I 6 (12.5-0)

This course is an in-depth theoretical approach to the various subjects an entry-level student will need to use as a building block for further learning. Professional development, sanitation, anatomy, electricity, chemistry, trichology, study of nails and skin are essential to promote a productive, creative student. Students will be able to relate and recognize the diverse learning and communication styles of each other and guests that enter the salon. Along with interactive lecture, numerous videos are used to create the connection between the text and the students own understanding. Students will be assessed at the completion of each subject through written exams. Students will also be assessed at the completion of the course with a cumulative exam.

Prerequisite: None.

COS 103 COSMETOLOGY LAB II 10 (0-22.5)

This course will continue with hands on practice in subject matter from COS 101 and COS 102. Lab practice to improve all professional skills and efficiency of services. Customer consultation and communication skills are to be improved and used daily. Students will expand upon their knowledge of diversity in hair textures and research hair types of all ethnicities when applying their knowledge of chemical relaxers. Students will apply their knowledge of makeup, creative color techniques, thermal styling, men's hair sculpting and acrylics to models and salon clientele. Instructor demonstrations and video presentations followed by supervised actual or mock practice sessions where students will be verbally assessed. Students will also be assessed through hands-on demonstrations at the completion of the course.

Prerequisite: COS 101, 102

COS 104 COSMETOLOGY THEORY II 6 (12.5-0)

This course encompasses the study of communication skills in relation to the cosmetology field, advanced skin theory in relation to makeup applications, including matching skin tones and colors of all ethnicities with cosmetics. Students will learn in-depth systematic approach to men's haircutting by the use of different tools such as shears, razor and clippers. A professional approach to salesmanship and the retail industry will expand students' understanding of clientele's spending habits. Students will discover chemical services such as chemical relaxing in relation to all ethnicities and hair types, highlighting, lowlighting and other creative color techniques. An intensive workshop of completed long hair designs will be

included in this course. Students will enhance nails with the use of acrylic product to create artificial nails. Students will be assessed at the completion of each subject, as well as a written cumulative exam at the completion of the course.

Prerequisite: COS 101, 102

COS 105 COSMETOLOGY LAB III 10 (0-22.5)

This course involves the hands on practice of the subjects previously learned from COS 101, and COS 103. The lab portion enables the student to practice all skills, focusing on efficiency of skills and communication skills. Students will understand and apply state and local laws and understand how they affect the salon industry. Students expand upon their knowledge of all hair types and ethnicities in the application of soft curl blow outs, pressing and marcelling. Students will gain greater understanding of color correction. Students will see the daily operation of a salon through the lens of salon management and understand the importance of the business structure. Live demonstrations and video presentations are followed by actual or mock practice sessions. Students will be assessed verbally and through hands-on examinations at the completion of each subject, as well as at the completion of the course.

Prerequisite: COS 101, 102, 103, 104

COS 106 COSMETOLOGY THEORY III 6 (12.5-0)

This course encompasses the theory of advanced lab practices. This course includes an in-depth study of color correction, marcel curling, pressing, wiggery, salon management and State Laws and Rules. Students will study the State of Michigan Laws and Rules and understand the relationship the state, salon and school have. Students will further understand the diverse hair textures through soft curl blowouts and the styling methods using the pressing and marcel method. Sensitivity in communication will be discussed during Wiggery Theory in the tactful approach to hair loss and balding. Students will complete a cover letter and resume, effectively communicating their strengths, work history and abilities. Students will also study the seasonal color concepts and differentiate skin tones, colors and the appropriate hair colors, makeup choices to be used for each person. Live demonstrations and videos are presented prior to lab assignments. Students will be assessed at the completion of each subject and a cumulative exam at the completion of the course.

Prerequisite: COS 101, 102, 103, 104

CRIMINAL JUSTICE/CORRECTIONS (CJC)

The primary content of CJC courses is directly related to the Criminal Justice occupational program.

CJC 101 INTRODUCTION TO CORRECTIONS 3 (3-0)

Enables students to understand the historical and philosophical development of corrections, legal dimensions of the correctional system, the correctional process, including probation, imprisonment, parole, the rights of prisoners, the

character of community-based corrections, the role of the correctional officer, the characteristics of the offender, and the expectation for the future of the corrections system.

Prerequisite None

CJC 102 CORRECTIONAL INSTITUTIONS/FACILITIES 3 (3-0)

Examines the purpose of prisons, treatment and rehabilitative programs, management and organization of correctional institutions, custodial care, safety and security, and prisoner rights.

Prerequisite None

CJC 103 CRIMINOLOGY 3 (3-0)

Examines normal versus criminal behavior, human development and criminal patterns, specific problems, and intervention strategies.

Prerequisite None

CJC 104 DIVERSITY AND INCLUSIVITY IN PUBLIC SAFETY 3 (3-0)

Examines the meaning and function of culture, the impact and meaning of discrimination, minorities, attitude formation and professional responsiveness.

Prerequisite None

CJC 105 LEGAL ISSUES 3 (3-0)

Examine constitutional law, law and the court process, U.S. courts, prisoners' rights, Section 42, 1983 concerns, and current topics.

Prerequisite None

CJC 110 INTRODUCTION TO CRIMINAL JUSTICE 3 (3-0)

Introduces students to the criminal justice system and its process. Examines the interrelationships of various agencies of the criminal justice system; police, courts, corrections and security, and explores careers in all areas.

Prerequisite None

CJC 206 INTRODUCTION TO HOMELAND SECURITY 3 (3-0)

This course covers the concepts of homeland security and the programs and actions being taken by government agencies, organizations, and the private sector. It examines the essential need for preventing terrorist attacks within the United States, decreasing vulnerability to terrorism, and minimizing the recovery from attacks that do occur.

Prerequisite None

CJC 207 EMERGENCY MANAGEMENT & PLANNING 3 (3-0)

This course covers the concepts of emergency management and crisis planning as an activity to anticipate, prevent, prepare for, respond to, and recover from various incidents. It examines the critical role emergency management and planning plays in protecting the social and economic stability of our communities.

Prerequisite None

CJC 210 THE LAW ENFORCEMENT FUNCTION 3 (3-0)

The course allows students pursuing a career in law enforcement to explore all aspects of police work. This includes the history of law enforcement, current methods used by law enforcement officers, and expectations placed on the police in today's society.

Prerequisite CJC 110 or Consent of Instructor

CJC 211 POLICE ETHICS 3 (3-0)

The course covers the history of law enforcement, ethical behavior, and moral commitment in standards. Ethical definition and ethical decision-making barriers are examined and applied to daily police work.

Prerequisite CJC 110

CJC 215 JUVENILE JUSTICE 3 (3-0)

The alternatives available to the juvenile offender after disposition of their case in court are examined. This includes probation, special alternative incarceration, foster care, adoption, halfway houses and prison terms.

Prerequisite CJC 101 or 110

CJC 225 COMMUNITY-BASED CORRECTIONS 3 (3-0)

Allows students to explore and understand the methods used to place and keep the convicted felons within the community. It will provide an overview of the history, administration, organization and utilization of those methods employed and what theories may be put into practice in the future.

Prerequisite CJC 101 or 110

CJC 235 CRIMINAL LAW 3 (3-0)

This course is designed for students to develop an awareness of criminal law. It will assist students in understanding both federal and state law, sentencing, and criminal activity. The students will be able to apply the law to various situations within the criminal law context and philosophy.

Prerequisite CJC 110 or Consent of Instructor

CJC 250 SPECIAL TOPICS 1-4

Special courses exploring special topics relevant to the field of Criminal Justice may be offered during select terms.. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. This course fulfills a social science requirement when taken for 3 or 4 credits. Special topics courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

CJC 295-299 CRIMINAL JUSTICE INTERNSHIP PROGRAM 2-6

This program is designed for criminal justice degree-seeking students and is intended to provide an opportunity to integrate classroom theory with practical experience and observation at a municipal, county, state, or federal criminal justice agency. The program may be taken during any semester.

Prerequisite CJC 101 and CJC 110

DRAFTING AND DESIGN (DWG)

The primary content of DWG 102 and higher course is directly related to the Mechanical Engineering Technology occupational program.

DWG 101 TECHNICAL DRAWING I 3 (4-0)

An introductory course in the development and application of fundamental drafting principles and skills as applied to engineering functions. Includes: proper use and care of drafting instruments, geometric drawing functions, lettering, freehand sketching, theory of orthographic projection, dimensioning auxiliary projection, sections, pictorial representation, and working drawings.

Prerequisite None

DWG 102 INDUSTRIAL DRAFTING 4 (2-4)

Creation of industrially acceptable drawings involving true position, geometric and dimensional tolerances, fasteners, welding, gears and cams. US and ISO standards will apply. The CAD System will be used in this course.

Prerequisite EGR 101 or EGR 103 and DWG 105

DWG 103 MATERIALS AND MANUFACTURING PROCESSES 2 (2-0)

A study of the materials, processes, and equipment used in manufacturing with focus on the primary and secondary processes used to produce finished goods. Local field trips provide experiences in manufacturing environments.

Prerequisite None

DWG 105 INTRODUCTION TO 2D AUTOCAD 4 (2-4)

This course is designed to introduce the student to the operation of a computer graphics system. The student gains hands-on experience at the graphic workstation while working on two- and three-dimensional drawing exercises. The course covers system orientation, graphics generation, graphics editing, text, dimensions, and data maintenance.

Prerequisite None

DWG 106 INTRO TO 3D SOLID WORKS 3 (2-2)

This course will make use of previously learned drafting & AutoCAD concepts. The subject matter will include the introduction of solid-modeling design concepts.

Prerequisite EGR 101 and DWG 105 or permission of the instructor

DWG 107 ADVANCED 3D SOLID WORKS 3 (2-2)

This course will make use of previously learned concepts from Solid Works Part 1. The subject matter will include the advanced techniques of solid-modeling design concepts.

Prerequisite DWG106 or permission of the instructor

DWG 108 MATERIALS & LEAN MANUFACTURING PROCESSES 4 (4-0)

This course will provide introductory basic instruction in the areas of industrial materials, manufacturing processes, and lean manufacturing strategies. Students will be introduced to material properties along with casting, molding, forming, separating, conditioning and finishing process methods. Lean manufacturing concepts will be introduced along with topics on business fundamentals. Local field trips will provide experiences in a manufacturing environment.

Prerequisite None

DWG 200 STRENGTH OF MATERIALS 3 (3-1)

This course will provide the student with a basic background of the vast field of strength of materials. Units include basic concepts and design properties of materials, direct stress, deformation, thermal stress, torsional shear stress, moments of inertia, pressure vessels, bending moments and shearing forces in beams, stress due to bending, shearing stresses and deflections of beams, columns, and connections. Specific problems will be assigned during the study of each unit of instruction. The course will concentrate on developing the ability to apply available methods, resources and technology to solve strength of materials design problems.

Prerequisite Completion of math requirement or instructor permission

DWG 201 ARCHITECTURAL DRAWING AND DESIGN 4 (2-4)

A course for designing of a residence and preparing architectural working drawings. Course includes design and construction principles and methods for residential construction. The CAD system will be used in this class.

Prerequisite EGR 101 and either DWG 105 or EGR 103 or Permission of Instructor

DWG 202 TOOL DESIGN 4 (2-4)

Class will include principles of jig and fixture design and die design related to the manufacturing sequence with special emphasis on the relationship between the design and fabrication process. The CAD System will be used in this class.

Prerequisite DWG 102

DWG 203 MACHINE DESIGN 3 (3-1)

This course will provide the student with a basic background of the vast field of machine design. Units include failure analysis, bearings, lubrication, shafts and couplings, gears, cams, belts and chains, clutches, brakes, fasteners, springs, and dynamic loading and balancing.

Prerequisite DWG 200

DWG 205 TECHNICAL ILLUSTRATION 3 (2-2)

The course involves an application of drafting practices oriented toward presentation or publication drawings. Exploded assemblies and architectural perspectives and renderings are included along with the process of graphic publication. The CAD system will be used in this class along with solid modeling software.

Prerequisite EGR 101 and DWG 105

DWG 206 GEOMETRIC DIMENSIONING & TOLERANCING (GD&T) 3 (2-2)

This course will provide a foundational understanding and interpretation of mechanical drawings using linear dimensions, tolerancing, and GD&T in their designs and inspections of their parts.

Prerequisite DWG 102 pr permission of instructor

DRAMA (DRA)**DRA 101 INTRODUCTION TO THEATRE 3 (3-0)**

A study of the principles of theatrical production and appreciation of theater, structure of written drama and the forms and styles of theater in both literature and performance.

Prerequisite None

DRA 102 INTRODUCTION TO THE ART OF THE MOVIES 3 (3-0)

An introduction to the social significance of the cinema through the decades showing how film reflects the historical, moral and intellectual atmosphere of its day.

Prerequisite None

DRA 202 FILM APPRECIATION 3 (3-0)

An introductory course tracing the development of a variety of film genres not covered in DRA 102. Representative movies are analyzed for plot, acting, directing, and cinematic technique.

This course fulfills a humanities requirement.

Prerequisite None

DRA 250 THEATER ARTS SPECIAL TOPICS 1-4 VAR

Seminar course exploring special topics relevant to the field of theater arts may be offered during select terms. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. This course fulfills a humanities requirement when taken for 3 or 4 credits. Special topics courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

EARLY CHILDHOOD EDUCATION (ECE)

The primary content of ECE courses is directly related to an Early Childhood Education occupational program.

ECE 100 INTRODUCTION TO CHILDCARE & EARLY CHILDHOOD EDUCATION 3 (3-0)

An introductory course covering historical prospective, philosophies, current issues and practices, models and curriculum of preschool, kindergarten, and primary programs. Includes approaches for the education of young children with special needs.

Prerequisite None

ECE 110 DEVELOPMENTALLY APPROPRIATE PRACTICES FOR EARLY CHILDHOOD EDUC. 3 (3-0)

Focuses on developmentally appropriate practices which encourage children to become creative, independent, and successful. Subjects include definitions of play, creating curriculum plans and schedules, designing a supportive environment, safety, nutrition, physical, emotional, social, and cognitive development.

Prerequisite None

ECE 111 WORKSHOP IN EARLY CHILDHOOD PRACTICE .50-3 VAR

Provides training in an array of practices appropriate for the young child. Topics include such areas as nutrition, games, music, movement, discipline and other areas of interest to educators and childcare providers.

Prerequisite None

ECE 195 PRACTICUM I EARLY CHILDHOOD EDUCATION 3 (1-6)

This course involves observation, social interaction and recording of preschool children's development. Provides an opportunity to apply the theories and practices previously learned in the classroom. Emphasis on the developmentally appropriate activities and competency as a childcare provider.

Prerequisite Permission of Instructor or a cumulative CPA of 2.3 in ECE classes totaling 6 credits or more

Contact Hours 10 1/2 Hours Instruction & 90 Hours of required fieldwork in Gogebic or Houghton County in the Spring semester.

ECE 210 CHILD GUIDANCE 3 (3-0)

Explores the principles of guiding children through the early childhood and primary years. The emphasis is on the child's social development. Strategies that enhance the child's self-esteem and consequently that increase self-discipline will be taught through role playing and small group activities.

Prerequisite None

ECE 220 INFANT & TODDLER CARE 3 (3-0)

Emphasis is on the specialized care of infants and toddlers between birth and thirty-six months of age. This emphasis includes developmental stages and appropriate practices, daily care, feeding, and guidance.

Prerequisite None

**ECE 230 CREATIVE METHODS FOR TEACHING 3 (3-0)
YOUNG CHILD**

Prepares students to work with young children in a variety of creative activities. Art, music, drama, science, math, and environmental awareness are some of the topics covered. Emphasis shall be on acquiring methods and skills which shall enhance a child's creativity, imagination, and curiosity.

Prerequisite None

**ECE 240 LANGUAGE & LITERACY FOR EARLY 3 (3-0)
CHILDHOOD EDUCATION**

This class will help students become familiar with teaching strategies and techniques that support the language and literacy development of young children. The topics of study will include: language development, reading readiness, print rich environments, storytelling through puppets and flannel boards, and children's literature. Students will become proficient at helping children develop both expressive and receptive language skills.

Prerequisite None

ECE 290 MANAGING A CHILD CARE CENTER 3 (3-0)

Focuses on the design and operation of a preschool center. Includes assessment of needs, schedules, health and safety services, licensing regulations, personnel management, equipment purchasing, financing, and professionalism.

Prerequisite Permission of Instructor

**ECE 295 PRACTICUM II IN EARLY CHILDHOOD 3 (3-0)
EDUCATION**

This course is utilized to practice skills learned throughout prior coursework in the program. Students will be required to participate in 90 hours of fieldwork within the preschool classroom. They will also be responsible for attending 5 seminars, where they will receive assignments and be given the opportunity to discuss their various experiences.

Prerequisite Permission of instructor of a cumulative CPA of 2.3 in all ECE classes. Must have completed ECE 210 Child Guidance with 2.3 GPA.

Contact hours 10 1/2 hours of instruction & 90 hours of required fieldwork in Gogebic or Houghton County in the Spring semester.

ECONOMICS (ECO)

ECO 101 AMERICAN ECONOMY 3 (3-0)

This course will improve the economic literacy of our citizens through a survey of both macro and microeconomics. By

examination of recent historic events and by the study of theories and principles that explain economic events that shape their lives. These events include inflation, unemployment, national income, money and banking, government, prices and output, monopoly, wages and profit, international trade, and economic growth. *This fulfills a social science requirement for non-business majors only.*

Prerequisite None

ECO 201 MACROECONOMICS 3 (3-0)

This course is designed to provide a study of aggregate behavior; how consumers, businesses, and society choose, and what determines the level of output that our economy chooses. Topics include GNP, GDP, unemployment, inflation, monetary policy, fiscal policy, & national debt. *This fulfills a social science requirement.*

Prerequisite None

ECO 202 MICROECONOMICS 3 (3-0)

The Microeconomics course is designed to provide a study of individual markets in our economy. We will examine price-output behavior in purely competitive, oligopolistic, monopolistically competitive, & monopolistic markets. Other topics reviewed in this course include - resource markets, concentration ratios, labor & unions, pollution, agriculture, & international trade. In summary, our studies will emphasize how households and firms make decisions & interact within the economic markets in which we live. *This fulfills a social science requirement.*

Prerequisite None

EDUCATION (EDU)

**EDU 104 WORKING WITH SPECIAL 3-6
POPULATIONS**

This is an Internet-based course which covers an overview of the field of special education, including characteristics, programs, adaptive teaching methods, and supporting research.

Prerequisite None

EDU 201 INTRODUCTION TO EDUCATION 3 (3-0)

This program enables the student to explore a career in education. In addition to providing background information on the organization, control, supervision, financing and professional aspects of American schooling, various assessment and observational activities have been designed to determine the individual's potential for teaching.

Prerequisite None

EDU 202 AFFECTIVE TEACHING 3 (3-0)

An introduction to the concepts of social emotional learning and trauma-informed practices as they impact the PK-12

learner, focusing on strategies that reduce the impacts of trauma.

Prerequisite EDU 201

EDU 250 EDUCATION SPECIAL TOPICS 1-4 VAR

Seminar courses exploring special topics relevant to education that will be offered on various semesters. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. This course fulfills a social science requirement when taken for 3 or 4 credits. Special topics courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

EDU 290 COOPERATIVE WORK EXPERIENCE 10 (0-20)

A 300-hour cooperative work experience that allows the student to meaningfully engage in classrooms through observation and actively participating in classroom organization and instruction. The cooperative work experience is a coordinated team effort between GCC, the student and a K-12 classroom teacher. Regular assessment and evaluation is an integral pillar to the success of cooperative experience.

Prerequisite EDU 201 & EDU 202, both completed with a C or higher.

Corequisite EDU 290A

EDU 290A TEACHING SEMINAR 3 (3-0)

A seminar course that explores the foundational knowledge and principles of best practice, mindfulness, self-reflection, and decision-making to honor the public trust and dignity required of a professional educator.

Prerequisite EDU 201 & EDU 202, both completed with a C or higher.

Corequisite EDU 290

ELECTRIC LINE TECHNICIAN (ELT)

The primary content of ELT courses is directly related to the Electric Line Technician occupational program.

ELT 102 ANALYSIS OF THE PUBLIC UTILITY INDUSTRY 3 (3-0)

Course addresses the history and legacy of public utilities in the United States as they have existed for more than 100 years. In addition, this course presents the most up-to-date information available on utility operations and the changing utility environment. Special emphasis is placed upon the foundations of utility regulation, the complexities of delivering gas and electric services, and an analysis of the utility's income and expenditures.

Prerequisite None

ELT 103 UTILITY LABORATORY & FIELD EXERCISES I 3 (3-0)

This course is an introduction to construction, operation, and maintenance procedures in the electric utility industry. The course will emphasize day-to-day operation of the electric utility including the safe and proper procedures for construction of new facilities and operation and maintenance of existing facilities. Field trips to operating entities will provide a firsthand look at various segments of the electric utility business. Lab and field exercises will focus on safety, operating systems and construction practices and procedures. Specific subject matter to be covered includes unloading, hauling, erecting and setting poles, guying poles, insulators, cross arms and conductor supports, line conductors, electric power system overview, electrical units, alternating current, three-phase circuits, circuit protection, working in an electrical environment, and installing and removing protective grounds. Other topics to be covered will include map reading, property descriptions, design considerations, regulatory review, and the one-call system. Some class sessions may consist of informational lectures provided by experts in their field.

Prerequisite None

ELT 104 CAREERS AND APPRENTICESHIPS 2 (2-0)
TBD

Prerequisite None

ELT 110 SCIENCE FOR THE UTILITY INDUSTRY 3 (3-0)

An introduction to basic electricity, this course begins with the study of direct current (DC) and ends with the study of alternating current (AC). DC topics covered include Electron flow, Ohms Law, Series circuits, parallel circuits, power, high and low voltage, and magnetism. AC topics covered include significance of AC-voltage, wave form analysis, inductive reactance, capacitive reactance, impedance, AC power, and meters.

Prerequisite None

ELT 203 UTILITY LABORATORY & FIELD EXERCISES II 4 (4-0)

A continuation of ELM 103. Students will gain further knowledge in the subject areas of supplying quality power, conductors and cable, transformers, street lighting systems, revenue metering and line rigging. The line rigging segment will cover some basic principles of physics, use of formulas in line construction and how to safely lift and move field equipment using ropes, knots, splices, blocks, and slings. The laboratory segment of this course will consist of experiments based on Ohms law including resistance, voltage and current in circuits with emphasis on the use of a digital multi-meter to measure resistance, voltage and current. Other experiments will include analysis of circuits with capacitors, diodes, and transistors.

Prerequisite None

ELT 206 CLIMBING AND KNOTS/RIGGING 7 (0-7)

An introduction to pole climbing, pole top construction and load lifting and handling. This course will emphasize safe and

proper use of pole climbing equipment, including inspection and maintenance of pole climbers, body belts, and other safety related equipment. Pole top construction will include actual construction of utility plant under un-energized conditions. Students will learn how to splice rope, tie knots, and use rope to life tools and equipment necessary for the construction of new and maintenance of existing overhead electrical lines.

Prerequisite None

ENGINEERING GRAPHICS (EGR)

The primary content of EGR courses is directly related to the Mechanical Engineering Technology occupational program.

EGR 101 ENGINEERING GRAPHICS 2 (1-2)

The course includes the following units of instruction: Proper use and care of drafting instruments, triangles, scales, geometric curves; drawing geometry; freehand lettering; technical sketching; theory and principles of orthographic projection; basic and precision dimensions; primary auxiliary projection; sections; pictorial representation; and working drawings.

Prerequisite None

EGR 102 DESCRIPTIVE GEOMETRY 2 (1-2)

In this course, the student will learn to solve engineering problems graphically by using the relationship between points, lines, planes, and curved surfaces. The CAD system will be used with special emphasis on engineering applications.

Prerequisite EGR 101, DWG 105, or EGR 103

EGR 103 CAD CONCEPTS 2 (1-2)

This course is designed to familiarize the student with CAD concepts such as the drawing editor, graphic entities, editing capabilities, display manipulation, symbol and attribute creation, layer and output. 2D and 3D techniques will be employed.

Prerequisite None

ENGLISH (ENG)

Courses listed with numbers below the 101 level are designed to assist the student in preparing for college level coursework. They may be recommended on the basis of placement assessment scores and/or referral by faculty advisors, counselors, or the Vice President of Student Services. If one of these courses is recommended for a student, the student has three options:

- The student may elect to take the course.

- The student may demonstrate, through testing, his/her competency in the subject matter. (The student may test out of the course.)
- The student may elect not to take the course and sign out of it. If the student signs out of the course, the Gogebic Community College guarantee is void for that student.

ENG 100 ACCELERATED LEARNING PROGRAM 3 (3-0)

This course is a co-requisite of ENG101 for those students assessed at a level below college-level English. This class emphasizes active learning, improved reasoning skills, engaged reading, and effective editing skills to maximize the likelihood of success in ENG 101. This developmental level course does not transfer to other institutions.

This course does not count toward an Associate of Arts or Associate of Science degree.

Prerequisite None

ENG 101 ENGLISH COMPOSITION I 3 (3-0)

This course focuses on the writing and revising of expository essays, concentrating on the writing process, identifying, and responding to different audiences and rhetorical situations, and understanding the conventions of format and structure. Critical reading and thinking skills are emphasized.

Prerequisite Appropriate placement by assessment scores or ACT/SAT

ENG 102 ENGLISH COMPOSITION II 3 (3-0)

This course focuses on the writing, researching and revising of expository essays and writing projects. The second of a two-course sequence, it concentrates on the writing process, identifying and responding to different audiences and rhetorical contexts, and understanding the conventions of format and structure. Skills in essay development and in critical writing, reading, and thinking are emphasized. Students write analytical and argumentative essays, including an academic research paper.

Prerequisite Grade C or higher in 101 or 111

ENG 105 TECHNICAL ENGLISH 3 (3-0)

The focus of this course is on expository writing for utilitarian purposes in the business and technical fields. Emphasis is on developing a clear and concise style of presentation based on one's audience and purpose. Course assignments include, among others, a set of instructions, various kinds of abstracts based on readings, a comparison-contrast leading to a recommendation, basic business letters and a resume.

Prerequisite None

ENG 201 ENGLISH LITERATURE (Beginnings to 18th Century) 3 (3-0)

An intensive study of selected works from the major periods of English literature. Emphasis is placed on literary analysis to show how the dominating philosophy, attitude or mood of each period is reflected in the works themselves. Its main objective is to furnish the student with a literary background of the development of Western culture. Includes lecture, commentary, discussion, and analytical writing. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 202 ENGLISH LITERATURE (18th, 19th, 20th century) 3 (3-0)

A continuation of English 201. Includes the reading of supplementary works. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor FE

ENG 211 AMERICAN LITERATURE (1600-1860) 3 (3-0)

The course enables the student to conduct an in-depth study of the works of five or six of the great Master of Early American literature. The study is based on a series of paperback collections and novels. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 212 AMERICAN LITERATURE (1860 to the Present) 3 (3-0)

The course enables the student to conduct an in-depth study of the works of five or six of the great Master of Early contemporary poetry and prose (1840-1950) and acquaints the student with late contemporary poetry and prose (1950 to date). The study is based on a series of paperback collections and novels and contemporary periodicals. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor FO

ENG 221 INTRODUCTION TO LITERATURE 3 (3-0)

An introduction to poetry, drama, fiction, and non-fiction. Analyses of classic and contemporary works help the student to have a better appreciation and understanding of literature. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 222 SPECIAL TOPICS IN LITERATURE 3 (3-0)

The study of literature that has been grouped by era, nation, and/or content. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. This course fulfills a humanities requirement when taken for 3 or 4 credits. Special topics courses are considered general transfer

electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite Placement in ENG 101 or permission of instructor

ENG 223 MODERN LITERATURE 3 (3-0)

This course focuses on the poetry and prose of modern writers (1950- present). The study is based on collections of works of established modern writers and literary journals that showcase the works of emerging modern writers. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 224 WOMEN IN LITERATURE 3 (3-0)

This class will explore the changing perspectives of women through the close reading of writings by and about women in a variety of genres. Topics considered are women's relationship to literary, philosophical, and social movements; the experience of women in various social, political, and cultural landscapes; and the impacts of race, class, and gender in the construction of women's identities and voices. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 225 MYTHOLOGY 3 (3-0)

The course focuses on the mythology of Greece and Rome, traditionally called "Classical" mythology, with the added component of a detailed analysis of the "Hero" myth as it appears in a variety of cultures around the world. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor FO

ENG 226 WORLD LITERATURE 3 (3-0)

This course introduces students to important texts in world literatures from antiquity to the present, and may focus on a specific culture, era, theme, or genre. Students will be introduced to novels, poetry, and drama from outside the Anglo-American literary tradition, focusing on literature translated into English from other languages, as well as works written in English from non-Western authors. Through the literature of writers from around the world, students can compare their lifestyles, values, worldviews, perceptions, and experiences to those of people from different cultures, giving students a broader and deeper understanding of and respect for those cultures.

Texts studied will derive from Europe, the Americas, Asia, Africa, and/or the Caribbean and Australia. Course content may vary from semester to semester. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 228 THE LITERATURE OF FANTASY AND SCIENCE FICTION 3 (3-0)

A study of the genres of fantasy and science fiction. The course will survey the history of fantasy and science fiction with an emphasis on major contemporary authors. The course will examine the art of storytelling and worldbuilding in fantasy and science fiction to evoke a “sense of wonder.” Students will also explore the wide variety of sociological, political, and scientific themes inherent to fantasy and science fiction literature, such as utopian/dystopian worlds, race, class, gender and identity formation, surveillance, and artificial intelligence. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 229 BLACK LITERATURE 3 (3-0)

This course will examine the literary and cultural contributions of African Americans from colonial times to present through written, oral, and visual forms of expression, such as poetry, fiction, drama, nonfiction, film and music. It will focus on specific literary movements, including the literature of slavery and resistance, Harlem Renaissance, Black Arts Era and the newest modes of cultural expression. *This course fulfills a humanities requirement.*

Prerequisite None

ENG 230 LITERATURE FOR CHILDREN 3 (3-0)

A survey of prose and poetry suitable for use in the elementary classroom. Work with the presentation and selection of materials is designed to give experience with children's books that will aid in the stimulation and guidance of individual recreational reading. Includes student participation involving the reading of selections from children's literature in simulated and actual classroom situations. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor S

ENG 231 READING SHORT FICTION 3 (3-0)

This course will examine the genre of the short story, especially its traditional and innovative narrative techniques, its various ways of constructing authorial point of view, and its mode of plot compression. In this investigation into the creation, understanding, and audience of short fiction, students will discuss and analyze short fiction—its components, appeals, and conventions. Subjective interpretation from class members will be paired with academic literary analyses, critical essays, and exercises in critical analysis. *This course fulfills a humanities requirement.*

Prerequisite None

ENG 240 CREATIVE WRITING 3 (3-0)

A survey of the creative process and the resulting literary art. Structured around contemporary and classic literary works,

discussions with available contemporary writers, a study of literary techniques, and an analysis of the psychology of creativity (motivation), the course will encourage students to produce original compositions of short stories, poetry, and/or essays. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 244 CREATIVE WRITING: FICTION 3 (3-0)

Creative Writing: Fiction is a writing course that focuses, specifically on fiction. Students will read, study, and analyze the literary techniques and craft of great fiction writers. In structured exercises, they will practice strategies for creating character, plot, dialogue, setting, symbolic and figurative imagery, as well as other key narrative elements. To this end, students will read several exemplary texts of a variety of fiction form and craft. Students will also create their own short fiction and participate in writing workshops. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 245 CREATIVE NONFICTION 3 (3-0)

This course provides an introduction into the writing genre of creative nonfiction by focusing on the basic principles of reading and writing creative nonfiction. Students will read and study works by prominent writers of creative nonfiction. Drawing on the course readings for models and idea development, students will produce creative nonfiction works such as the personal essay, the memoir, nature writing, and literary journalism. Additionally, students will construct a writing portfolio of short works in creative nonfiction. Classroom activities will include discussion of the various modes and approaches used in creative nonfiction, analysis of the major creative nonfiction writers, and the writing and revision of student nonfiction works. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 246 CREATIVE WRITING: POETRY 3 (3-0)

Creative Writing: Poetry is a writing course that introduces students to the nature and function of poetry's fundamental components (image, sound, interplay of concepts). Students will read, study, and analyze the techniques and craft of historical and contemporary poets to gain a sufficient grasp of the nature and variety of poetry. Students will work within a workshop atmosphere, providing and accepting critiques of their own work and the work of others. *This course fulfills a humanities requirement.*

Prerequisite Placement in ENG 101 or permission of instructor

ENG 260 READING AMERICAN POPULAR CULTURE 3 (3-0)

This course will investigate the relationship between American culture and popular culture art forms. Students will investigate the poetics of pop culture artifacts, such as literature, television, and film, as well as emerging media forms, such as the meme, web videos, and smart phone apps. Beginning with a theoretical approach to cultural studies, students will then investigate expressions of cultural identity through a reading of the pop culture artifacts. The course schedule will follow a historical trajectory of American popular culture since WWII. Students will study significant events that contributed to generational distinctions (e.g. WWII and the Greatest Generation, 9/11 and the Millennials), and the popular culture that shaped, defined, and emerged from these generations. The final project will be a multimedia essay/presentation that will require students to analyze recent popular cultural artifacts in an attempt to identify and trace emerging cultural values.

Prerequisite Placement in ENG 101 or permission of instructor FE

ENG 270 DOCUMENT DESIGN FOR PRINT AND WEB 3 (3-0)

English 270 is an introduction to the techniques of visual communication in both print and digital design. A variety of design software will be used to practice typography, color theory, layout, and image manipulation. Emphasis will be placed on developing the vocabulary necessary to assess design strategies and solve problems in visual rhetoric.

Prerequisite None

ENVIRONMENT (ENV)

ENV 101 HUMAN ECOLOGY 3 (3-0)

An analysis and survey course specifically designed to develop students' awareness of their relationship to their biophysical environment, including basic knowledge concerning the environment and associated environmental problems. Environmental problems will be addressed from scientific, economic, social, and political perspectives, with emphasis on solutions to these problems.

Prerequisite Recommended ENG 101

Corequisite Recommended ENG 101

FORESTRY (FOR)

FOR 105 NATURAL RESOURCES SEMINAR 1 (1-0)

This course introduces students to the various careers within forestry, conservation, applied ecology, environmental science, and wildlife ecology that represent specialties within natural resources.

Prerequisite None

FOR 107 FIELD TECHNIQUES 1 (0-3)

Equipment and techniques used to measure forest ecosystem attributes and perform fieldwork. Topics include field safety,

land measurement and navigation, establishment of sample locations, measurement of attributes of individuals and groups of trees, vegetation, and other organisms.

Prerequisite None

FOR 112 VEGETATION OF NORTH AMERICA 4 (2-4)

Identification of trees and shrubs. Study of seed dispersal, dormancy, and community ecology, with an emphasis on trees. Systematic study of the major forested vegetation types of North America.

Prerequisite None

FOR 113 FOREST ECOLOGY 3 (2-3)

Environmental factors and plant and animal characteristics which control composition, structure, and function of forest ecosystems. Emphasis on how ecosystems change across space and time and knowledge needed to sustainably manage forest ecosystems for social, economic, and ecological benefits.

Prerequisite FOR 112

Corequisite FOR 107

FOR 200 SUMMER INTERN EXPERIENCE 2 (0-2)

This course provides structure to a work experience with an agency or company related to this career field. This internship will offer the opportunity for the student to further develop on-the-job experience related to this field of study and enhance future career options.

Prerequisite Recommended sophomore status

FOR 203 SOIL SCIENCE 4 (3-3)

Introduction to the chemical, physical, and biological properties of soil. The student will gain a basic understanding of soil physical, chemical, and biological properties and how they relate to forest management and plant ecology.

Prerequisite Recommended HS Chemistry.

FOR 204 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS FOR NATURAL RESOURCE MANAGEMENT 4 (3-3)

The fundamentals of GIS and its application to natural resource management. Spatial data, its uses and limitations are evaluated. Students work extensively with the ARCGIS software package. Each major component of a GIS will be explored.

Prerequisite Computer proficiency

FOR 207 TIMBER HARVESTING 2 (1-3)

This course is designed to provide you with background and basic information regarding the removal of timber from the forest and the associated ecological, aesthetic, and financial impacts.

Prerequisite None

FOR 209 MULTI-RESOURCE ASSESSMENT 3 (1-4)

Develops a basic proficiency in the application of multiple-resource measurement techniques. Gain familiarity with the application of individual tree and landscape measurements as well as estimation of growth, sampling techniques, computational procedures, and mapping procedures commonly used in forest and land management. To gain an applied knowledge of inventory techniques and their application to the sustainable management of natural resources.

Prerequisite FOR 107, FOR 113, FOR 210, and MTH 211
Recommended Sophomore Status

FOR 210 BIOMETRICS AND DATA ANALYSIS 4 (3-3)

Sampling design, implementation and analysis for inventory and monitoring of attributes of stands, forests, and landscapes. Includes computing skills for data entry, storage and analysis and application of statistical techniques to answer questions about ecological data.

Prerequisite MTH 108 or MTH 110 and MTH 211

FOR 221 PRACTICE OF SILVICULTURE 4 (2-4)

Methods of controlling the establishment, growth, composition, health and quality of forests and woodlands to meet the diverse needs and values of landowners and society on a sustainable basis. To gain an understanding of how to use silvicultural practices to meet multiple resource management objectives.

Prerequisite FOR 112, FOR 107, FOR 113
Recommended MTH 211

FOR 226 WILDLIFE HABITAT 3 (2-3)

Understand the ecological basis for management of forest wildlife and how forest management influences wildlife populations.

Prerequisite None

FOR 227 LAND MEASUREMENT AND GPS 1 (0-3)

Introduces field measurements and computations involved in determining direction, distance, and area. Covers the hand compass, pacing, and use of GPS, including differential correction. Integration of GPS data with GIS is emphasized. Demonstrate a basic level of skill and confidence in carrying out field assignments that may be required of an entry level natural resources technician.

Prerequisite FOR 107

Corequisite Recommended FOR 207

FOR 228 FOREST HEALTH 3 (2-3)

Drawing on examples from the Great Lakes region, and other parts of North America, this course will consider which type of insects and pathogens attack our trees and forests, how they interact.

Prerequisite Recommended FOR 112

FOR 243 INTRODUCTION TO WILDLAND FIRE 3 (3-0)

An introduction to wildland fire based on an understanding of fuel properties, fire behavior, ecological effects, and management.

Prerequisite None

GEOGRAPHY (GEG)

GEG 101 INTRODUCTION TO GEOGRAPHY 4 (4-0)

The course deals mainly with elements of the natural landscape including: earth sun relationships, weather, climate, soils, natural vegetation, and landforms, with related major activities, and their cultural landscape manifestations. *This fulfills a social science requirement.*

Prerequisite None

GEG 111 WORLD REGIONAL GEOGRAPHY 3 (3-0)

A survey of the world's nations and geographic regions. Each region will be discussed in connection with population, natural environment, size and location, economy, political situation, problems, and potentialities. *This fulfills a social science requirement.*

Prerequisite None

GEOLOGY (GLG)

GLG 101 FUNDAMENTALS OF EARTH SCIENCE 4 (3-2)

Introduction to the principles of geology, oceanography, meteorology, and climatology. The laboratory experience consists of working with weather and topographical maps, rocks, minerals and fossils. Field trips may be required.

Prerequisite None

GLG 102 PHYSICAL GEOLOGY 4 (3-3)

A study of the earth's crust and its constituents, the various geological processes of diastrophism, plate tectonics, and erosion. Lab work includes study of common rocks and minerals, aerial photo, topographic and geological map interpretation.

Prerequisite None

GLG 150 FIELD GEOLOGY 1-4 VAR

Studies in rocks, minerals, fossils, and landforms in applied field situation. Specimen collection and outdoor photography are an integral part of the course.

A report will be required.

Prerequisite Permission of Instructor

HEALTH EDUCATION (HED)

The primary content of HED courses is directly related to an Allied Health/Business occupational program.

HED 103 BASIC LIFE SUPPORT-HEALTH CARE PROVIDERS .5 (.5-0)

The Basic Life Support Healthcare (BLS) Provider course is designed to teach cardiopulmonary resuscitation (CPR) skills to healthcare professionals. This course includes adult, child, infant CPR, and foreign- body airway obstruction. Proper operation of an automated external defibrillation (AED) will be required. Successful completion of a written and practical exams is required to obtain a two-year certification from the American Heart Association. This course is intended for healthcare professionals.

Prerequisite None

HED 105 INTRODUCTION TO MEDICAL TERMINOLOGY 2 (2-0)

An introduction to medical terminology designed to increase familiarity with terms used in medicine learning root words, prefixes, suffixes, and combining forms. This course will help you learn the terms that describe very specific healthcare conditions or procedures. The terminology will be presented and analyzed as it corresponds to body systems. Students will learn to examine unknown words and identify commonly used abbreviations.

Prerequisite None

HED 120 LIVING WITH HEALTH 3 (3-0)

Examines health issues and presents contemporary approaches to personal health. Emphasis is on problem prevention, focusing on topics as stress, hypertension, nutrition, depression, smoking, and sexually transmitted diseases.

Prerequisite None

HED 130 STRESS MANAGEMENT 2 (2-0)

This course is a holistic approach to stress management which emphasizes scientific knowledge and an awareness of how attitudes and unhealthy practices cause stress. Healthy coping skills are developed to reduce negative stress experienced in adult life. Included are lecture, discussion, role playing, relaxation techniques, physical activities, instructional aids, and individual self-discovery projects.

Prerequisite None

HED 230 NUTRITION 3 (3-0)

An introductory course in the science of food and its role in all age groups. Emphasizes the importance of nutrition in the normal growth and development process of the human body. Theory is supplemented by practical applications such as food label reading, weight control, and functions in disease states. The course includes elements for students of Nursing and Early Childhood Development, and allows students to collaborate using their many different styles of learning.

Prerequisite None

The primary content of HIT courses is directly related to an Allied Health/Business occupational program.

HIT 103 MEDICAL CODING AND BILLING 2 (0-4) CAPSTONE

Students will apply their knowledge and skills learned throughout the program in clinical classification systems, reimbursement methodologies, health records, and data content, compliance, confidentiality and privacy, and information technology. The capstone project will be an eight-hour job shadow in a healthcare setting.

Prerequisite BIO 105, HIT 108, HIT 109, HIT 110, HIT 205, HIT 226, all completed with a C (75% or higher) or permission of advisor and instructor

HIT 108 MEDICAL OFFICE PROCEDURES 2 (2-0)

This course provides an introduction to processing health information and the professional skills needed within a medical office. The student will start by learning professionalism, communication techniques, telephone etiquette, as well as other employability skills that are necessary to work in a medical office. The course will then move onto scheduling, data entry, posting charges and payments, adjustments, claims processing and other relevant medical office procedures.

Prerequisite None

HIT 109 HEALTH CARE DATA/STRUCTURE 2 (2-0)

This course provides an analysis of the health record including content, structure, and use. The legal and ethical issues involved in the documentation found in the record will be discussed. Data, data sets, primary and secondary records will also be evaluated. At the conclusion of the course, the student will be able to identify where information will be found in the record and in other resources or data sets.

Prerequisite None

HIT 110 INTRODUCTION TO HEALTH INFORMATION MNGNT 4 (4-0)

This online course will provide the student with the background needed to develop an understanding of the delivery systems, regulatory agencies, and reimbursement methodologies in the healthcare system. Students will learn about the different types of healthcare facilities and the various disciplines involved, be able to read and interpret healthcare regulations that affect the different types of healthcare facilities and have a basic understanding of Medicare, Medicaid, Blue Cross and Blue Shield, Worker's Compensation, Tricare and disability compensation.

Prerequisite None

HEALTH INFORMATION TECHNOLOGY (HIT)

HIT 205 DISEASE PROCESS AND PHARMACOLOGY 4 (4-0)

This is an online course which looks at signs/symptoms, etiology, diagnosis, and treatments involved for a basic understanding of human diseases and conditions. The student will also learn about the pharmaceuticals for these diseases and conditions.

Prerequisite BIO 105 and BUS 116 with a minimum accepted grade of C (75%)

HIT 212 HEALTH CARE INSURANCE PROCESS 2 (2-0)

This course integrates all the competencies obtained throughout the program. The student utilizes health information, coding principles, and knowledge of healthcare reimbursement and regulatory standards to process healthcare claims legally and ethically. Students will be required to work on an encoder and obtain practical experience at their mentoring site.

Prerequisite HIT 108 with a minimum accepted grade of C (75%)

Corequisite HIT 215

HIT 215 AMBULATORY CARE CODING 4 (4-0)

This is an online course which provides the student with the background and skills needed to code in the ambulatory care setting. The student will code utilizing the HCPCS coding system composed of CPT and national codes for physician billing, outpatient/ancillary care, emergency department and ambulatory care. The importance of documentation to support the code selection, especially in the area of Evaluation and Management, will be stressed. Legal and ethical issues involving coding and submission of claims will also be discussed. Prospective payment in ambulatory and outpatient services (RBRVS and APC) will be presented and the implications of coding will be discussed.

Prerequisite HIT 205 with a minimum accepted grade of C (75%)

HIT 216 CCA REVIEW 2 (2-0)

This online course is designed to assist the student in reviewing for the Certified Coding Associate (CCA) exam through the American Health Information Management Association (AHIMA). It will cover test taking strategies and review of the content areas covered during the Medical Coding and Billing program. The student will become comfortable with online testing and special format questions used in the CCA exam.

Prerequisite HIT 108, HIT 109, HIT 110, HIT 205, HIT 226 with a minimum accepted grade of C (75%)

Corequisite HIT 103, HIT 212, HIT 215

HIT 226 ICD-10-CM/PCS CODING 4 (4-0)

This is an online course in which the student will learn the basic guidelines for ICD-10-CM and ICD-10-PCS coding, the importance of supporting documentation for every code selected, and complex aspects of ICD-10-CM/PCS coding with appropriate sequencing of diagnoses and procedures.

Prerequisite BUS 116 with a minimum accepted grade of C (75%)

Corequisite HIT 205 and BIO 105

HISTORY (HST)

Students may take both Western and World Civilization courses in combination, but not for the same time periods.

Permitted combinations:

101,102 101,104 102,103 103,104

Prohibited Combinations:

101,103 102,104

HST 101 HISTORY OF WESTERN CIVILIZATION TO 1750 4 (4-0)

This course covers the history, cultures and values of western society from the prehistoric period to the Enlightenment. It examines the development of early civilizations in the ancient Near East; the rise of classical civilization in Greece and Rome; the influence of early Christianity and Islam on Europe; the development of European society, religion and politics during the Middle Ages; the Renaissance, the Reformation, the Scientific Revolution and the Enlightenment; and western contacts with the Americas and Asia in the 15th through 18th centuries. *This course fulfills a humanities requirement.*

Prerequisite None

HST 102 HISTORY OF WESTERN CIVILIZATION 1750 TO PRESENT 4 (4-0)

This course covers Western Civilization from 1750 to the present. Topics include the Enlightenment and changes which led to the French Revolution; the French Revolution and how it influenced the western world; the intellectual, cultural, social, and political changes in the 19th century as Europe came to dominate much of the world; the crises of the first half of the twentieth century, such as the world wars and the depression; the rise of the Soviet Union; and the post-World War II period with the rise of the welfare state, the Cold War, decolonization, and the collapse of the communist world.

This course fulfills a humanities requirement.

Prerequisite None

HST 103 HISTORY OF WORLD CIVILIZATION TO 1650 4 (4-0)

This course covers the emergence of world history from ancient times to the beginnings of the modern period in the 17th century. It examines the rise of civilization in the Middle East and China; classical civilizations in Greece, Rome, India, and the Americas; the early development of African civilization; the rise and spread of Islamic civilization; the spread of Chinese civilization; and the rise of the western world discussed in the context of principal political, religious, economic and cultural forces molding these societies. *This course fulfills a humanities requirement.*

Prerequisite None

HST 104 HISTORY OF WORLD CIVILIZATION FROM 1450 4 (4-0)

This course covers the evolution of leading civilizations and the interaction among different peoples and societies around the globe. It examines the rise of the west as a dominant influence on the world; global change in Africa and Asia; industrialization and imperialism throughout the 19th century; major developments in the history of Latin America from its colonial period; the crises in the west during the 20th century; the rise and fall of the Soviet Union; decolonization; and major developments in Asia, especially Japan, during the 20th century. *This course fulfills a humanities requirement.*

Prerequisite None

HST 150 HISTORY OF THE GOGEBIC RANGE 3 (3-0)

A general but systematic study of the history of the Gogebic Iron Range and what its role was in state, national, and world history. The course also discusses methods of compiling and preserving what remains of this history and the useful applications that could result from preservation. *This fulfills a social science requirement.*

Prerequisite None

HST 160 PACIFIC CENTURY 3 (3-0)

An introductory, college-level survey of the modern history, economics, politics, and cultures of the Pacific Basin region. *This fulfills a social science requirement*

Prerequisite None

HST 170 AMERICAS 3 (3-0)

A study of the 20th century political, economic, social, and cultural history of Latin America and the Caribbean. Focuses on the key issues and events crucial to understanding the development of the modern-day Americas. *This fulfills a social science requirement.*

Prerequisite None

HST 201 UNITED STATES HISTORY TO 1877 3 (3-0)

This course covers the political, social, and cultural history of the United States from its colonial founding through Reconstruction. It examines the interaction of European and native/indigenous civilizations; development of colonies; growing independence of the colonies; revolution and the formation of a national government; nation building; sectional conflict; the Civil War; and rebuilding the nation after the war. *This fulfills a social science requirement.*

Prerequisite None

HST 202 UNITED STATES HISTORY FROM 1865 3 (3-0)

This course covers the political, social, and cultural history of the United States from the Reconstruction period to the present. It examines the rebuilding of the nation after the Civil War; settlement in the Midwest and Industrialization; the Progressive Era; World War I; the 1920s and the Great Depression; World War II; the Cold War; the political and

cultural transformation of the 1960s and 1970s; and the resurgence of conservatism. *This fulfills a social science requirement.*

Prerequisite None

HST 210 HISTORY OF MINORITIES IN AMERICA 3 (3-0)

This course will explore the role of racial minorities including African Americans, Native Americans, Hispanics, & Asian Americans. This course thoroughly integrates the experiences of these groups, as well as the experiences of ethnic, religious, & sexual minorities, or other traditionally underrepresented group, into US history in a manner that fosters understanding & appreciation of their perspectives & experiences as well as their contributions to, & interactions within, American society.

Prerequisite None

HST 212 MICHIGAN HISTORY 3 (3-0)

This course examines the history of Michigan, including the indigenous people who inhabited the region prior to European contact, colonization, and its path to statehood.

Prerequisite None

HST 222 A MILITARY HISTORY OF THE UNITED STATES 3 (3-0)

A survey of both the military experiences and issues in American History. At heart, a view of American History through the lens of military warfare and developments. The course analyzes war, it's economic issues, technological developments, politics and other factors that have influenced the military aspects of the United States. *This fulfills a social science requirement.*

Prerequisite None

HST 224 HISTORY OF WOMEN IN THE UNITED STATES 3 (3-0)

This course provides a general introduction to the study of American women's history from the pre-contact period to the present. It will focus on key themes in the history of the United States, while putting women in the center of the discussion. Topics will include the movement of women from the home into the public workspace, the suffrage, and feminist movements, as well as the role of women of color in the American past. *This course fulfills a social science requirement.*

Prerequisite None

HST 226 NATIVE AMERICAN HISTORY 3 (3-0)

An ethno-historical study of Native American cultures from prehistoric times to the present. The major emphasis will be on patterns and diversity among tribal groups through a historic timetable. *This fulfills a social science requirement.*

Prerequisite None

HST 229 AFRICAN AMERICAN HISTORY 3 (3-0)

This course is a survey of the role of black Americans in the history of the United States. Emphasis will be placed on

economic, social, and cultural developments from the introduction of the slave trade to the Americas through the 21st century. Key topics addressed will include the course slavery, the Civil War, Reconstruction, Jim Crow, the Civil Rights and Black Power movements, the late 20th, early 21st century race politics. *This fulfills a social science or humanities requirement.*

Prerequisite None

HST 230 HISTORY OF AMERICAN EDUCATION 3 (3-0)

This course surveys the history of American education from the Colonial Era to the present. It treats the changing character of education in the context of broader social and cultural developments. The course attempts to provide both knowledge of the history of American education and an appreciation of historical perspectives as ways of understanding contemporary education.

Prerequisite EDU 201

HST 250 HISTORY SPECIAL TOPICS 1-4 VAR

Seminar course exploring special topics relevant to the field of history may be offered during select terms. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. This course fulfills a humanities requirement when taken for 3 or 4 credits. Special topics courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

HUMANITIES (HUM)

HUM 201 INTRODUCTION TO THE HUMANITIES 3 (3-0)

This course provides a general introduction to the foundational skills of the Humanities: observation, description, analysis, and explanation. Students will consider evidence from fields including architecture, music, advertising, cartography, and literature, both fiction and non-fiction. Some evidence will be observed by way of fieldwork, with visits to sites and events of cultural significance. Emphasis will be on how meaning is constructed and conveyed rather than what meaning is attributed to any given piece of evidence. *This course fulfills a humanities requirement.*

Prerequisite Placement into ENG 101 or permission of Instructor.

HUM 250 HUMANITIES SPECIAL TOPICS 1-4 VAR

Seminar courses exploring special topics relevant to the humanities that will be offered on various semesters. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. This course fulfills a humanities requirement when taken for 3 or 4 credits. Special topics

courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

INDUSTRY (IND)

IND 200 INDUSTRIAL SEMINAR 6 (2-8)

Students will work as a team under the instructor's supervision. The students will choose a product to manufacture, select the equipment needed for manufacturing, program the CNC equipment, procure materials, calculate payroll, perform a project cost analysis, design, and build necessary fixtures, prototype and manufacture the product, and provide comprehensive documentation of the product. This course allows the student to be creative in applying his or her skills and knowledge toward the creation and manufacture of a product. This is primarily a "hands" on type of course with the instructors providing guidance and direction when necessary. *The primary content of this course is directly related to a Mechanical Engineering Technology Occupational program.*

Prerequisite Must be in final semester of Mechanical Engineering Technology program or have consent of instructor(s).

MATHEMATICS (MTH)

MTH 100 BASIC MATHEMATICS 4 (4-0)

A course covering the fundamental operations of basic mathematics including whole number operations, fractions, decimals, ratio and proportion, percentages, square roots and perfect squares, the Pythagorean theorem, basic statistics, signed numbers, pre-algebra concepts and real-life applications. *This course does not count toward an Associate of Arts or Associate of Science degree.*

Required Corequisite Math 100A if Math Placement: Support

MTH 100A BASIC MATHEMATICS SUPPORT 2 (2-0)

MTH 100A is a corequisite support course for MTH 100 and must be taken concurrently with MTH 100. MTH 100A provides support and enhancement of both the foundational mathematical skills and the specific topics required for success in MTH 100.

MTH 106 MATHEMATICS FOR THE ENGINEERING TECHNOLOGIES 4 (4-0)

A course covering technical applications in measurement, conversion, ratio, proportion, percentages, basic statistics, basic algebra, practical plane geometry, triangle trigonometry, and solid figure calculations.

Required Corequisite Math 106A if Math Placement: Basic or lower

MTH 106A MATHEMATICS FOR THE ENGINEERING TECHNOLOGIES SUPPORT 2 (2-0)

MTH 106A is a corequisite support course for MTH 106 and must be taken concurrently with MTH 106. MTH 106A provides support and enhancement of both the foundational mathematical skills and the specific topics required for success in MTH 106.

MTH 108 PRACTICAL MATHEMATICS 4 (4-0)

MATH 108 is a course which demonstrates mathematics' usefulness and relevance to students' daily lives through topics such as calculating interest and understanding voting systems. The course emphasizes problem-solving skills, practical applications, probability, statistics, and the history of mathematics. MATH 108 unveils the relevance of mathematics and its creative human aspect to students. This course investigates a variety of areas in which mathematics is concretely applied, in a way which is both engaging and accessible to students who do not necessarily have strong interests in the sciences.

<i>Required Corequisite</i>	<i>Math 108A if Math Placement: Technical or lower</i>
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MTH 108A PRACTICAL MATHEMATICS SUPPORT 2 (2-0)

MTH 108A is a corequisite support course for MTH 108 and must be taken concurrently with MTH 108. MTH 108A provides support and enhancement of both the foundational mathematical skills and the specific topics required for success in MTH 108.

MTH 110 COLLEGE ALGEBRA 4 (4-0)

This course covers equation solving and functional analysis. Topics covered include: systems of real numbers, operations on polynomials and rational expressions, functions, conic sections, roots, exponential and logarithmic functions, and systems of equations.

<i>Required Corequisite</i>	<i>Math 110A if Math Placement: Technical or lower</i>
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MTH 110A COLLEGE ALGEBRA SUPPORT 2 (2-0)

MTH 110A is a corequisite support course for MTH 110 and must be taken concurrently with MTH 110. MTH 110A provides support and enhancement of both the foundational mathematical skills and the specific topics required for success in MTH 110.

MTH 112 TRIGONOMETRY 3 (3-0)

This course covers functions of acute angles, solution of right triangles and applications. Functions of a general angle, identities, related angles, radian measure, graphing the trigonometric functions, addition formulas and related

identities, logarithms, oblique triangles, inverse trigonometric functions, vectors.

Prerequisite MTH 110 (passed with a C grade or higher) or appropriate Math placement score

MTH 121 PRINCIPLES OF ELEMENTARY MATHEMATICS I 4 (4-0)

This course is intended primarily for future elementary and junior high school teachers. A precise treatment of the mathematics underlying arithmetic will be given, with the emphasis on the "why" of arithmetic procedures. The course will cover systems of numeration, sets, relations, whole numbers, rational numbers, real numbers, construction and properties of number systems, basic number theory and computational methods.

Prerequisite

MTH 122 PRINCIPLES OF ELEMENTARY MATHEMATICS II 4 (4-0)

This course is a continuation of Mathematics 121. It will include selected topics from informal geometry such as elementary theorems and proofs, area and volume, coordinate systems, topology, axiomatic method, as well as logic, basic probability, and statistics. The LOGO programming language will be introduced

Prerequisite MTH 121 or Permission of Instructor

MTH 150 CALCULUS AND ANALYTIC GEOMETRY I 5 (5-0)

Functions and their graphs, rate of change of functions, theorems about limits, derivatives, chain rule, differentials dy and dx , maximum and minimum theory, derivatives of inverse functions, natural logarithms, and exponential functions, tangents and normals to curves. Newton's method for approximating roots of equations, introduction to integration, differentiation and integration of sines and cosines, areas under a curve, trapezoidal rule for approximating an integral, and topics in analytic geometry.

Prerequisite MTH 110 and MTH 112 (passing with a C grade or higher)

MTH 151 CALCULUS AND ANALYTIC GEOMETRY II 4 (4-0)

Applications of the definite integral, volumes, length of arc of plane curves, areas of surface of revolution, moments and center of mass, centroid, infinite series, MacLauren's Series, Taylor's Series, indeterminate forms, Vectors and parametric equations basic methods of integration, partial fractions, integration by parts, and trigonometric substitutions.

Prerequisite MTH 150 (passing with a C grade or higher)

MTH 152 CALCULUS III 4 (4-0)

Scalar and vector product, spherical and polar coordinates, partial differentiation, directional derivatives, the total

differential, multiple integrals, path and curve integrals, surface integrals, and Green's Theorem.

Prerequisite MTH 151 (passing with a C grade or higher)

MTH 211 INTRODUCTION TO STATISTICS 3 (3-0)

MATH 211 includes the organization of data, summation notation, measures of central tendency and dispersion, probability, types of probability distributions, sampling, hypothesis testing, regression and correlation, and analysis of disparities. Outcome of experiments and interpretation of data are related to business, sociological, psychological, and educational problems.

Prerequisite MTH 108 or MTH 110 (passing with a C grade or higher)

MTH 220 ORDINARY DIFFERENTIAL EQUATIONS WITH LINEAR ALGEBRA 4 (4-0)

First order equations, second and higher order equations with constant coefficients, solution by operator methods, matrices, systems of linear equations, eigenvalues and eigenvectors, systems of linear differential equations, applications, power series solution of 2nd order equations will be covered. Also includes a module on linear algebra.

Prerequisite MTH 152 (passing with a C grade or better)

MTH 280 HONORS MATH SEMINAR 1 (1)

Students must take this one-credit seminar simultaneously with a four- credit higher-level math course. A grade of "C" or better in both courses will convert into five honors credits on students' transcripts. Students will understand the impact of mathematical thought, both historical and modern, on the world and will work on special projects that relate their higher-level math class to everyday concerns.

Prerequisite Assessment Scores

MEDICAL ASSISTING (CMA)

The primary content of CMA courses is directly related to an Allied Health and/or Business occupational program.

CMA 116 INTRODUCTION TO MEDICAL ASSISTING CLINICAL AND ADMINISTRATIVE SKILLS 6 (4-4)

The student will be introduced to the basics of being a medical assistant in the ambulatory care setting. Topics such as medical terminology, anatomy and physiology, basic administrative procedures, human relations, medical asepsis, vital signs, and nutrition will be covered.

Prerequisite Admission into the program

CMA 126 MEDICAL ASSISTING ADMINISTRATIVE SKILLS 5 (4-2)

In this course the student will learn about the: EHR (electronic health record), how to apply effective and professional communication and interpersonal skills, demonstrate cultural

awareness, maintain inventory, perform billing and collections, process insurance, schedule patients, adapt care to different life stages, and help the patient navigate the healthcare system.

Prerequisite Admission into the Program, all first semester courses of the CMA program with a passage of C (75%) in each course.

CMA 135 MA PHARMACOLOGY & MEDICAL MATH 2 (2-0)

In this class the student medical assistant will learn about the different classifications of drugs and the most commonly used medications, how to calculate dosages for proper administration, the parts of a prescription, common abbreviations, and how to use proper drug references.

Prerequisite Admission into the program.

CMA 145 LEGAL AND ETHICAL CONCEPT 2 (2-0)

The student medical assistant will learn about documentation guidelines, federal and state guidelines when releasing medical records and information, following established policies when initiating or terminating treatment, scope of practice, Code of Ethics compliance, HIPPA, ADA Amendments Act, and local health laws.

Prerequisite CMA 102 with a minimum accepted grade of C (75%)

CMA 156 MA CLINICAL PROCEDURES I 5 (3-4)

Within a clinical classroom the student medical assistant will assist with general and specialty exams, learn how to administer medications, respond to emergencies, and how to educate patients. Students will also learn to apply medical terminology to the different specialties and learn about diagnostic and treatment modalities for each body system.

Prerequisite Admission into the program, all first semester courses of the CMA program with a passage of C (75%) in each course.

CMA 166 MA CLINICAL PROCEDURES II 5 (3-4)

Within a clinical classroom the student medical assistant will learn how medical terminology applies to the body systems, and how each body system is affected by diseases, along with diagnostic tests and treatments for each. The student will learn how to obtain laboratory specimens and to perform point of care testing.

Prerequisite BUS 105, HED 105, CMA 136, CMA 100, CMA 101, CMA 102, CMA 103, CMA 104, with a minimum accepted grade of C (75%).

CMA 175 MA CERTIFICATION REVIEW 3 (3-0)

In this capstone course, the medical assistant student will learn about employment skills, resume writing, interview technique, professional dress, time management, demonstrating professional behavior, and continuing

education. The student will also prepare for the RMA exam by having review and doing practice tests.

Prerequisite Admission into the program.

CMA 177 MA PRACTICUM IMMERSION 3 (0-0-3)

The practicum experience includes placement at the ambulatory care facility that performs a balance of administrative and clinical activities to expose students to the necessary skills required of the profession. It has a minimum of 160 clock hours. Students will work under the direct supervision of a preceptor.

Prerequisite Admission into the program.

MUSIC (MUS)

MUS 101 MUSIC THEORY 3 (3-0)

The study of the elements of music-elementary theory, musical notation, chord construction and relationships, and ear training; all as related to the piano keyboard.

Prerequisite None

MUS 102 MUSIC APPRECIATION 3 (3-0)

An introduction to the sounds and composition of serious music from ancient times to the present, with an emphasis on the recognition of musical styles through recorded sound.

This course fulfills a humanities requirement.

Prerequisite None

MUS 105 GCC SYMPHONIC CHOIR 1 (0-2)

GCC Symphonic Choir is an auditioned ensemble committed to the exploration and learning through performance of exceptional choral literature. Junior & Senior students, from surrounding High Schools are encouraged to audit for credit as well as the greater community for non-credit. The main goal of this group is preparing each piece we perform extremely well emphasizing accurate pitches, diction, phrasing, musicality, balance, blend, vocal production, and correct period practices. In order to achieve this, students are expected to know their individual parts completely. Initial rehearsals will focus on part learning, while subsequent rehearsals will address the other musical aspects listed above. When possible, students will have access to learning tracks for their part so they can practice outside of rehearsal. Also, required reading that will round out your learning perspective and utilize that for the chorus. Great satisfaction and enjoyment come from rehearsing and performing music that has been well prepared.

Prerequisite None

NURSING (NUR)

NUR 140 FUND. CONCEPTS OF NURSING PRACTICE ACROSS THE LIFESPAN 7 (6-3)

This course provides the acquisition and application of fundamental concepts important to the practice of nursing

including those related to patient-centered care, the healthcare environment, and professional nursing practice. Includes care of stable patients with a focus on wellness and health promotion. Mental health is integrated throughout the course. Application of knowledge and skills occurs in the nursing laboratories and clinical settings.

Prerequisite Admission into the Nursing Program.

Corequisites: NUR 141 and NUR

NUR 141 CLINICAL EXPERIENCE OF FUNDAMENTAL CONCEPTS 1 (0-0-3)

This course provides the application of fundamental concepts important to the practice of nursing including those related to patient-centered care, the healthcare environment, and professional nursing practice. Includes care of stable patients with a focus on wellness and health promotion. Mental health is integrated throughout the course.

Prerequisite Admission into the Nursing Program.

Corequisite NUR 140 and NUR 142

NUR 142 CLINICAL REASONING IN CURRENT NURSING PRACT. 2 (2-0)

This course introduces the learner to clinical reasoning used in nursing. In this course the student learns to use critical thinking skills and strategies that underscore the clinical reasoning represented in the nursing process as well as dealing with aspects of the healthcare system for safe practice in the current healthcare environment. This course forms the basis for the thinking processes applied throughout all nursing courses.

Prerequisite Admission into the program.

Corequisite NUR 140, NUR 141

NUR 144 CONCEPTS OF NURSING PRACTICE IN THE CARE OF PATIENTS WITH UNCOMPLICATED CONDITIONS 9 (8-3-0)

This course builds on the fundamental concepts providing for the acquisition of additional concepts and application of concepts of nursing applied to the care of patients experiencing uncomplicated health issues. The course also includes care of the reproducing family during pregnancy and care of the newborn and children. Mental health is integrated throughout the course. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisite NUR 140, NUR 141, NUR 142, BIO 251.

Corequisite NUR 145

NUR 145 CLINICAL EXPERIENCE OF NURSING PRACTICE I 4 (0-0-12)

This course builds on the fundamental concepts providing for the acquisition of additional concepts and application of concepts of nursing applied to the care of patients experiencing uncomplicated health issues. The course also includes care of the reproducing family during pregnancy and care of the newborn and children. Mental health is integrated throughout

the course. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisite NUR 140, NUR 141, NUR 142, BIO 251

Corequisite NUR 144

NUR 150 PRACTICAL NURSING EXIT COURSE 3 (3-0)

The purpose of this course is to prepare students completing the first year of the ADN program who choose to engage in nursing at the level of the Practical Nurse scope of practice. This course provides additional nursing content and skills needed at the PN level focusing on the SLOs at the end of the second level of nursing courses.

Prerequisite NUR 140, 141, 142, 144, 145

NUR 240 CONCEPTS OF NURSING PRACTICE IN THE CARE OF ADULTS WITH STABLE AND UNSTABLE CONDITIONS 5 (4-3)

This course further expands on the concepts of nursing practice with application to the care of adult patients with stable and unstable conditions. Mental health is integrated throughout the course. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisite NUR 140, NUR 141, NUR 142, NUR 144, NUR 145, BIO 251 or LPN Licensure and admission into the advanced standing program.

Corequisite NUR 241

NUR 241 CLINICAL EXPERIENCE OF NURSING PRACTICE II 4 (0-0-12)

This course further expands on the concepts of nursing practice with application to the care of adults with stable and unstable conditions. Mental health is integrated throughout the course. Application of knowledge and skills occurs in the nursing laboratories and a variety of clinical settings.

Prerequisite NUR 140, NUR 141, NUR 142, NUR 144, NUR 145, BIO 251 or LPN Licensure and admission into the advanced standing program.

Corequisite NUR 240

NUR 242 TRANSITION TO RN PROGRAM 1 (1-1)

This theory and lab course is designed for Practical Nurses who possess a current license and have stopped out of nursing school for greater than one year. The course strengthens the student's ability to develop and utilize the nursing care plan, complete detailed assessments, and engage in clinical reasoning. Students completing the course will understand the differences between the LPN and RN scope of practice. Nursing skills reviewed and evaluated include but are not limited to: IV insertion, medication administration, assessment, Foley catheter insertion, drug dosage calculations, trach care, EKG interpretation, sterile dressing changes, and glucometer usage. OB and Pediatric care will also be reviewed.

Prerequisite LPN licensure, acceptance into the RN program, GPA requirements, BIO 250 and BIO 251 within the last 7 years, and completion of the ATI comprehensive predictor.

Corequisite NUR 240, NUR 241, Humanities course (unless completed).

***NUR 244 CONCEPTS OF NURSING PRACTICE IN THE CARE OF PATIENTS 4 (3-3)**

This course builds on all previous nursing courses to further refine and apply the concepts of nursing practice to the care of patients with complex conditions. The course focuses on a variety of healthcare settings and patient populations throughout the lifespan through case studies and classroom discussion. The laboratory component allows students to analyze case studies, apply critical thinking skills, and practice prioritization, delegation and communication skills.

*Change pending state board approval

Prerequisite NUR 140, NUR 141, NUR 142, NUR 144, NUR 145 or advanced placement

Corequisite NUR 240, NUR 246

NUR 245 CLINICAL EXPERIENCE OF COMPLEX PATIENTS 4 (0-0-12)

This course builds on all previous nursing courses to further refine and apply the concepts of nursing practice to the care of patients with complex conditions. The course focuses on a variety of patient populations through complex clinical experiences in a variety of clinical settings.

Prerequisite NUR 240, NUR 241.

Corequisite NUR 244, NUR 246

NUR 246 TRANSITION TO NURSING PRACTICE 2 (2-0)

This theory course focuses on strengthening the students' knowledge base and thinking skills in preparation for current practice by applying clinical reasoning to case studies based on patients experiencing multisystem health issues.

Prerequisite NUR 240, NUR 241

Corequisite NUR 244, NUR 245

PHYSICAL EDUCATION (PED)

PED 103 FIRST AID/COMMUNITY CPR 1 (0-1)

The theories, practices, and skills that meet certification requirements for standard First Aid and Community CPR by the National Red Cross. (Students will receive American Red Cross Community First Aid and Community CPR Certification after completing the requirements. CPR for the Professional Rescuer certification may be received after supplemental training.)

Prerequisite None

PED 150 BEGINNING YOGA 1 (1-0)

This course focuses on safe practice of beginning level yoga asanas (poses), including standing, seated, and lying down poses, and inversions. Asanas will be explored individually and as part of vinyasa sequences. Connecting to the breath and developing mindfulness will also be emphasized.

Prerequisite None

PED 160 FITNESS WALKING 1 (1-1)

Assists walkers of all abilities to acquire the knowledge, skills, and attitudes necessary to incorporate a lifelong fitness walking program into their daily lifestyles by utilizing a total approach to personal fitness.

Prerequisite None

PED 202 RESPONDING TO EMERGENCIES 2 (3-0)

Through textbook, lecture, video, and performance of practical skills, students will become prepared to recognize and respond to medical emergencies. This course will prepare students to make appropriate decisions regarding first aid care, and to act on those decisions by building upon first aid knowledge and skill competency. Students will receive CPR training, Automated External Defibrillator, and Advanced First Aid certifications upon completion of this course.

Prerequisite None

PED 203 AMERICAN RED CROSS EMERGENCY RESONSE 3 (3-0)

Addresses advanced subjects such as emergency childbirth, management of spinal injuries, emergency use of oxygen, and automatic external defibrillation (AED). Instructional methods reinforce decision-making and technical skills through lecture, discussion, skills practice, and action-oriented activities. (Students will receive American Red Cross Emergency Response and CPR for the Professional Rescuer certification after completing the requirements.)

Prerequisite None

PED 220 FUNDAMENTALS OF SKI INSTRUCTION 1 (0-2)

Designed for individuals interested in learning the art of alpine ski instruction. The American Teaching System (ATS) and materials prepared by the Professional Ski Instructors of America (PSIA) will be utilized throughout the coursework. Classroom, on snow training simulations, and videotaping are utilized.

Prerequisite Strong Parallel Skiing Ability or Instr. consent

PHYSICAL EDUCATION/HEALTH (PEH)

PEH 110 PHYSICAL EDUCATION/HEALTH PROMOTION (WALKING, JOGGING) 2 (2-1)

An updated approach to the study of individual well-being and the conduct of healthy, safe, active lifestyles. Lifestyles will be

assessed in terms of physical fitness, body composition, nutrition, substance abuse and stress reduction. Strategies for the successful pursuit of healthy lifestyles will be explored, and application of basic principles will be experienced through walking and jogging.

Prerequisite None

PHILOSOPHY (PHI)

PHI 105 CRITICAL THINKING AND ETHICS 3 (3-0)

This course introduces a systematic process of critical thinking which is indispensable to all educated persons. It is a process by which we develop and support our beliefs and evaluate the strength of arguments made by others. *Critical Thinking* is designed to help motivated learners develop into fair-minded critical thinkers and provide a means to systematically practice and improve one's quality of thinking, learning, and problem solving. *This course fulfills a humanities requirement.*

Prerequisite None

PHI 201 INTRODUCTION TO PHILOSOPHY 3 (3-0)

Philosophy seeks to understand nature, the individual, and their relationship to the world. The student is encouraged to learn how to think and to probe areas of inquiry such as knowledge, reality, religion, self-identity, mind and body, truth, rationality, morality, freedom, and politics. *This course fulfills a humanities requirement.*

Prerequisite None

PHYSICS (PHY)

PHY 101 PHYSICAL SCIENCE 4 (3-2)

A course to help the non-science student become more scientifically literate with respect to our physical world. The course emphasis will include understanding principles of science, methods of doing science, development of inquiry skills related to practical and environmental situations. Topics may include physical mechanics, energy, the atom, the structure of matter, and earth science.

Prerequisite MTH 103

PHY 105 INTRODUCTORY ASTRONOMY 4 (3-2)

An introduction to the science of astronomy for the non-science student. Topics include: the achievements of early and modern astronomers, planetary motion, light, optical instruments, methods of astronomical observation, the sun, planets, moon, asteroids, comets, meteors, satellite systems, stars, constellations, galaxies, nebula, stellar evolution, pulsars, quasars, black holes, and theories of the origins of the universe. Several lab sessions will be devoted to direct sky observations.

Prerequisite MTH 103

PHY 107 INTRO TO METEOROLOGY 4 (3-2)

Course is designed for the science and non-science student interested in the variable nature of weather. Topics include our atmosphere and its composition, different weather systems seen on earth, and the tools used to try to measure/predict weather for forecasting.

Prerequisite MTH 103 or test into MTH 104

**PHY 110 INTRODUCTION TO ENGINEERING – 3 (2-2)
APPLICATIONS AND PROBLEM
SOLVING**

In this course we will discuss and investigate the different fields of engineering and their contributions to society throughout the ages. Using active and collaborative teamwork, we will develop our problem-solving skills, computational skills, and communication skills by applying engineering methods to real-life problems. The intent is to understand the mathematics and scientific principles that lead engineers in their design processes and assist them in their careers.

Prerequisite MTH 150 Calculus I (or concurrent enrollment)

**PHY 121-T TECH. PHYSICS: MECHANICS AND 3 (3-1)
THERMODYNAMICS**

A course intended for the technical student which provides an introduction to practical physics as related to mechanical and energy systems. Topics include: units and conversions, measurements, vectors, forces, motion, Newton's Laws, falling bodies, elasticity, momentum, equilibrium, torque, work, power, mechanical energy and simple machines, heat, temperature and E-M waves.

Prerequisite MTH 106 or MTH 110 & MTH 112

PHY 201 ELEMENTS OF PHYSICS I 4 (3-2)

A general course in mechanics, heat, and fluids designed for students who need a college course in physics to satisfy general or pre-professional curriculum requirements.

Prerequisite MTH 110 (or concurrent enrollment)

PHY 202 ELEMENTS OF PHYSICS II 4 (3-2)

A continuation of Physics 201 with emphasis on waves, electricity, magnetism, optics and modern physics topics.

Prerequisite PHY 201 & MTH 110

PHY 251 GENERAL PHYSICS I 5 (4-2)

A course in mechanics, heat and sound with special emphasis upon problem solving as related to physical principles. Designed for students majoring in physics, pre-engineering, or its allied fields.

Prerequisite MTH 150 or Concurrent Enrollment

PHY 252 GENERAL PHYSICS II 5 (4-2)

A continuation of Physics 251 with emphasis upon electricity, magnetism, physical and geometric optics, and modern physics.

Prerequisite PHY 251, MTH 151 or concurrent enrollment (passing with a C or higher)

PHY 261 STATICS 3 (3-0)

A study of force systems in two and three dimensions. Topics include: review of vector algebra; introduction to forces, moments, and couples; first and second moments of area and mass; principles of equilibrium of simple structures, frames and machines; and a study of friction as it applies to the above

Prerequisite PHY 251 (passing with a C or better)

PHY 262 DYNAMICS 3 (3-0)

A first course in the principles of dynamics. Topics include a study of kinematics, motion of a particle, kinetics of particles, kinematics and kinetics of rigid bodies, and the principles of work and energy, impulse and momentum. Uses vector methods.

Prerequisite PHY 261 (passing with a C or better)

PHY 263 MECHANICS OF MATERIALS 3 (3-0)

This course will introduce mechanical behavior of materials. We will examine stress and strain at a point, the principle of stresses and strains and how they relate to each other. We will also determine the stresses and deformations due to axial loading, torsional loading, and flexural loading. Additionally, stresses due to combined loading and buckling of columns will be covered.

Prerequisite Successful completion of PHY 261 (passing with a C or better)

PHY 264 ENGINEERING THERMODYNAMICS 3 (3-0)

This course covers basic definitions and a review of thermodynamic ideas covered in general physics. In addition, the student will examine and show proficiency in: energy transfer including mechanical forms of work, properties of pure substances using equations of state calculations and generated tables, creation and evaluation of different thermodynamic diagrams, energy analysis of both open and close systems, perform energy balances, mass and energy analysis of control volumes, analyze systems through use of the 2nd law, entropy efficiencies and balance and the investigation of gas powered cycles, power cycles, and refrigeration cycles.

Prerequisite MTH 150 and PHY 252 (passing with a C or better)

**PHY 296- SPECIAL TOPICS IN PHYSICS 3-5 VAR
299**

This course will be designed based on the interest of the student. It will allow the student further study into a branch of physics. Some topics may include: Medical Physics, Advanced Classical Mechanics, Thermodynamics, Modern Physics, Nuclear and Particle physics.

Prerequisite Successful completion of MTH150-151 (Calculus I and II), PHY251-252 (General Physics I and II), permission of instructor.

POLITICAL SCIENCE (PLS)

PLS 101 INTRODUCTION TO AMERICAN GOVERNMENT 3 (3-0)

A study of the major aspects of American government on national, state and local levels. Special emphasis on national government, with comparisons between the levels of government made throughout the course. Satisfies Michigan requirements on political science. Fall and winter. *This fulfills a social science requirement.*

Prerequisite None

PLS 102 STATE AND LOCAL GOVERNMENT 3 (3-0)

Major aspects of policy-law making process at the state and local level. Comparison of state and local political systems with special emphasis given to regional government. Various problems and solutions encountered by government will also be considered. Winter. *This fulfills a social science requirement.*

Prerequisite None

PLS 250 SPECIAL PROJECTS AND SEMINARS 1-4 VAR

Designed to offer students curriculum flexibility through independent study. Approved studies include field trips, assigned readings, or specific research projects. Projects may also include small group conferences and lectures. A research paper will be a basic requirement of the course, regardless of the nature of the specific study. All projects must receive prior approval of the Social Science Division Committee on Independent Studies.

Prerequisite PLS 101 and/or Consent of the Appropriate Division Chair

PSYCHOLOGY (PSY)

PSY 101 GENERAL PSYCHOLOGY 4 (4-0)

An introduction to the scientific study and interpretation of human behavior. The topics include: scope and goals of psychology, learning, perception, sensation, motivation, emotions, physiological basis for behavior, mental illness, psychotherapy, and personality development. The course reflects the increasing attention being paid to experimental procedures, laboratory techniques and research findings. *This fulfills a social science requirement.*

Prerequisite Assess into or complete ENG 101

PSY 202 Child and Adolescent Psychology 3 (3-0)

A study of the total growth and development of the child from conception through early adolescence with emphasis on those

factors that make for individuality in growth patterns which are established in the learning process. Clinical experience will be arranged with local educational agencies and institutions. *This fulfills a social science requirement.*

Prerequisite PSY 101

PSY 204 SOCIAL PSYCHOLOGY 3 (3-0)

Social Psychology combines knowledge and methods from sociology, psychology and anthropology; and attempts to explain how the thoughts, emotions and behavior of an individual are influenced by other individuals and groups within society. The conceptual approach is used in this course. Concepts covered include: social perception, socialization, communication, attitudes, the dyad, groups, environment, and social behavior. *This fulfills a social science requirement.*

Prerequisite SOC 101 and PSY 101

F

PSY 210 LIFESPAN DEVELOPMENT 3 (3-0)

Explores the universal features and individual variations of human biological, cognitive, emotional, social, moral, and gender-role development from conception to death. *This fulfills a social science requirement.*

Prerequisite PSY 101

PSY 225 PSYCHOLOGY OF PERSONALITY 3 (3-0)

This course is designed to promote human understanding through the analysis of personality theory, theoreticians, research, therapeutic applications, developmental models, and the strengths and weaknesses of theories, past and present. This course is an extension of psychological studies for those interested in counseling, teaching, literature, and art. *This fulfills a social science requirement.*

Prerequisite PSY 101

PSY 295 ABNORMAL PSYCHOLOGY 4 (4-0)

An introduction to the description, classification, and interpretation of various patterns of disordered or dysfunctional behavior. Relevant theories and research findings concerning etiology and dynamics will be explored. Modern techniques for diagnosis and treatment will also be considered. *This fulfills a social science requirement.*

Prerequisite PSY 101 (PSY 202 or 225 is also required unless waived by instructor)

PSY 296 PSYCHOLOGY SPECIAL TOPICS 1-4

Seminar course exploring special topics relevant to the field of Psychology that will be offered during select terms. . Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. This course fulfills a social science requirement when taken for 3 or 4 credits. Special topics courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

SCIENCE (SCI)

SCI 105 FUNDAMENTAL SCIENCE CONCEPTS 3(3-0)

An integrated introduction to basic physics and chemistry concepts through the lens of everyday, environmental, and workplace applications. Science concepts will be blended with science practices (modeling, constructing evidence-based arguments, hands-on activities, etc.).

Prerequisite none

SCI 106 FUNDAMENTAL LAB METHODS 2(0-4)

This laboratory course provides foundational training in essential wet lab techniques, with emphasis on safety, adherence to protocols, and accurate use of equipment and instrumentation. Students will develop skills in data recording and analysis across analog and digital formats, working with sensor networks and control systems, and troubleshooting procedures.

Prerequisite Basic Math or Higher

SCI 110 INTEGRATED SCIENCE 4 (3-2)

An introduction to fundamental concepts of the physical and life sciences. Application to daily experiences and critical evaluation of science as discussed in the public domain will be emphasized. The approach will be primarily descriptive in nature, with basic mathematical principles applied to understanding relationships and expressing data derived during hands-on investigations.

Prerequisite Technical Math placement
Recommended Sophomore Standing

SCI 120 SCIENCE SEMINAR 2 (2-0)

Capstone seminar course for the Lab Science Technician (LST) Certificate. Students will engage in discussion of articles and experiences related to LST careers, including presentations by peers, invited guests, and field trips. Additionally, students will compile their career-readiness portfolios.

Prerequisite SCI 105 and SCI 106 or permission of instructors

SCI 250 SCIENCE SPECIAL TOPICS 1-4

Seminar courses exploring special topics relevant to science that will be offered on various semesters. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. Special topics courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

SCI 251 LAB SCIENCE SPECIAL TOPICS 1-4

Seminar courses exploring special topics relevant to science that will be offered on various semesters. SCI 251 includes a lab component. Selections vary from semester to semester, and the course may be repeated to a maximum of six credits provided there is no repetition of subject matter. Special topics courses are considered general transfer electives however students are advised to work closely with their intended transfer college or university to determine course equivalency.

Prerequisite None

SKI AREA MANAGEMENT (SAM)

The primary content of SAM courses is directly related to the Ski Area Management occupational program.

SAM 100 INTRODUCTION TO SKI AREA MANAGEMENT 3 (3-0)

A course designed to give the student an insight into the U.S. ski industry, past, present, and future. Topics include: U.S. ski industry history and growth; market surveys; types of resort ownership; management, its functions and organization; ski industry organizations such as, NSAA and MSAA. Guest lecturers are utilized as resource persons.

Prerequisite None

SAM 101 SKI AREA DESIGN AND LAYOUT 3 (3-2)

An introduction to the design and layout of a ski resort's base and mountain zones. Planning for indoor and outdoor space allocation is studied. The balancing of skier capacity to lift, trail capacity, and other support facilities is studied. Geologic, hydrologic, economic, environmental factors and other pertinent topics to resort development are also considered.

Prerequisite None

SAM 103 SKI LIFT CONSTRUCTION AND DESIGN 3 (3-0)

Provides an introduction to design and construction of the most common types of ski lifts. Topics to be covered include: lift design; construction; operations maintenance procedures; record keeping; and various regulatory agencies. The coursework also includes a study of the ANSI B77 (American National Standard) safety requirements for aerial passenger tramways.

Prerequisite None

SAM 104 SKI EQUIPMENT MECHANICS 2 (2-0)

This course will introduce students to basic technology regarding the care and maintenance of ski equipment. The major orientation of this course will revolve around the ski rental & repair department of a ski resort. This class will provide potential rental department supervisors or technicians with basic knowledge and skills relating to employment in this department. Topics include: rental repair shop design and layout; shop efficiency; purchasing; tools; inventory; ski, boot, and binding systems compatibility; equipment repair

techniques; ski tuning; binding mounting; function testing; shop liability; recordkeeping.

Prerequisite None

SAM 105 SKI AREA MAPS 1 (1-1)

This course is a prerequisite to SAM 200 Ski Area Operation and Cost Analysis. Students prepare a map layout for a complete ski resort complex. The project utilizes student skills learned in SAM 101. Students work with contour lines, percent grades, horizontal and slope distances, vertical distances, exposures, lines, lodges, parking, snowmaking, power lines, utilities, other buildings, and ancillary facilities are determined. Preliminary calculations are made for the implementation of the project.

Prerequisite SAM 101

SAM 106 SNOWMAKING FUNDAMENTALS 2 (1-1)

This course will cover the basic system components required to produce manmade snow. Two major types of guns will be examined, compressed air water and fan guns. Major emphasis during laboratory will be the production of snow utilizing our own snowmaking system and guns under various weather conditions. Field trips to local ski resorts will take place.

Prerequisite None

SAM 107 SLOPE GROOMING FUNDAMENTALS 2 (2-2)

This course will examine ski slope and trail grooming techniques as well as snowcat operation training, the identification and selection of proper grooming implements for varying slope conditions, operator safety and recordkeeping. Students will operate and learn the operational capabilities of our PB260D and Tucker Snowcats as a requirement of this course. Field trips will be taken to local resorts.

Prerequisite None

**SAM 111 WORKSHOP IN SKI AREA .50-3
MANAGEMENT VAR**

This workshop provides supervisory staff with appropriate training and methodologies to help them achieve operational goals through the development of their seasonal employees. This workshop will include but not be limited to the following topics: employee commitment, technical skill building, motivation, understanding and reliability.

Prerequisite None

**SAM 200 SKI AREA OPERATION AND COST 3 (3-0)
ANALYSIS**

Designed to give students basic knowledge of constructional and operational costs involved in designing and implementing a ski resort complex. Topics covered are: constructional costs, operational expenses, labor cost and control, projected revenues, profit and loss statements. This course is a basic feasibility study.

Prerequisite SAM 101, SAM 105

**SAM 201 SPECIAL PROBLEMS IN SKI AREA 1-4 VAR
MANAGEMENT**

A course designed to permit SAM students to research a chosen topic of interest within the spectrum of the ski industry. The independent study topic must be approved by the instructor. Guidance and direction are given by the instructor. A project report must be submitted by the student at the end of the semester. A final grade will be based on the scope, content, and quality of the research effort.

Prerequisite Sophomore Status

**SAM 202 RISK MANAGEMENT AND RELATED 2 (2-0)
ISSUES**

This course will cover risk management and related issues of concern to the ski industry. Topics include: risk management and functions; insurance coverages; liability issues; recordkeeping; employee training; skier education; and, designing and implementing a good risk management plan. Resource persons are utilized in the coursework.

Prerequisite Sophomore Status

**SAM 205 APPLIED INDUSTRIAL SKILLS/SKI 2 (0-3)
AREA MANAGEMENT**

This course consists of on-the-job training for students enrolled the Ski Area Management program. Career related tasks related to the ski industry take place at the Mt. Zion Ski area. All work and training will be concerned with preseason maintenance and preparedness for the upcoming ski season.

Prerequisite Sophomore Status

SAM 230 COOPERATIVE WORK EXPERIENCE I 3 (0-11)

Students spend an entire ski season at their Coop site as a culminating experience or the Ski Area Management Program. Students are placed at ski resorts and are trained in areas of career interest. The students are compensated as coop interns and receive their training as outlined in a training agreement. Students are evaluated during the course of their training by their immediate supervisor and coop coordinator. Students submit periodic reports and a comprehensive final report to the coordinator during the course of the training period.

Prerequisite Completion of all SAM courses with a minimum 2.0 G.P.A.

Contact hours 176 hours at assigned ski area

**SAM 231 COOPERATIVE WORK EXPERIENCE 12 (0-44)
II**

A continuation of SAM 230. Students gain specified job skills in cooperation with an internship site commensurate with career goals and objectives. Students work approximately 40 hours per week under supervision of the employer and internship coordinator. Students submit periodic reports and a comprehensive final report at the conclusion of the coop assignment.

Prerequisite Completion of all SAM courses with a minimum 2.0 G.P.A.
Contact hours 704 hours at assigned ski area

SOCIAL WORK (SWK)

SWK 101 INTRODUCTION TO SOCIAL WORK 3 (3-0)

This course will familiarize students with the various roles, functions, and tasks which social workers perform in a variety of settings and acquaint them with the primary skills and practices of generalist social work. Students will also be introduced to the historical background, core values and ethics of social work and be exposed to issues of diversity, oppression, and social justice.

Prerequisite None

SOCIOLOGY (SOC)

SOC 101 INTRODUCTION TO SOCIOLOGY 3 (3-0)

Sociology is the scientific study of humans living with one another in a society. Basic social concepts studied include: social organization, culture, collective behavior, deviant behavior, stratification, population, and social institutions such as family, religion, and education. Students are exposed to fundamental theories, methods, and techniques used by sociologists. *This fulfills a social science requirement.*

Prerequisite None

SOC 102 SOCIAL PROBLEMS 3 (3-0)

An in-depth study of social problems within our society and the world in general. Health issues, substance abuse, family problems, poverty, race and gender inequality are analyzed. *This fulfills a social science requirement.*

Prerequisite None

SOC 201 MARRIAGE AND FAMILY LIFE 3 (3-0)

An overall view of the family in the United States today and a look into the future. Areas of study include: an analysis of courtship and pre-marital relationships, family planning and parental roles and legal and social factors affecting marital adjustment. *This fulfills a social science requirement.*

Prerequisite SOC 101 or Consent of Instructor

SOC 296-299 .25-1 VAR

From time to time, GCC offers workshops, seminars, and short courses of varying lengths and on a variety of social science topics. With the approval of their advisor and the Vice President of Student Services, students can apply credits from these workshops to certificate and degree requirements.

Prerequisite Permission of advisor and instructor

WELDING (WLD)

WLD 100 INTRODUCTION TO WELDING & INDUSTRIAL SAFETY 2 (1-2)

Introduction will cover the welding processes used in industries. Students will gain fundamentals of theory and techniques pertaining to arc welding and thermal cutting processes. Shop Orientation, Equipment set-up, electrode types, and consumable requirements for specific welding processes and applications. Requirements for use of industrial welding codes to develop Welding Procedures and Welder Qualifications are introduced. Students are also introduced to the Occupational Safety and Health Administration (OSHA), Mining Safety and Health Administration (MHSA), and The American National Standards Institute (ANSI) and subsequent regulations pertaining to welding industry and manufacturing careers, individual and work force safety and health practices.

Prerequisite None

WLD 110 WELDING SYMBOLS & BLUEPRINT READING 2 (2-0)

A general course in blueprint reading and welding symbols and their application. This course will cover visualization of objects and shapes, reading the blueprint for finding size and location dimensions, symbols, mathematics notes and related welding and assembly information shown on the print. This course further develops the student's understanding of how to read welding blueprints and develops the range of thinking required to assemble simple components and complex assemblies from welding prints.

Prerequisite None

WLD 120 THERMAL CUTTING AND WELDING PROCESSES 4 (2-4)

Instruction and practice of equipment inspection, maintenance, repair and set up for manual and mechanized oxy-fuel gas cutting (OFC), manual and CNC plasma arc cutting (PAC) and manual air carbon arc cutting (CAC-A). Instruction and practice soldering and brazing carbon steel, stainless steel and copper using oxyfuel equipment. Instruction and practice in the production of cuts on carbon steel, stainless steel and aluminum using PAC equipment. Instruction and practice cutting, scarfing and gouging carbon steel using CAC-A equipment. Instruction and practice welding carbon steel using oxy-fuel equipment. Practice and production of assemblies and coupons to be examined and tested according to Section 8 AWS SENSE QC10.

Corequisite WLD 100

WLD 140 SHIELDED METAL ARC WELDING 3 (1-4)

Focus on Shielded Metal Arc Welding (SMAW) process: electrode selection and application, equipment inspection and operation, welding current and polarity selection, weld joint types, and all-position lab modules geared towards qualification testing.

Corequisite WLD 100

Prerequisite Completion of Certification Course Content
or Consent of Instructor

WLD 150 METAL FABRICATION AND RIGGING 3 (1-4)

Basic metal fabrication tools and equipment utilizing various measuring tools, geometric nomenclature, basic layout and assembly skills along with shape construction, and triangulation from scale drawings, advanced metal fabrication tools, developing assemblies and sub-assemblies from working prints using various fabrication processes. Identify individual parts and weldments utilizing materials lists. Additionally: tools of rigging, and lifting, hardware, slings, hoists, ladders and scaffolding, weld distortion control, and basic CNC programming will be incorporated.

Corequisite WLD 100

WLD 240 PIPE AND PLATE QUALIFICATION 2 (0-4)

Qualification with groove welds qualifies for both groove and fillet welds so an emphasis is placed on plate groove weld tests. The processes covered are Shielded Metal Arc Welding (SMAW), Gas Metallic Arc Welding (GMAW) and Flux-Cored Arc Welding (FCAW). All positions of welding will be performed in these processes. Serves as a final preparation for students for American Welding Society (AWS) certification tests administered in the lab.

Prerequisite Completion of Certification Course Content
or Consent of Instructor

WLD 160 GAS METAL/FLUX CORED ARC WELDING 5 (2-6)

Focus on Wire Feed Arc Welding processes: Gas Metal Arc Welding (GMAW) Solid wire short-circuit and spray transfers, Flux Cored Arc Welding FCAW-GC (gas shielded) and FCAW-SS (self-shielded) welding, electrode selection, equipment set-up and operation, weld joint types, and all-position lab modules geared towards qualification testing.

Prerequisite WLD 100

WLD 170 METALLURGY 2 (2-0)

Introduction to Welding Metallurgy. A study of ferrous and nonferrous metals from the ore to the finished product. Emphasis on: metal alloys, heat treating, hard surfacing, welding techniques and their effect on metal, forging, foundry processes. Mechanical properties of metals including hardness, machinability, and ductility.

Prerequisite None

WLD 180 GAS TUNGSTEN ARC WELDING 3 (1-4)

Provides knowledge of theory, safety practices, inert gas, equipment, and techniques required for successful gas tungsten arc welding. Qualification tests, all positions, are used in the evaluating of student progress toward making industrial standard welds on ferrous and non-ferrous metals. Topics include GTAW safety and health practices; shielding gases; metal cleaning procedures; GTAW machines and equipment set up; selection of electrodes and filler rods; GTAW weld positions; and production of GTAW beads, bead patterns, and joints.

Prerequisite WLD 100

WLD 220 WELD INSPECTION AND TESTING 1 (1-1)

Students are introduced to the functions of quality assurance/control programs and the techniques for inspecting welds. Reference and interpret welding codes and specifications to accurately evaluate weld flaws and discontinuities. Students also learn destructive and non-destructive weld testing methods commonly used in the welding industry.

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