Kirtland Community College

Catalog   **2004-2005**
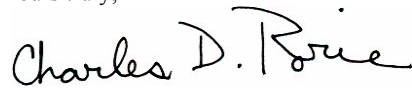
WELCOME

A MESSAGE FROM THE PRESIDENT

Welcome to the "college in the woods!" Your success is
our business. Call on us for whatever you need. Let us help
you plan and prepare for your life's careers. We are
delighted to have you join the Kirtland family.

While you are at KCC, you should also take advantage of
our intercollegiate athletics, intramurals, cultural events,
skiing, hiking, swimming, canoeing, golfing, etc. Enjoy our
unique and beautiful setting!

You can feed our deer, wild turkeys, squirrels, chipmunks,
and small birds, but don't get too close to our raccoons,
bald eagles, and bears!

Yours truly,

Charles D. Rorie, Ph.D.
President

TABLE OF CONTENTS

The contents of the catalog are subject to change. Check the class schedule for the most current information.
The catalog cannot be considered as a contract or agreement between the
individual student and Kirtland Community College or its administrators.

VISION AND VALUES

MISSION
The purpose of Kirtland Community College is to improve the quality of life in the Kirtland region by providing educational programs and services.

GUIDING PRINCIPLES
Kirtland's mission stems from a commitment to the development of the individual and is guided by the underlying belief that learning is a lifelong process that must consider an individual's life experiences, motivation, and readiness to learn. Through this process, people can become more independent and sound in their thinking, make better decisions, grow in self-esteem and gain greater control over their lives.

Education is a responsibility shared by the college, the individual, and the community. Education should stimulate creative, productive participation, instill the abilities to think critically and communicate effectively; encourage active participation in acquiring the skills and competencies necessary for a changing workplace; foster change in attitude and behavior, encourage exploration and instill desire to seek further knowledge, and foster a commitment to improving the quality of life in the community.

Kirtland Community College acknowledges that its students and staff share a joint educational responsibility to improve student learning by assessing the extent to which such student learning takes place and using that assessment to further enhance outcomes.

The community is defined as a region served, as well as a climate created. Kirtland's role within the community is to establish and build partnerships based upon shared values and common goals. Through these partnerships, Kirtland becomes a source of educational, civic, and cultural renewal.

How Kirtland Accomplishes Its Mission
Kirtland Community College accomplishes its mission by offering programs that prepare students for employment, that prepare students for transfer to four-year colleges, and that provide the region with a variety of academic, vocational, and cultural opportunities. The college does this by offering associate degree programs, certificate programs, developmental courses, and continuing education courses. To complement its educational programs, Kirtland also provides support services such as orientation, academic placement testing, advising, financial assistance, remediation, tutoring, counseling, career planning, and job placement services, all of which increase the likelihood of student success.

The college also serves the people and communities of the region by:

1.   Serving as an information center/clearinghouse

2.   Making its physical facilities and human resources available to citizens and community groups
3.   Serving as a cultural and entertainment center that provides citizens with the opportunity for enriching experiences not typically available to rural communities

4.   Participating with groups, individuals, and agencies in the economic growth and development of the Kirtland region

5.   Working cooperatively with local educational and community agencies to broaden and improve the educational opportunities for all residents of the region

KEY SUCCESS FACTORS
For a provider of personal and career-enhancement options, carving a visible niche in an overly competitive environment is no small challenge. There is an almost compulsive tendency to strive to be all things to all people. To set out in this direction would quickly deplete the institution's valuable resources, or so fragment the mission and purpose of the college that it would severely limit Kirtland's ability to serve the needs of its constituents.

Within this context, four key factors have been deemed essential to the fulfillment of Kirtland's mission and purpose. These are listed below:

Quality of Educational Experience
Regardless of the reason for which learners come to Kirtland to meet their educational and personal enrichment needs, the quality of their learning experience(s) and association with the institution will be a critical determinant of long-range success for the college. Issues of quality are not limited to the usual focus on assessment of teaching; rather, there are several additional attributes that uniquely contribute to degrees of excellence in the learning process:

Spirit of Partnership
Education is held to be a mature partnership process between the learner and the institution (in each and all of its many facets). Each partner shares the responsibility for contributing to meaningful educational and personal enrichment outcomes. The student assumes the responsibility for commitment to learning; the institution, through its faculty and staff, is accountable for creating and maintaining an effective quality learning environment.

Education as "Guided Learning"
Rather than the limited, traditional concept of teachers as gatekeepers of knowledge, Kirtland faculty exercise their role as "managers of learning environments," assuming the spirit of partnership in the educational process.

Learner Maturity
The life experiences of learners are recognized and valued as integral components of the educational process. The outcome engenders self-esteem as an inherent part of the educational process.

Professional Integrity
The mission and purpose of Kirtland demands the highest degree of integrity in the exercise of responsibilities, regardless of one's role and/or affiliation with the institution, be it as faculty, student, administrator, support staff member, or individual within the community at large within the Kirtland region. Success and survival of Kirtland as a viable force correlates directly to a collective dedication to use to the fullest the expertise, knowledge, skill, and experience available to support the institution in the achievement of its mission.

Joy
What makes Kirtland truly unique is that those who are associated with the institution find a deeply personal satisfaction in that association. There is a sense of joy in the relationships and of accomplishment in the work. A faculty member's observation typifies the feelings of those who have an affiliation with the college, regardless of status, function, or role: "I love what I teach because I respect who I teach. I love what I do because I am doing what I love."

External and Internal Support Networks
Kirtland is comprised of more than groups of students and faculty. There is a complex network of interdependent entities each with varied levels of expertise, knowledge, training and experience that exists within the context of both the institutions and the larger community served. The challenge is to bring about and maintain a harmonious balance in which the functioning of these interrelated networks supports the institution's mission and purpose.

Financial Stability
Proper fiscal planning and management are imperative in today's economy. Kirtland is impacted by federal, state, and local economies. Two ongoing programs of operations are warranted: (1) financial planning that promotes income for the institution coupled with (2) sound budgeting and expense allocations in day-to-day operations.

Responsive Leadership
Marshaling the resources necessary to establish, monitor, and manage programs and activities to foster success and effectiveness in the three critical areas noted above will require exemplary leadership. To lay a solid foundation for progress and movement into the future, a committed and visionary leadership group of highly skilled and respected professionals should be called to action. Working in various capacities, but dedicated toward the common mission, the leadership team will ensure the fulfillment of the college's objectives.

ASSURANCE OF QUALITY

Kirtland Community College is committed to graduating students of high quality, fully capable of performing the skills specified in the student's major, and in the area of the college's general degree requirements. Kirtland Community College offers assurance to its students, prospective employers, and transferring institutions that individuals holding degrees or certificates are fully capable of competent performance.

1. Transferring students who meet the admission criteria of the four-year college or university would be able to perform at a level equal to or better than those students who were admitted as freshman at the transferring institution.

The college will, upon recommendation from the institution to which the student transferred, permit the student to retake any course or courses previously completed at Kirtland in areas deemed deficient. This retake shall result in no tuition or fee charges for the student. If a retake at Kirtland is not preferred and the student shows proof of enrollment in an equivalent course at another college, the college will refund the tuition and fees paid by the student for the Kirtland course or courses in question.

2. Non-transferring students who earn a degree or certificate can be expected to perform competently in the area in which they were instructed. Any employer who views a Kirtland 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 or fee charge. If a retake at Kirtland is not preferred and the student shows proof of enrollment in an equivalent course at another college, the college will refund the tuition and fees previously paid by the student for the Kirtland course or courses in question. The college recognizes that unused skills decay rapidly. The assurances offered herein are made for individuals who transfer or gain employment within a year of receiving a degree or certificate and are limited to courses numbered 100 or above completed at Kirtland Community College with a C grade or better. Furthermore, this assurance does not apply toward performance on licensing or civil service examinations. Finally, Kirtland Community College graduates must have initiated their program of study after May 1989.

Kirtland Community College graduates who are eligible to apply for compensation in accordance with Kirtland's Assurance of Quality policy must have their employer or transferring institution submit a completed Assurance of Quality Compensation Request form to the student services office.

GENERAL EDUCATION

Kirtland Community College is committed to the belief that all graduates should possess the skills and breadth of knowledge necessary to realize their potential to live full and productive lives. This belief forms the foundation of Kirtland's commitment to the process and goals of general education.

General education is the heart of the educational experience at Kirtland. General education seeks to make people intellectually well-rounded, whole, and complete. It comprises that core of knowledge and skills that educated people need regardless of what career or vocation they enter. The pursuit of general education provides learners with the broad intellectual foundation necessary for continuing growth to achieve their potential and become successful lifelong learners in a changing world. General education provides the common knowledge and skills that enable us to understand one another, interact, collaborate to solve problems, and build an effective community.

Kirtland Community College seeks to achieve the aims of general education in three ways:

1. **The General Education Core**
   Every degree-seeking student completes a core of courses that nurture foundational competencies in critical reasoning, writing and communication, scientific inquiry, mathematical reasoning, computer literacy, and other areas.

2. **General Education Across the Curriculum**
   All of Kirtland's degree courses, regardless of discipline, are designed to build upon, apply, and continue to nurture the development of the knowledge and skills acquired in the general education core.

3. **Extracurricular Programs and Events**
   Kirtland seeks to extend, foster, and enrich the general education experience for its students through a variety of extracurricular programs and events, such as those listed below:

Kirtland Art Gallery	Controlled Burn Reading Series	Performing Artists Series
Brown Bag Lunch Series	Cultural Events	Service Learning Program
Center for the Performing Arts	Global Awareness Program	Student Writing and Art Competitions
Continuing Education Program	Kirtland Youth Theatre	Kirtland's Warbler Festival

   These and other cultural activities and programs at Kirtland help to foster intellectual curiosity, cultural enrichment, communication, critical thinking, diversity, lifelong learning, social and cultural awareness, and other general education goals.

COLLEGE OVERVIEW

ESTABLISHMENT OF THE COLLEGE
On March 7, 1966, in accordance with provisions of Public Act 188 of the Michigan Public Acts of 1955, Kirtland Community College was created by a vote of the electorate from six local K-12 school districts (Crawford-AuSable, Fairview Area, Gerrish-Higgins, Houghton Lake, Mio-AuSable and West Branch-Rose City). With this approval, the largest Michigan community college district was formed. The college's district totals 2,500 square miles and consists of all or part of nine counties. Approximately 65,000 people reside within the college's district.

LOCATION
Kirtland Community College, located close to the geographic center of the college's district, is accessible by F-97 from the north and south and by M-18 to County Road 603 from the west. The location is very rural and is approximately 170 miles north of Detroit, Michigan. Kirtland is surrounded by the following communities (approximate distances from the college are listed):

Grayling	30 miles	Mio	30 miles
Fairview	40 miles	Roscommon	11 miles
Frederic	35 miles	Rose City	35 miles
Houghton Lake	30 miles	St. Helen	8 miles
		West Branch	25 miles

ACCREDITATION
Kirtland Community College is accredited by the Michigan Commission on College Accreditation and The Higher Learning Commission, a commission of the North Central Association of Colleges and Schools at 30 North LaSalle Street, Suite 2400, Chicago, IL 60602 (800-621-7440). The college also holds membership in the Michigan Community College Association and the American Association of Community and Junior Colleges.

The Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools granted Kirtland Community College status as candidate for accreditation in 1972, and the college has been accredited as an associate degree-granting institution since 1975.

Students wishing to view documents pertaining to the accreditation and licensing of Kirtland Community College should submit their request in writing to the President's office. The request will be processed within five (5) business days of receipt. Any request requiring the copying of more than 50 pages will be assessed a copy fee of .10 cents per page.

CALENDAR
Kirtland operates on a semester calendar. There are two 15-week semesters, starting in late August and mid-January. A shorter session is offered during the summer and begins in June.

DEGREES AND CERTIFICATES
Kirtland offers seventy-three occupational (technical career oriented) certificate and degree programs and seven transfer degree programs. Transfer programs are designed for students planning to complete up to half of a bachelor's degree prior to enrollment at a university.

ENROLLMENT
Approximately 2,500 students are served annually by Kirtland through college level and community service classes. While 51 percent of Kirtland's students are under the age of 24, the average age is 30. Fifty-nine percent of the students attend on a part-time basis. Most are employed at least part-time.

INTERCOLLEGIATE ATHLETICS
The mission of the athletic program is to provide men and women with the opportunity to learn and grow as a result of participating in a high-quality intercollegiate program. The program also attempts to improve student life and, in turn, improve the recruitment and retention of students. The athletic program also seeks to increase community involvement with Kirtland by providing sports entertainment at a level that previously has not been offered in the Kirtland region.

Kirtland competes in intercollegiate athletics as a member of the Eastern Conference of the Michigan Community College Athletic Association. Kirtland also competes in the National Junior College Athletic Association as a member of Region XII (Michigan, Ohio, and Indiana. The Kirtland Firebirds compete in men's and women's basketball, men's and women's golf, and men's and women's cross-country. For more information, call the athletic director's office at 989- 275-5000, extension 325.

STUDENT PROFILE (2003 Fall Semester)

Total enrollment (census date): 1,824

Student Gender:
Males 39%
Females...61%

Student Age Distribution:
24 and under 53%
25 to 39...29%
40 to 59...15%
60 and older 2%
Unknown 1%

County of Residence:
Crawford..13%
Ogemaw..18%
Oscoda 12%
Roscommon 25%
Other...32%

Student Status:
FTIAC (first time in any college) 24%
Returning to KCC 67%

First-time Transfer 7%
Guest 2%

Student Program Areas:
Art 1%
Automotive.. 3%
Business 5%
Contracting with Business and Industry......................... 1%
Construction Technology 3%
Cosmetology 3%
Criminal Justice... 5%
Health Careers.. 25%
Industrial Technology 5%
Science 0%
Secretarial 5%
Transfer 24%
Personal Interest.. 20%

Student Credit Hour Load:
Non-Credit 1%
Part-Time: 1-11.99 credit hrs 63%
Full-Time: 12 & over credit hrs. 36%

2003-2004 COLLEGE CALENDAR

Approved by Board of Trustees. Dates are subject to change. Please check the current class schedule.

FALL 2004 SEMESTER

Fall Registration ....………………………….Monday – Friday ....August 23-29, 2004
Fall 2004 Semester Begins .... Saturday .... August 28, 2004
Late Registration...Monday & Tuesday ....August 30-31, 2004
Labor Day Break ....Saturday - Tuesday .... September 4-7, 2004
Thanksgiving Break... Wednesday – Sunday ....November 24-28, 2004
Fall 2004 Semester Ends...Sunday .... December 19, 2004

WINTER 2005 SEMESTER

Winter Semester Registration .... Wednesday & Thursday ....January 10-13, 2005
Winter 2005 Semester Begins... Friday .... January 14, 2005
Late Registration................................... Friday, Monday, & Tuesday ....January 14-18, 2005
Spring Break...Monday – Sunday ....March 7-13, 2005
Easter Break.. Friday – Sunday ....March 25-27, 2005
Commencement .... Friday .... May 6, 2005
Winter 2004 Semester Ends...Sunday .... May 8, 2005

SUMMER 2005 SESSION

Registration... Thursday – Friday ....May 31-June 3, 2005
Summer 2005 Session Begins…………………………………Saturday ....
June 4, 2005
Late Registration.. Monday .... June 6, 2005
Independence Day Break .... Saturday – Monday ....July 2-4, 2005
Summer 2005 Session Ends...Sunday .... August 1, 2005

NOTE: Dates are subject to change. Please check the current class schedule.

DIRECTORY OF SERVICES

Offices   **Extension**

ADMISSIONS **284**
This office is responsible for admission of all new students, new student recruitment activities, and admissions advising.

BOOKSTORE **273**
Located in the student center, the bookstore provides textbooks, reference books, classroom supplies, clothing, gift items and souvenirs, some snacks, and miscellaneous sundries.

CAFETERIA **268**
The cafeteria is located in the student center and is open Monday - Friday. Hours and specials are posted in the student bulletin.

CAREER AND EMPLOYMENT SERVICES **450**
This office helps students research specific careers and career opportunities. Assistance with job search strategies, résumé writing, and interviewing techniques is also provided.

COUNSELING OFFICE **280**
Michigan-licensed professional counselors are available in the student services office in the administration center to provide Kirtland students with academic, personal, and career counseling. The counseling staff will make use of a variety of test instruments when they work with students in order to help them learn more about their academic abilities, interests, personality type, and current level of self-esteem. The counseling process, aided often by such testing information, can help students make more informed personal, academic, and career decisions.

DEPARTMENT OF PUBLIC SAFETY **355**
The Department of Public Safety is located in room 127 in the administration center. Office hours are 8 a.m. to 11 p.m., Monday through Friday. Public Safety services include the following:
- After-dark escort service from buildings to vehicles
- Response to criminal behavior complaints
- Preventative workshops/seminars on drug/alcohol awareness, rape awareness, use of weapons, etc.
- The addressing of parking and traffic violations
- Provision of vehicle emergency assistance (keys locked inside vehicle, jump-starting vehicle, etc.)

FINANCIAL AID **257**
This office helps students apply for financial assistance including grants, loans, scholarships and student employment.

LIBRARY **246**
The library is open to the general community as well as all students. A variety of services are available, including full reference service, term-paper counseling, interlibrary loan, and online search service. See library for library hours and more information.

SERVICES FOR STUDENTS WITH DISABILITIES **252**
This office assists students who need supportive services to succeed in their college courses. Examples of services include scribes, note-takers, readers, textbooks on tape, and sign language interpreters.

INSTRUCTION OFFICE **270**
This office is located in the instructional center and is responsible for instructional matters that include the class schedule, cancellation of classes, selection and supervision of career and technical faculty, and related grade appeals.

RECORDS OFFICE **251**
The responsibilities of this office include course registrations, processing of student progress reports, grade reporting, maintenance of permanent academic records, issuance of academic transcripts upon student request, and transfer credit evaluations.
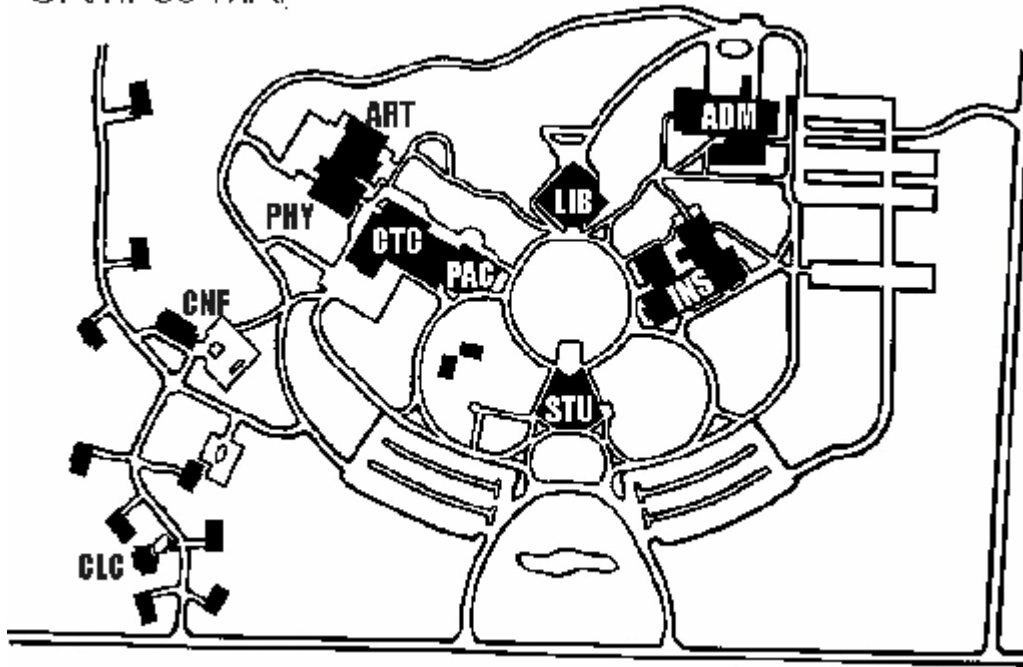
PHONE NUMBERS TO KNOW

MAIN SWITCHBOARD   **989-275-5000**
Telecommunication Device for the Deaf (TDD) 989-275-6721

COLLEGE MAPS

CAMPUS MAP

A - H - Parking lots

ADM - Administration Center - Administrative offices; Accounting; Athletics; Business Conference Room; Business Office; Career & Employment Services; Computer Help Desk; Computer labs; Criminal Justice Program offices; Developmental classrooms; Disability Services Office; Financial Aid Office; FLEX Lab; General, computer, and multimedia classrooms; Housing; Institutional Services; Journalism office; President's Office; President's Board Room; Records; Registration; Secretarial lab, Special Populations Office, Student Services (including admissions, counseling, placement); Testing Center

ART - Fine Arts Center - Art Department Office; Art labs; Sculpture lab

CLC - **Children's Learning Center**

CTC - Career Technology Center - Automotive labs; Cosmetology labs; Manufacturing lab; Welding lab; Faculty offices

INS - Instructional Center - Faculty offices; General and computer classrooms; large lecture hall, Biology lab; Computer-Aided Drafting & Design (CAD) lab; Chemistry lab; Developmental classrooms; Health Careers offices; Nursing lab; Physics lab; Tutoring lab

KIR – Kirtland House - Conference Center; Art Gallery

LIB - Library - Computer labs; Honors Program Office; eServices; ITV Room, Library facilities; Telecommunications Center

PAC - Performing Arts Center - Kirtland Center for the Performing Arts; G.I. Stewart Auditorium

PHY - Physical Plant - Printshop; Maintenance and Grounds Department; Shipping & Receiving

STU - Student Center - Bookstore; Cafeteria; Game Room; Music lab; Student Senate Office; Switchboard; Public Safety & Security Office; COOR offices

ADMISSIONS AND FINANCIAL AID

GETTING STARTED

ADMISSIONS POLICY
Kirtland Community College adheres to the "open door" policy of granting general admission primarily to all persons above the twelfth-grade age level. Depending upon the applicant's situation, either "regular" or "special" admission status will be granted.

Regular Admission
Regular admission will be granted to high school graduates and successful completers of the General Education Development (GED) test. Individuals who do not meet this requirement may also be granted regular admission by meeting "ability to benefit," as defined by federal regulations.

International students may be granted regular admission provided they meet certain English proficiency and financial requirements, as determined by the designated school official in the President's office.

Special Admission
Special admission will be granted to anyone who does not qualify for general admission. Persons admitted under this category will be restricted to non-degree/certificate-seeking status. The special admission category includes the following two groups:

1.   Dual-Enrolled Student: a K-12 student who is also attending college. Dual-enrolled students are required to submit a Dual Enrollment form for each semester or session of enrollment. All dual-enrolled students must have written authorization to attend Kirtland from their school's principal or counselor. Dual enrollees must also take Kirtland's Placement Tests.

2.   Non-High-School Completer: is a person who has withdrawn from high school, has not earned a GED certificate, and has not met the ability-to-benefit requirement.

Any person who desires either special or regular admission to Kirtland must complete an Application for Admission form. All students under the age of 18 must have parental or legal guardian consent.

Students being granted regular admission are encouraged to provide one of the following: (1) a high school transcript (with graduation date indicated), or (2) an official report of GED test results, verified by the college, showing test scores achieved by the applicant.

If regular admission was granted on the basis of the "ability to benefit" requirement, an official report showing test scores achieved by the applicant must be received and verified by the college.

Admission of Home Schooled Students
Most students attending college have earned a diploma from a public or private high school. Some students, however, have completed their high-school-level studies through a home school program. Parents of home schooled children are encouraged to register their program with the State of Michigan's Department of Education.

When a student attends a public or private high school, an official transcript (list of courses completed and grades earned by a student) is kept by the high school and made available to colleges upon a student's written request. In lieu of an official transcript, home schooled students are expected to provide a list of high-school-level courses completed and the grades earned in each course. If a home school diploma was awarded, a copy should also be sent to Kirtland's admissions office.

The Michigan Commission on Law Enforcement Standards (MCOLES) requires that criminal justice students complete a GED or a high school or adult education diploma, in addition to their home school diploma, in order to become certified.

Additional admissions requirements must be met by those students planning to enroll in one of the following programs of study:

- Criminal Justice Administration
- Corrections Administration
- Correctional Officer
- Criminal Justice Pre-Service
- Nursing Level I - Practical Nursing
- Emergency Medical Services/Paramedic/EMT
- Nursing Level II - Associate Degree in Nursing

Additional information about admissions requirements may be requested from the advisor or from the admissions office.
This admission policy will also be applied to returning students, regardless of their past admission status.

ADMISSIONS ADVISING

All students interested in being admitted to Kirtland for the first time are encouraged to make an appointment to see an admissions advisor. The advisor will help guide the student in completing all the steps necessary for a smooth entry into college. Tours, program requirements, and student services information are available for both students and their families.

TRANSFER OF CREDITS

Regionally Accredited Colleges and Universities

Credit may be given for courses transferred from regionally accredited colleges and universities. Credits only, not grades, are transferred for courses in which a grade of C or better has been earned. Students who received credit by departmental exam may be required to pass a Kirtland examination prior to the awarding of credit. Normally, a C- grade will not be accepted for credit when transferring to Kirtland. However, students may appeal to the dean or associate dean of their program (see page 46) to have the C- grade accepted. Students must appeal to the dean or associate dean in writing, stating reasons for acceptance of the grade. The dean or associate dean will consider the student's GPA from the previous institution as well as the student's Kirtland GPA in making the decision. Acceptance of the grade is at the dean's or associate dean's discretion, and his/her decision will be final. Courses on transcripts are evaluated by the registrar or designee according to the student's selected program.

The student's academic advisor will determine whether the awarded transfer credit may be applied toward the student's program of study. Students who want a transfer credit evaluation must request an official copy of their previous academic transcripts to be sent directly to the student services office.

Non-Regionally Accredited Colleges and Universities

Credit may be given for courses transferred from non-regionally accredited colleges and universities. The policy is the same as described above for "Transfer of Credit from Regionally Accredited Colleges and Universities," with the following exceptions:

1. The registrars office may choose to request a recommendation of transfer credit for the transcript in question from the academic advisor for the program in which the student has enrolled.

2. The student may be requested to demonstrate knowledge and/or skills commensurate with the performance required for satisfactory completion of existing courses.

3. Credit may not be granted.

Other Transfer Credits

Kirtland Community College recognizes the following opportunities for awarding transfer credits:

1. **College Board Advanced Placement Program (APP)**
   College course credit will be granted to students who participate in the APP and pass the Advanced Placement examinations with a score of three, four, or five. Students must submit a College Action Report to the student services office for consideration of granting college credit.

2. **College-Level Examination Program (CLEP)**
   College course credit will be granted to students who take a CLEP Examination and achieve the minimum passing score as recommended by the American Council on Education (ACE). Kirtland Community College does not award credit for all CLEP Examinations. A list is available in the counseling office that shows the CLEP Examinations acceptable for credit. Students must submit a CLEP transcript to the student services office for consideration of granting college credit.

3. **DANTES Subject Standardized Tests (DSSTs)**
   College course credit will be granted to students who participate in the DSSTs and achieve the minimum passing score as recommended by the American Council on Education (ACE). A list is available in the counseling office that shows the DANTES Examinations acceptable for credit. Students must submit an official transcript to the student services office for consideration of granting college credit.

4. **Educational Experiences in the Armed Services**
   Veterans may be awarded college credit for the service schools they attended and their work experience while in the U.S. military. The college awards credit based on recommendations provided by the American Council on Education (ACE). Students must submit a copy of their DD-214 and training certificates to the student services office for evaluation of prior training for college credits. Other documentation may also be required.

5. **United States Armed Forces Institute (USAFI) Program**
    College course credit will be granted to students who participated in the USAFI Program and achieved the minimum passing score as recommended by the American Council on Education (ACE). Students must submit an official transcript to the student services office for consideration of granting college credit.

6. **Articulation**
    College course credit will be granted to students who have met the requirements of formal articulation agreements between the college and secondary educational institutions. Students must submit an Application for Articulation Credit form to the records office at Kirtland Community College for consideration of granting college credit. College policies concerning the transferability of articulated credit vary. Students should check with the college to which they plan to transfer to determine if the articulated credit will be accepted by that college.

Currently Kirtland has articulation agreements with the following secondary educational institutions: Bible Baptist, Cheboygan, COOR-ISD, Crawford-AuSable, Davison, East Jordan, Fairview, Gaylord, Gerrish- Higgins, Hale, Houghton Lake, Huron Area Technical Center, Iosco RESA Tech Center, Johannesberg-Lewiston, Mio, Onaway, Oscoda, West Branch-Rose City, Whittemore-Prescott, Wolverine. For further information, students should consult with their high school counselor or contact the dean or associate dean of their program (see page 46).

PROFICIENCY IN BASIC ACADEMIC SKILLS AND PLACEMENT TESTING

Kirtland Community College requires prospective students to demonstrate basic academic skill proficiencies in English, reading, and mathematics before they will be permitted to enroll in college-level courses. Acceptable ways in which a student may demonstrate proficiency in one or more of the basic academic skills include the following:

1. Submitting ACT test results. The ACT must have been taken within <u>four</u> years of enrollment at the college. Test results can be presented in person or mailed to the admissions office.

2. Submitting test results from the Advanced Placement Program, CLEP, or DANTES. Official transcripts must be sent to the admissions office. An Application for Admission must be on file for a credit evaluation to be completed.

3. Transferring credit for courses taken in English and mathematics at another college or university. Courses must be completed with a C grade or better. Official transcripts must be sent to the admissions office. An Application for Admission must be on file for a credit evaluation to be completed.

4. Enrolling as a "Personal Interest" student. A student is permitted to take one occupational-technical course, developmental education course(s), business seminar(s), and studio art course(s) without being required to test for such placements.

5. Taking developmental courses offered by the college in the basic academic skills of English, reading, and mathematics.

6. Taking the COMPASS Test within <u>four</u> years of enrollment at the college. The COMPASS Test will consist of tests for English, reading, and mathematics.

Further exceptions to the Proficiency in Basic Academic Skills and Placement Testing policy may be granted by the associate dean responsible for testing (see page 46) or the dean of student services.

NEW STUDENT ORIENTATION
Practical information about campus procedures and college services are explained in the Student Orientation Guide, which is provided to new students when they take the COMPASS Test. New students, both new to the college experience and transferring from another college, find this information vital to their success at Kirtland. Please call the admissions office at 989-275-5000, extension 284, for more information.

PAYING FOR COLLEGE

TUITION AND FEES
Tuition
In-district residency: $62.75 per credit hour.   Out-of-state residency: $142.25 per credit hour.

Out-of-district residency: $115.15 per credit hour.   International student status: $162.85 per credit hour.

Residency categories are described in more detail in the "Residency" section on the next page. M-TEC^{SM} residency rules are addressed in the M-TEC^{SM} section.

General Fees
Activity fee: $1.00 per credit hour (not assessed during summer).

Course fees: Please refer to the class schedule.

Excess contact hour fee: $4.80 per excess contact hour.

Facilities fee: $2.00 per credit hour.

Registration fee: $15.00 per semester (nonrefundable).

Technology fee: $5.00 per credit hour.

NOTE: Tuition and fees are subject to change without notice. M-TEC^{SM} students should call 989-705-3600 for information about their fees.

Payment for Classes
Upon registration, it is the ultimate responsibility of the student to pay tuition, fees, and other debts incurred at Kirtland by the appropriate due date listed in the current class schedule and on CampusWeb. When registering in person, each student will be given a statement of account, as well as his/her class schedule. For students registering via CampusWeb, it is the students responsibility to view and print their charges from the "My Account" menu on CampusWeb. Statements will only be mailed upon request. Students with questions concerning their accounts are encouraged to contact the accounting office in the administration center at 989-275-5000, extension 238.

If payment in full is not received by the due date, the student's classes will be dropped, and the nonrefundable registration fee will still be due. All delinquent accounts will be turned over to a collection agency, and the cost of such action will be added to the student's account. Students are not be allowed to register for classes or receive transcripts if all financial obligations to Kirtland have not been met.

Methods of Payment
Cash, Check, or Money Order - Payment may be made in person or by mail. The student ID number needs to be included with the payment. A $15.00 charge will be assessed for all NSF checks returned by the bank.

VISA, MasterCard, Discover - Students have the option of paying by telephone by calling 989-275-5000, extension 238, or online via CampusWeb at: www.kirtland.edu.

Employer or Sponsoring Agency - The accounting office can bill a student's employer or a state agency if a signed authorization or letter is submitted prior to the payment due date or at the time of registration. Written authorizations need to be submitted each semester.

Financial Aid/Loans/Scholarships - When a student's financial aid award is approved, the amount will automatically be credited to his/her account. If the award does not cover the balance in full, the student is responsible for paying the difference by the due date. Also, if a student applies late for financial aid and the award has not been approved by the due date, the student must be prepared to pay. He/she may be reimbursed after the award has been posted to the account.

FACTS Payment Plan
Students with a tuition and fee balance of $100.00 or more may be eligible for the FACTS Payment Plan. This plan enables students to make interest-free payments for tuition and fees via automatic transactions from a checking or savings account, American Express, DiscoverCard, or MasterCard. The cost to enroll is $25.00 per semester. Tuition and fees may be budgeted for up to five months per semester. The earlier a student registers, the smaller the monthly payments can be. **If a student plans to make payments through**

FACTS, an online application must be submitted by the payment due date or on the day of registration. Otherwise, the student's classes will be canceled. After registering for classes students can apply online by logging into CampusWeb at: www.kirtland.edu. Once you are logged in click on **My Account**, then select the FACTS Payment Plan link at the bottom of the page. Once the application is submitted, the student will receive an e-mail from FACTS verifying the agreement. More information is available online on the accounting web pages at: www.kirtland.edu.

Residency

In-District Residency

A new student will be classified as in-district if he/she can prove that he/she has lived in the Kirtland college district for a period of five months immediately prior to attending Kirtland. The Kirtland district includes the following school districts: Crawford, Fairview, Gerrish-Higgins, Houghton Lake, Mio-AuSable, and West Branch-Rose City. Acceptable proof includes the following:

- Driver's license
- Voter registration card
- 5 mo's Rental receipts with address on it
- Place of residence property tax receipt
- Secretary of State identification card

A returning in-district student will continue to be considered in-district if he/she can prove he/she continues to reside in the district.

Out-of-District Residency

A new student will be considered out-of-district if he/she can prove residency within Michigan at least one month prior to attending Kirtland, but cannot prove in-district residency. Acceptable proof includes the following:

- Driver's license
- Rental receipt with address on it
- Voter registration card
- Place of residence property tax receipt
- Secretary of State identification card

A student who resides outside the district can be assessed an in-district tuition rate if he/she provides the college with tax receipts showing tax payments to the college, as long as the property is owned by the student or the student is a dependent of the person who owns the property.

A returning out-of-district student will be considered in-district if he/she can prove in-district residency as a non-student for a period of five months immediately prior to attending.

Out-of-State Residency

A student who cannot prove in-district or in-state residency will be considered out-of-state if he/she is a U.S. citizen, or if he/she is a registered alien who resides in the U.S.

An out-of-state student can change his/her classification to in-district in the same way that is described for out-of-district students.

International Student Status

A student who is not a U.S. citizen and who is attending Kirtland Community College under an F-1, J-1, or J-2 visa will be considered an international student.

REFUNDS

Tuition and fee refunds are based on the following schedule:

Full-semester courses

- 100 percent refund through and including the census date for the semester.

Open Entry/Open Exit Courses

- 100 percent refund prior to the start date indicated on the student's FLEX contract.
- No refunds as of the start date indicated on the student's FLEX contract.

All other courses

- 100 percent refund through and including the census date for the course.

Registration fees are nonrefundable. The college will follow any federally mandated refund schedules. Contact the accounting office for more information. Exceptions to the stated refund policy may be granted by the dean of student services.

Cancelled Class

Students who registered for a course that is cancelled by the college will be refunded ALL tuition and fees for the cancelled course.

Federal Return of Funds/Repayment Policy

Under changes made by the Higher Education Act of 1998, this policy focuses on the amount of Title IV program funds to be returned when a student withdraws from college prior to completing the semester. This policy applies only to students receiving Title IV aid (federal PELL grants, federal SEOG, and federal subsidized and unsubsidized Stafford Loans).

During the first 60% of the enrollment period, a student "earns" Title IV funds in direct proportion to the length of time he or she remains enrolled.

Students who withdraw totally from the college without completing 60% of the enrollment period will be required to repay a portion of the aid received within 45 days. For example, a student withdrawing after completing 10% of the enrollment period may need to repay up to 90% of the federal funds that were awarded to him or her.

A student's withdrawal date is:
• the date the student began the institution's withdrawal process, or
• the midpoint of the period for a student who leaves without notifying the school.

The institution has the option of using the student's last date of attendance at a documented academically-related activity in lieu of any other withdrawal date.

The responsibility to repay unearned aid is shared by the school and the student in proportion to the aid each is assumed to possess.

The institution's share is the lesser of:
• the total amount of unearned aid, or
• institutional charges multiplied by the percentage of aid that was unearned.

The student's share is:
• the difference between the total unearned amount and the institution's share.

After the student's share is fully allocated among the Title IV programs, any amount owed to a grant program is reduced by half.

Students with questions should contact the financial aid office.

NOTE: A student who withdraws may have charges not covered by financial aid, such as non-classroom-related items charged at the bookstore, which must be paid by the student.

FINANCIAL AID

The Kirtland Community College financial aid office endorses the philosophy that the primary source of support for a student should come from his/her own family. However, to the extent funding will allow, Kirtland will try to assist a student with financial aid when the family is unable to meet college expenses. Approximately three out of four students receive financial assistance through scholarships, grants, loans, and/or student employment.

Financial aid is a privilege, not a right. Therefore, it is the student's responsibility to: (1) obtain and file the appropriate forms; (2) maintain the correct address on file; (3) respond promptly and fully to all requests for information; and (4) understand and comply with the rules governing the aid received.

HOW TO APPLY FOR FINANCIAL AID

All students wishing to be considered for financial assistance (including student loans and work study) must complete and file the Free Application for Federal Student Aid (FAFSA) available from Kirtland's office of financial aid. An electronic application may also be accessed at www.fafsa.ed.gov. This is not an application for any particular form of aid; rather, it is an application **for needs analysis**, on which most federal and state aid programs are based. Within 30 days after submitting the FAFSA, the student will receive his/her copy of the Student Aid Report (SAR).

If there are any problems, errors, or questions, the student should contact the financial aid office of the college. The SAR will be used to determine which programs the student is eligible for and how much can be awarded. The student may need to provide supporting documentation for information provided on the FAFSA.

A student's application for aid at Kirtland will not be considered finalized until the following items are completed:

1. The applicant has been officially admitted to Kirtland Community College.

2. The financial aid office has on file the following documents, if selected for verification:
    *   Student Aid Report (SAR) from the federal processor and, if required,
    *   Verification Worksheet
    *   Income documentation: federal income tax returns and/or other sources of income
    *   Other information as requested

3. The applicant has been packaged for aid and mailed a letter by the financial aid office listing the award(s) he/she is expected to receive.

HOW THE FINANCIAL AID FORMULA WORKS

Most federal and state financial aid is awarded on the basis of demonstrated financial need. The formula used to determine who has need and who does not is actually quite simple. The following equation is used:

Student Budget - Expected Family Contribution = Financial Need

Student Budget is the cost of attending college (tuition, fees, room and board, transportation, books, supplies, etc.).

Expected Family Contribution is taken from the student's Student Aid Report.

Financial Need is the maximum dollar amount of need-based aid from the various sources for which the student is eligible.

A student will not necessarily receive financial assistance up to the maximum dollar amount for which he/she may be eligible. The various sources of aid have maximum award amounts and may be further affected by limitations in the availability of funds. Loans may be available if grant aid is insufficient. Inquire at the financial aid office if additional funding is needed.

Applicants' answers to certain questions will determine whether they are considered "dependent" (still part of a parent's family unit) or whether they are "independent" (have formed their own family unit). Students are classified according to family unit because federal student aid programs are based on the idea that students, and their parents or spouses (if applicable), have the primary responsibility for paying for their postsecondary education. To be considered "independent," at least one of the following must apply to the student:
*   turns 24 before January 1 of the academic year for which aid is sought.
*   is a veteran of the U.S. Armed Forces.
*   is an orphan or ward of the court until age 18.
*   is married.
*   has dependent children.

HOW DO STUDENTS PAY FOR CLASSES IF THEY HAVE FINANCIAL AID?

At time of registration, and if and only if all financial aid paperwork has been received and processed by the financial aid office, a student may charge college costs (tuition, books, supplies, and certain fees) up to the amount the student has been awarded in aid. If a student does not have all paperwork completed at time of registration, the student will be obligated to make other arrangements for payment and may be required to pay in full. Students must be aware that financial aid is always subject to change without prior notice if changes occur in the student's enrollment status, class attendance, personal circumstances, or in federal or state guidelines.

The student is responsible for all college bills not covered by financial aid. All charges incurred during a semester that are not covered by financial aid must be paid by the student before the student will again be allowed to register.

FINANCIAL AID AND WITHDRAWALS

A student who withdraws, ceases attendance, or is expelled may have charges and financial aid adjusted according to the time and circumstances of cessation of enrollment. Students should refer to the refund schedules, which are published in the current class schedule. Failure to attend class without officially withdrawing may void financial aid, leaving the student responsible for all charges. Students must advise the student services office in writing in order to withdraw.

OVERAGES AND REFUNDS

Overages, or payments due the students from their awards after charges have been deducted, will be made available approximately the fifth week of class. Exceptions are for: student loan borrowers, whose checks are generally distributed 30 days into the enrollment period; work-study pay checks, which are issued biweekly; and those students who are enrolled in modular coursework programs.

STANDARDS OF SATISFACTORY ACADEMIC PROGRESS

To be eligible for financial aid, students must be in Good Academic Standing and making Satisfactory Academic Progress, as defined below, toward the completion of a one-year certificate or degree program. This policy applies to all students receiving assistance from any financial aid program administered by the Kirtland Community College financial aid office. This policy is separate from the college's general probation policy and is monitored at the completion of each semester of enrollment. The following standards must be met in order to continue to receive financial aid:

Good Academic Standing

Good Academic Standing means maintaining a current grade point average (GPA) of 2.00 or better. In addition, once the student has completed a cumulative total of 45 credit hours, the student must maintain a cumulative GPA of 2.00.

Satisfactory Academic Progress

Satisfactory Academic Progress means that the student is making reasonable progress toward completion of a degree or certificate program. For each semester of enrollment, students must satisfactorily complete 66% of the credits for which they were awarded aid.

A student shall not receive financial aid for credit hours taken beyond a maximum of 150 percent of the published length of their declared program of study. Upon completion of a program of study, a student may be considered for financial assistance up to a maximum of 150 percent of a new program of study. Kirtland Community College limits financial aid eligibility to a maximum of three eligible certificates (without completing an associate degree) and no more than three associate degrees. In addition, the following rules also apply:

- Classes taken for audit will not be considered when determining eligibility.
- Incomplete (I) grades are considered as failures to complete unless and until changed to passing grades.
- No more than 30 credit hours of remedial classes will be approved for financial aid.
- Repeated courses will be allowed only if the previous course grade was less than a 1.00.

PROBATION/TERMINATION

Any student failing to meet the above standards will be placed on financial aid probation for the student's next actual period of enrollment (unless a period of at least four calendar years has elapsed, in which case the student may be considered for a one-time-only waiver). A student will continue to receive financial aid during the probationary semester. The student must complete a minimum of six credit hours to be considered for removal from probation. Failure to do so will result in termination from future financial aid. In the case of a student who has exceeded the allowable semester limit, all requirements for graduation should be met during the probationary semester as no further financial aid will be granted.

REINSTATEMENT

Except for students exceeding the time limitations within a degree or certificate program, a student may regain eligibility for financial aid by enrolling for a semester and satisfactorily completing, at his/her own expense, a minimum of six credit hours. It is the student's responsibility to notify the financial aid office when satisfactory academic progress has been met.

Students should be aware, however, that all of the above listed requirements are applicable whenever financial aid is being considered, whether or not any previous courses were taken at the student's expense. The only exception to this policy shall be in the instance where a student applying the first time for financial aid, who has a prior record of unsatisfactory progress but has been allowed by the college to enroll, may be considered for financial aid for one probationary semester. As stated previously, satisfactory completion of probationary requirements will remove the probationary status.

APPEALS/SPECIAL CIRCUMSTANCES

All students have the right to appeal any decision or action taken regarding their financial aid. Appeals may be made in typewritten form to the director of financial aid. The student must explain any mitigating circumstances and be prepared to provide all reasonable proof or documentation requested. A committee decision is final. The result of an appeal will be recorded and kept on file.

Any student who feels his/her family has special circumstances that might affect the amount the family can contribute may request, in writing, a professional judgment analysis by the financial aid office. Special circumstances include unusual medical or dental expenses; tuition for children attending private school; or recent unemployment of the student, his/her spouse, or parents. The director of financial aid will review the request to determine if circumstances meet professional judgment guidelines. Any decision made in this regard is final and cannot be appealed to the Department of Education.

CONFIDENTIALITY OF RECORDS
Information contained in the financial aid file is strictly confidential and will not be released without the prior written approval of the student. However, departments within the college may be provided information on a "need-to-know" basis. Files are generally destroyed after five years.

STATEMENT OF COMPLIANCE
Financial aid is awarded in compliance with all pertinent federal and state laws and regulations, without regard to race, creed, color, religion, national origin, sex, age, or handicap, except as provided under federal and state laws and regulations.

STUDENT EMPLOYMENT
Part-time student employment is offered both on and off campus. The federal government and Kirtland Community College provide work-study dollars, which fund the student employee program. Off-campus employers may be obligated to contribute matching funds. The goals of the program are to provide employment experience, the opportunity for community service, and additional financial assistance to students. Students are paid an hourly rate for the work they perform.

Students must file the Free Application for Federal Student Aid form (FAFSA) before consideration for student employment and attend a student employee orientation.

STUDENT EMPLOYMENT HANDBOOK
The purpose of the Student Employee Handbook is to inform students of the general provisions and regulations of work study, a financial aid program that provides valuable job experience through student employment. This booklet includes responsibilities of student employees and their supervisors, how to complete a time sheet, office conduct, student employee evaluation process, and forms. Contact the financial aid office for a copy.

SOURCES OF FINANCIAL AID
There are many different types of student financial aid. Almost all, including state and federal grants, student loans, work-study, and even many scholarships, require the filing of the Free Application for Federal Student Aid form (FAFSA) for a determination of "financial need." Financial aid is classified in the following manner:

Grants - do not have to be repaid; awarded on the basis of demonstrated financial need.

Scholarships - do not have to be repaid; based upon academic performance and/or special circumstance. Demonstrated financial need may be considered.

Student Loans - must be repaid. Interest rates and repayment options are regulated by federal law and may change year to year.

Work-Study - is part-time work during the school year and vacation periods. Demonstrated financial need is typically considered.

GRANTS

BUREAU OF INDIAN AFFAIRS (BIA)
The student must be a registered member of a federally recognized American Indian tribe, be enrolled in a public college or university, and demonstrate financial need. For more information, contact Bureau of Indian Affairs, Federal Square Office Plaza, Box 884, Sault Ste Marie, MI 49783. Phone: 906-732-6809.

MICHIGAN MERIT AWARD SCHOLARSHIP
The student must score well on the MEAP exams while in high school. The state makes the award, and it is disbursed by the college.

MICHIGAN TUITION INCENTIVE PROGRAM (TIP)
The student must be from a low-income family and must have graduated from high school or completed a GED prior to reaching the age of 20.

If the student is eligible, the state will pay tuition and fees at Michigan community colleges and some universities. Applications should be submitted to the state no later than the senior year in high school, although eligibility may be established as early as grade seven.

FEDERAL PELL GRANT
This grant is awarded to undergraduate students demonstrating financial need.

FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)
This grant is awarded as a supplement to the PELL Grant to students showing exceptional need.

SCHOLARSHIPS/GRANTS OFFERED BY KIRTLAND COMMUNITY COLLEGE

DEPARTMENTAL SCHOLARSHIP
This scholarship is limited to Kirtland students who have completed, or are in the process of completing, at least 24 college credits, of which at least 12 must have been taken at Kirtland. Consideration is given to the student's overall GPA, the program GPA, and the program advisor or instructor's recommendation.

GILBERT I. STEWART SCHOLARSHIP
Students must have graduated from high school within the past academic year with a minimum GPA of 3.50.

KIRTLAND HONORS SCHOLARSHIP
Students must have been accepted into the Kirtland Honors Program.

KIRTLAND INDIAN TUITION WAIVER
The student must have been a Michigan resident for at least 12 months and be certified by his/her tribal association as not having less than 1/4 blood quantum.

OTTO AND MARTHA KRAUSS HONORS SCHOLARSHIP
Students must be admitted to the Kirtland Honors Program.

PRESIDENT'S SCHOLARSHIP
Students must have graduated from high school within the past academic year with a minimum GPA of 3.00.

SENIOR CITIZEN SCHOLARSHIP
Students must be residents of the Kirtland district, age 60 or over. Students should refer to the current class schedule for details.

SCHOLARSHIPS/GRANTS SPONSORED BY THE KIRTLAND FOUNDATION

AUTO PARTS GRANT
The student must be one with exceptional financial need who requires vehicle repairs in order to attend class.

ANN AND LAWSON CHAMBERS SCHOLARSHIP
This scholarship is limited to students who are residents of Rose City and Lupton.

CARL J. DARLING JR. MEMORIAL SCHOLARSHIP
This scholarship is limited to criminal justice pre-service students entering the Police Academy. They must have a GPA of 2.5 or better.

MILDRED DEBOLT SCHOLARSHIP
This scholarship is limited to students majoring in English.

JAMES D. FRYFOGLE MEMORIAL
This scholarship is limited to Kirtland Level II Associate Degree Nursing students who maintain a minimum 3.00 GPA in their core courses and a minimum 2.50 GPA for all other courses. They must also be residents of the college district.

MARGUERITE GAHAGEN SCHOLARSHIP
Students applying for this scholarship must be majoring in journalism at Kirtland. They must have earned a 3.00 GPA. Preference is given to those who reside in Roscommon County and/or show financial need.

JEAN KING MEMORIAL
This scholarship is limited to students majoring in fine arts or commercial arts at Kirtland. They must be residents of the college district. First preference will be given to residents of Ogemaw County.

THE RON MARINO MEMORIAL SCHOLARSHIP
Students must be seeking a degree or certificate on at least a half-time basis. Applications will be reviewed based upon a Statement of Goals, an instructor's recommendation, and an evaluation of financial need. Employees or immediate family members of Weyerhaeuser Company shall receive first consideration.

HERBERT AND EVELYN MILLER SCHOLARSHIP
This scholarship is limited to Kirtland Level I LPN students who maintain a minimum 3.00 GPA in their core courses and a minimum 2.50 GPA for all other courses.

HERBERT F. POEHLE MEMORIAL
This scholarship is limited to students majoring in fine arts at Kirtland Community College.

THE KEITH RICH TRUST
This scholarship is limited to students enrolled in nursing or other medically related programs at Kirtland. Applicants or their parents/guardians must be residents of Lyon Township, Roscommon County, Michigan.

PATRICK J. TRAHAN MEMORIAL
This scholarship is awarded in recognition of academic performance in chemical science, with preferential treatment given to those students pursuing a career in conservation or natural resources.

SCHOLARSHIP SPONSORED BY OUTSIDE AGENCY

JANET SIEB MEMORIAL SCHOLARSHIP
This scholarship is limited to full-time students in a business or office information systems program. Applicants must be residents of the college district and demonstrate financial need.

OTHER SCHOLARSHIPS
Many other particular and unique scholarships may be available from corporations, associations, agencies, clubs, churches, and foundations. It is recommended that interested students make inquiries of their high school counselor, their local Chamber of Commerce, their place of employment (or their parent's), any organizations to which they or their parents may belong, and the financial aid office.

STUDENT LOANS
NOTE: Loan eligibility criteria are subject to revision. Contact the financial aid office for current details.

FEDERAL FAMILY EDUCATION LOANS - FFEL
Subsidized Stafford Loan
This loan is for students enrolled at least half-time who demonstrate financial need beyond what is met by other financial aid. The federal government covers interest payments during periods of deferment. Students must file the FAFSA to have financial need determined.

Unsubsidized Stafford Loan
This is identical to the subsidized loan, except that the federal government does not pay the interest while a student attends classes.

PARENT LOAN PROGRAM (PLUS)
This loan is for parents of dependent students who have obtained the maximum financial assistance from other sources, including the PELL Grant and Stafford Loan.

MICHIGAN ALTERNATIVE STUDENT LOAN PROGRAM (MI-LOAN)
This loan is for students showing need over and above all other sources of financial aid for which they have been determined eligible. It is recommended that the student file the FAFSA to have need determined unless he/she is enrolled in a program of study not eligible for federal student aid.

OTHER PROGRAMS AVAILABLE AT KIRTLAND

SPECIAL POPULATIONS GRANTS
Attendance costs such as tuition, fees, books, supplies, uniforms, transportation, and/or dependent care may be covered for special population students enrolled in approved occupational programs or courses. Grants may be available to students with disabilities, students who are economically or academically disadvantaged, students with limited English proficiency, and also to the following students:

1. Single Parents, including single pregnant women, who are unmarried or separated from a spouse and have a minor child or children for whom the parent has either custody or joint custody, or who are unmarried or separated from a spouse and pregnant.

2. Displaced Homemakers, who have worked primarily without pay to care for the home and family and for that reason have diminished marketable skills, are also unemployed or underemployed, and have experienced difficulty in obtaining or upgrading employment. They must also have been dependent on the income of a family member but are no longer supported by that income or must be a parent whose youngest dependent child will become ineligible to receive Social Security assistance not later than two years after applying for the Title IV Social Security assistance.

3. Nontraditional Training and Employment Participants, who are preparing for occupations or fields of work, including careers in computer science, technology, and other emerging high-skill occupations, for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field of work.

Students participating in these programs must apply for other appropriate federal financial assistance by completing the Free Application for Financial Student Aid form (FAFSA). Priority is given to those with the greatest financial need.

COMMUNITY SERVICE
Opportunities are available for students who wish to perform community service. Examples include, but are not limited to, welfare, social services, transportation, public safety, crime prevention and control, recreation, work in service opportunities or youth corps, specified services for agencies identified by the National and Community Service Act of 1990, mentoring activities, support services for disabled individuals, health care, child care, literacy training, education, housing and neighborhood improvement, rural development, and community improvement. For further information, contact the financial aid office.

VA EDUCATIONAL BENEFITS
Entitlement and Eligibility
Veterans, dependents, and selected reservists should contact Kirtland's financial aid office in the administration center to obtain accurate, complete, and current information concerning educational benefits.

Educational Benefit Programs available are the following:

1. Chapter 30, Montgomery GI Bill
   Active Duty Educational Assistance Program

2. Chapter 31, Vocational Rehabilitation
   Veterans with a compensatory service-connected disability that impairs employability

3. Chapter 32, VEAP
   Non-contributory VEAP (Section 903)
   Service beginning on or after January 1, 1977, through June 30, 1985

4. Chapter 35, Educational Assistance for Veterans' Dependents
   Children and spouses of veterans who died of a service-connected disability or who are totally and permanently disabled from a service-connected disability

5. Chapter 1606, Montgomery GI Bill Selected Reserve Educational Assistance Program

VA Application Process
VA application forms are available online at www.gibill.va.gov, or from the financial aid office located in the administration center. The application is submitted to the VA with copy 4 of DD-214 (separation papers), preferably certified by a county clerk.

If the student has previously drawn educational benefits elsewhere, the student needs to complete a Request for a Change of Place and/or Program form and have transcripts from other colleges sent to Kirtland for evaluation as soon as possible. Benefits can be suspended if credit evaluations are not reported to the VA before the student completes two semesters.

Pay Rate
Monthly rates vary according to which VA program is providing the assistance and the student's course load status: full-time (minimum of 12 credit hours); three-quarter time (9-11 credit hours); half-time (6-8 credit hours); less than half but more than one-quarter (4-5 credit hours); one-quarter time (3 credit hours).

Advance Pay
Students eligible for VA benefits may request an advance payment if they carry at least a half-time course load and the VA receives the enrollment certification at least 30 days before classes start. The advance check covers the initial month or partial month of the semester, plus the following month. This check is sent to the college, and the student receives it at registration. Subsequent checks are mailed to the student's mailing address or can be directly deposited to the student's financial institution.

Guidelines and Responsibilities

1. Generally, classes certified must fulfill graduation requirements.

2. VA payment is not ordinarily allowed for repeating a previously passed course.

3. Any changes in program of study, course load, address, etc., must be reported to the financial aid office.

4. If any eligible student certified for benefits fails to enter a course or withdraws officially or unofficially from classes, the VA will be notified.

5. Students having problems with payment should contact the financial aid office on campus or call the VA toll-free number: 1-888-442-4551.

7. Monthly verifications are required by Ch. 30 students. Attendance may be verified by calling 1-877-823-2378 at any time on the last day of the month or later or use WAVE Internet access: www.gibill.va.gov

Consequences of Dropping Classes
If a student receiving VA benefits drops a class after the first 30 days of a regular semester and the drop changes the student's status, the student may have to repay the money received for the class. If the student receives a failing grade in the course dropped, the student is paid until the last date of attendance. However, if the student receives a W grade, the student must repay the benefits received for that course unless the drop was due to circumstances beyond the student's control.

The first time a student withdraws from up to six credits, the VA will excuse the withdrawal and pay benefits for the period attended. A VA-eligible student must always contact the financial aid office before dropping courses to prevent payment problems.

Satisfactory Progress
A student receiving VA benefits needs to understand the college's policy regarding academic probation. When this policy allows, a VA student placed on probation may have a maximum of two consecutive semesters to raise the cumulative grade point average to a 2.0. Failure to do so will make the student ineligible for recertification, and unsatisfactory progress will be reported to the VA in writing.

The student may be recertified in the future under one of two conditions: (1) the cumulative grade point average is raised to 2.0, or (2) a request for resumption of VA educational benefits is submitted to the VA and the VA reinstates benefits based on evidence supporting the student's claim. The director of financial aid will assist the student in submitting a claim for reinstatement of benefits if there were mitigating circumstances that led to the unsatisfactory progress.

MICHIGAN ARMY AND AIR NATIONAL GUARD TUITION WAIVER
A 25% tuition waiver is available to degree-seeking members of the Michigan Army or Air National Guard. Students should contact the director of financial aid in the administration center or at 989-275-5000, extension 257, for more information.

SERVICEMEMBERS OPPORTUNITY COLLEGES (SOC)
Kirtland Community College is designated as an SOC. SOC is a network of more than 1,400 colleges and universities whose policies and programs are designed especially to help meet the higher education needs of service-members. Contact the student services office for more information.

MICHIGAN VETERANS TRUST FUND
Children of Michigan veterans whose death or total disability is connected with wartime service should also inquire about the Michigan Veterans Trust Fund. If they are Michigan residents and not over 25 years of age, they may be eligible for full or partial coverage of tuition and fee charges.

REGISTRATION AND ACADEMIC POLICIES

REGISTRATION PROCEDURES
All students are required to complete admissions requirements and procedures before registration for classes. Students register for classes according to instructions published each semester in the class schedule. Students may register online at specified times by using CampusWeb at the following web site: www.kirtland.edu, in addition to registering in person.

A **registered student** is one who has completed the registration process, including arranging for payment of all financial commitments. A student must be registered for a class before he/she may attend the class. Questions concerning these procedures should be directed to the registrars office in student services.

Early registration is held just before the end of the fall and winter semesters and in the summer for the fall semester. This is an opportunity for students to secure their classes before the busier time of regular registration.

Regular registration is held just before the beginning of the semester or session. Both new and returning students may register for classes during this period.

Late registration is held during the first one or two days of a semester or session. Both new and returning students may register for classes during this period.

Online registration (CampusWeb) is available to students during open registration periods. If a registration period is open through the weekend, though the office would be closed for walk-in registration, students can register online throughout the weekend. You may access CampusWeb though our home page at: www.kirtland.edu.

CREDIT HOUR LIMIT
Students enrolling for more than 18 credit hours for the fall or winter semester, or more than eight credit hours for the summer session, must receive permission from their dean, associate dean, or designee (see page 46). In the instance where the college catalog lists more than 18 hours as a suggested semester load, students may register without need additional permission.

COURSE ADJUSTMENTS (ADDS AND DROPS)
Add/Drop forms for adding and dropping courses can be secured from the student services office. Adds and drops should be approved by the instructor or advisor and are to be used only to improve the student's instructional program.

Adding a class
Students are expected to complete their registration during the regular registration period. However, if a student must add a course, it should be done before the end of the first week of the semester. No student will be allowed to add a class after the class has met more than two times without written authorization from the instructor of the course.
Dropping a class
Students are permitted to drop any class in which they are enrolled, provided the request to officially drop the class is processed during the published drop period. Exact dates of the drop period are published in each semester's class schedule. (Please refer to the information listed in this catalog under "Withdrawal from Courses.")

COURSE REPETITION
A student may repeat any course previously taken or an equivalent at Kirtland Community College to improve his/her grade. Only the higher grade is credited when computing the grade point average, although both grades appear on the transcript.

If the student has achieved a C grade or better on the first repeat of a course, a second repeat will not be permitted. A student may not repeat a course more than twice. Exceptions to this policy may occur when a student desires reentry or progression within a particular program that requires current competency. These exceptions may be authorized by the program advisor. Other exceptions may only be authorized by the dean or an associate dean.

Students receiving financial assistance should check with the financial aid office before registration. Students should be aware that financial aid will not generally cover a repeated class if the prior grade was a C or better.

AUDITING OF COURSES

A student who wants to attend a course regularly but does not wish to receive a grade or credit may register to audit the course. A student who audits a course will be required to officially register and pay all tuition and fees.

A change from audit to credit or credit to audit must be approved by the instructor of the course. A Change in Audit Status form can be secured from the student services office; the form must be properly completed, signed by the instructor, and submitted to the records office in student services for processing.

Financial aid is not available for a course taken for audit. Students receiving financial assistance should check with the financial aid office to determine what effect the audit may have on their financial aid package.

GRADE REPORTING SYSTEM

Grades are issued at the end of each semester or session and become a permanent part of the student's record. Kirtland operates on two 15-week semesters and an 8-week summer session.

The following grades are computed in the semester/term and cumulative/career grade point average (GPA): A, A-, B+, B, B-, C+, C, C-, D+, D, D-, and E.

Academic achievement is recorded as follows:

Honor Point

Grade	Definition	Value
A	Excellent performance	4.0
A-	Excellent performance	3.7
B+	Above average performance	3.3
B	Above average performance	3.0
B-	Above average performance	2.7
C+	Above average performance	2.3
C	Average performance	2.0
C-	Below average performance	1.7
D+	Below average performance	1.3
D	Below average performance	1.0
D-	Below average performance	0.7
E	Failure	0.0
I	Incomplete	N/A
W	Withdrawal	N/A
AU	Audit	N/A
CR	Transfer Credit	N/A
R	Registrar Grade	N/A
S	Satisfactory	N/A
SA	Satisfactory - Grade A	N/A
SB	Satisfactory - Grade B	N/A
SC	Satisfactory - Grade C	N/A
SD	Satisfactory - Grade D	N/A
U	Unsatisfactory	N/A
IP	Denotes class in progress	N/A

The number of **honor points** received for a course is determined by multiplying the honor point value of the course by the number of credit hours. Therefore, a grade of B in a 4 credit-hour course is 12 honor points (3 x 4).

A **grade point average** is obtained by dividing the total number of honor points by the total number of credit hours graded. For example, a total of 32 honor points earned in a semester by a student enrolled for 16 credit hours equals a grade point average (GPA) of 2.00 for that semester.

TRANSCRIPTS

Official and unofficial transcripts are available from the records office in student services at no charge. Official transcripts include the college seal and are sent directly from Kirtland to the college, employer, or other location the student indicates. Unofficial transcripts do not have the college seal and can be given to the student.

A student requesting a transcript must do so in writing and include his/her Social Security number and/or student identification number, signature, and to whom and where (including address) the transcript is to be sent. Transcript requests can be sent by fax to (989-275-6789) and, if a FAX number is provided by the student, an unofficial copy may be faxed to another location.

NOTE: No transcripts will be issued to any student who has not met all of his/her financial obligations to Kirtland.

STUDENT RECORDS

In addition to academic transcripts, students' records are maintained by the records office in student services. A student record may include the application for admission, high school transcript, other college transcripts and the transfer credit evaluation, test results, correspondence, student progress reports, and other student information. Students may review their own student record any time during office hours with proper identification.

PROGRESS REPORTS

A progress report is initiated by an instructor to notify a student of poor academic performance or lack of attendance in the instructor's course. The progress report is submitted to student services offices (counseling, student support services, and financial aid), and copies are sent to the student and placed in the student's file.

STUDENT ATTENDANCE POLICY

Students are expected to attend every class and laboratory period for which they have registered. Regular class attendance is necessary for students to receive maximum benefits from their classes. Excused absences for participation in authorized campus activities shall in no way lessen student responsibilities for meeting the requirements of the class. Excessive absence may affect financial aid awards.

Regular attendance is expected of each student in each course. Instructors are required to determine reasonable attendance and satisfactory academic progress during the semester. Progress reports will be filed for students with poor attendance records. Financial assistance, whether Veterans Administration, federal and state grants and scholarships, student loans, work-study, or private funding, may be cancelled or reduced if attendance is unsatisfactory.

Since attendance is a legitimate basis for grading by instructors, students will receive progress reports for lack of attendance (see "Progress Reports"). If absent from class, students should explain the reason for their absence to their instructors.

INCOMPLETE GRADES

A student may request an incomplete (I) grade when he/she has found it impossible for reasons beyond his/her control to complete all required course work by the close of the semester. Upon the instructor's discretion, an incomplete grade may be granted.

If granting an incomplete grade, the instructor shall submit an Incomplete Grade Request form to the records office. If the course work is completed within the period prescribed by the instructor, the incomplete grade will be changed to the letter grade the student has then earned. If course work is not completed within the prescribed period, the incomplete grade will be changed to a letter grade of E.

WITHDRAWAL FROM COURSES

Students may withdraw from courses for which they have registered. If a withdrawal is made before or on the census date, no grade will be recorded. However, for withdrawals made after the census date and through the 14th week of the semester or through the sixth week of the summer session, a grade of W will be automatically issued. Check the class schedule or contact the records office for more information concerning the grading system for withdrawals.

A student withdrawing from a course must complete a drop form, and submit it to the records/registration office. Students are advised to have it signed by his/her faculty advisor or the instructor of the course. Students receiving financial assistance (PELL, veterans benefits, single parent/homemaker, etc.) must have approval from the financial aid office before having the Add/Drop form processed by the records office. A student withdrawing from a course must also gain approval from the dean or associate dean of his/her program (see page 46) if the withdrawal is being made after the fourteenth week of the semester or after the sixth week of the summer session. The student must then submit the completed form to the student services office for processing.

Generally, withdrawal from a course is the student's option. However, students who are enrolled in a program that has additional requirements may be required to withdraw from a course by their program advisor. As part of a disciplinary action, an "administrative withdrawal" may be authorized by the dean of student services.

Tuition refunds, which may be appropriate, are contingent upon proper completion of the withdrawal procedure within the semester refund period. Check the class schedule for more information about refunds.

WITHDRAWAL FROM COLLEGE
Students withdrawing from all classes (withdrawal from college) shall follow the same procedure as withdrawal from courses.

ACADEMIC PROBATION AND ACADEMIC DISMISSAL
Good academic standing is a status achieved by students who have an earned a cumulative/career grade point average (GPA) of 2.0 and above. Cumulative/career credit hours attempted/graded and cumulative/career GPA will determine a student's good academic standing, probation, and dismissal status. The following schedule reflects probation and dismissal status:

0-5   Cumulative/Career Credit Hours Graded
            Probation Status: None
            Dismissal Status: None

6-11   Cumulative/Career Credit Hours Graded
            Probation Status: 0.00-1.99
            Dismissal Status: None

12-17   Cumulative/Career Credit Hours Graded
            Probation Status: 1.00-1.99
            Dismissal Status: 0.99 or less

18-23   Cumulative/Career Credit Hours Graded
            Probation Status: 1.26-1.99
            Dismissal Status: 1.25 or less

24-29   Cumulative/Career Credit Hours Graded
            Probation Status: 1.53-1.99
            Dismissal Status: 1.52 or less

30-Plus Cumulative/Career Credit Hours Graded
            Probation Status: 1.80-1.99*
            Dismissal Status: 1.79 or less

NOTE: *Should the student not show academic progress (increasing cumulative/career GPA toward a 2.00) after completion of the next enrolled semester/session, he/she will be dismissed.

If a student is dismissed from the college and wishes to re-enter, he/she must submit an Application for Reinstatement form to the director of guidance and counseling for permission to re-enter as **a limited probationary student**. If permission is granted, the student will be allowed to reenter with enrollment restrictions as stated in a signed contract between the student and the director of guidance and counseling. Any adjustments to the limited probationary student's schedule must be approved by the director of guidance and counseling.

A limited probationary student will be dismissed again from the college if he/she is not showing academic progress (increasing the cumulative/career grade point average toward a 2.00), or if he/she does not meet all requirements as listed in the contract. Students being dismissed for a second time will automatically be required to sit out at least one semester.

Students being placed on academic probation or academic dismissal will be notified of their status by letter. The letter will be from the dean of student services.

ACADEMIC AMNESTY

Kirtland Community College understands that a student may "get off to a bad start" due to circumstances beyond his/her own control. Also, a student may enroll in a program that he/she later finds does not suit his/her needs. Both situations may result in a student experiencing poor academic performance. Academic amnesty is an action of forgiveness provided to certain students who have experienced poor academic performance at Kirtland Community College. Through academic amnesty, a student will be awarded a "second opportunity" to achieve success at Kirtland by removing the negative effect of less-than-C grade courses on the student's academic transcript.

To be eligible to apply for academic amnesty, a student must meet the following criteria:

1. Have a cumulative grade point average (GPA) of less than 2.00.

2. Complete at least six credit hours or more toward a new program of study while maintaining a 2.00 GPA or higher since beginning the new program.
3. Allowed one year to elapse between the poor academic performance period and requirement #2.

Once eligible, a student may petition the academic amnesty committee by requesting an Application for Academic Amnesty form from the counseling office, completing it, and returning it to that office. The applicant must meet with the director of guidance and counseling and agree to the conditions of academic amnesty.

The academic amnesty committee will review all requests for academic amnesty. Academic amnesty will only be granted for one continuous period of enrollment in a program at Kirtland Community College, as indicated by courses taken by the student that are directly attributable to that program.

Once amnesty has been approved by the committee and applied by the dean of student services to the student's (petitionee's) transcript, the student will not be permitted to rescind the application of amnesty on his/her academic record. Other conditions include the following:

1. No course work will be removed from a transcript.

2. A special notation explaining amnesty approval will be placed on the student's transcript.

3. Honor points and credit hours attempted during the amnesty period will be subtracted from the current cumulative honor points and credit hours attempted. A new cumulative grade point average will then be established.

4. Courses successfully completed with a grade of C or better during the amnesty period can be used toward the student's certificate or degree requirements but do not count toward the student's GPA.

5. A student receiving academic amnesty will not be allowed to graduate with honors.

6. Academic amnesty, when granted, applies only to Kirtland Community College courses. There is no guarantee, expressed or implied, that academic amnesty will be recognized by any other college or university.

7. Academic amnesty can be granted only once to any student.

The dean of student services has the responsibility of implementing amnesty, as stated in the academic amnesty policy, when it is granted to a student.

CREDIT BY EXAMINATION

Students who believe they have achieved the equivalent knowledge and/or skills of a particular Kirtland Community College course may choose to take a competency credit examination.

A Kirtland student may request credit by examination by using the following procedure:

1. Contact the counseling office for a list of nationally recognized standardized tests that are equivalent to the Kirtland course the student desires. Information regarding testing fees and date, time, and location of the testing will also be provided to the student.

2. If a nationally recognized standardized test is not available, the student may contact the dean or associate dean of his/her program (see page 46) for an Institutional Credit by Examination Request form and the cost for the testing. The student will complete and submit the form to the senior instructor in the subject area of the examination requested. The instructor will review the request and submit his/her recommendation back to the dean or associate dean, who may approve or disapprove the request. If approved, a test will be developed, and testing will be scheduled.

3. Credit by examination scores will be handled in the following manner: If a passing score is achieved, credit will be noted on the student's Kirtland transcript. Cumulative grade point average, credit hours attempted, and honor points will not be affected.

COURSE SUBSTITUTION

Certificate and degree program requirements are listed in the college catalog. These requirements include all courses needed for completion. Any alteration to a degree or certificate (substitution of one course for another) must be made in the following manner:

1. To initiate a course substitution, a student must meet with his/her advisor. During the meeting, a Student Request for Course Substitution form must be completed by the student and the advisor. The student's advisor will forward the form to the dean or associate dean of the student's program (see page 46) for possible approval. If approved, the form will be sent to the records office and placed in the student's file.

2. Required courses within a program may only be substituted under very unusual circumstances. No class may be substituted for POL-10100, Introduction to American Government.

3. Course substitutions should be submitted and approved before the student's registration for the semester in which the course substitution is to be made. If a student has received credit for courses transferred from another institution and desires a course substitution of the transfer credit for a required course, approval should be gained during the student's first semester at Kirtland.

GRADUATION REQUIREMENTS

Each candidate for graduation must fulfill the following requirements for an associate degree or certificate of completion:

1. Be granted admission to Kirtland Community College

2. Have completed a minimum of 15 semester hours of credit (100-level or above) at Kirtland

3. Have earned a minimum cumulative grade point average of 2.00 at Kirtland

4. Have completed all program requirements as listed in Kirtland's college catalog

   NOTE: The date of the catalog by which a student's credits are audited for graduation may not be more than four years earlier than the date of the issuance of the degree or certificate. Student records may not be audited by a catalog dated earlier than the time of entrance. Exceptions may be authorized by the dean or associate dean of the student's program (see page 46).

5. Have filed a Request to Graduate form with the records office at the beginning of the semester in which they plan to finish their required course work. Students should also check with their advisors when they register for that semester to be sure that all requirements have been met.

Graduation (commencement) ceremonies for students completing associate degree and certificate programs are held once a year on the last Friday of the winter semester. Participation in the graduation ceremonies is strongly encouraged, but not required. Cap and gown for graduation must be ordered before March 1. For more information about graduation fees, contact the registrars office at 989-275-5000, extension 251.

Students not wanting to participate in the ceremony, but who want a copy of their diploma, may contact the records office at 989-275-5000, extension 251, for ordering information. Payment must be received before a diploma will be mailed to the student.

ACHIEVING SUCCESS

EXPLORING EDUCATIONAL CHOICES

COUNSELING SERVICES

College is a time of many changes and decisions, and at times students may feel the need for help in coping with those changes and making those decisions. Kirtland's staff of Michigan-licensed professional counselors is trained to help students deal with the college experience.

Services provided include the following:
*   Personal, career, and academic counseling
*   Academic advising to assist a student in completing his/her educational plan, including transferring to another college
*   Administering and interpreting interest and personality test instruments for students seeking career and educational information (no charge)
*   Administering standardized tests for college credit (proctor fee and test publisher fee charged)
*   Referral information for other available counseling services

Personal Counseling is helpful in situations where problems are persistent and bothersome to the point that discussion with another person is needed. Personal counseling on campus is available through the director of guidance and counseling. Long-term counseling is available through referral to community agencies that provide this service. The college maintains a referral list of local crisis centers and mental health clinics qualified and available for personal counseling.

CAREER AND EMPLOYMENT SERVICES

The career and employment services office, which is located in the administration center, offers a wide variety of services to individuals who desire assistance with career planning and preparation. Help is available with career exploration, job search strategies, résumé and cover letter writing, interview techniques, and employability skills. A number of resources are available in the form of books, magazines, videos, computer programs, and Internet access.

For individuals seeking employment, the Job List is published every week. The Job List contains postings from the local area newspapers, plus positions that employers call in and list with the career and employment services office. The Job List is posted in the career and employment services office or can be found on the Internet at: http://k2.kirtland.cc.mi.us/~employ

Career counseling is available to help determine employment possibilities based on an individual's abilities, aptitudes, and interests. Both written and computerized tests can be administered to assist with making sound career decisions. All of these services are free and available to students and community members.

NONTRADITIONAL CAREER CHOICES

If a student is considering a career field in which his or her gender comprises less than 25% of the workers in the field, there may be funds available to assist in paying for educational-related expenses. For more information, please call 989- 275-5000, extension 252. Examples of nontraditional areas for males are cosmetology, nursing, and office information systems. Nontraditional areas for females include automotive, computer aided drafting and design, manufacturing processes, and welding.

SERVICE LEARNING

Service learning combines relevant community service experiences with academic courses. Service learning activities are academically meaningful. Kirtland Community College offers four courses as part of its commitment to service learning: Volunteerism in the Community (CAR-11500), Learning Styles (CAR-11600), Service Learning Lab (CAR-12600), and Service Learning Project (CAR-20000). Service learning projects are also offered as part of some classes at Kirtland. Seminars and classes relevant to service learning issues will also be offered through the Community Education Center. Additional service learning opportunities are tracked and made available by contacting the service learning coordinator at 989-275-5000, extension 412.

A Service Learning Library has been established as part of the main collection in the library. A bibliography of material available in this collection is available.

PREPARING TO TRANSFER
(From Kirtland to the senior institution)

Transfer students need to be aware of all deadlines, such as payment for tuition and fees, residence hall reservations, financial aid and scholarships, placement testing, etc.

Admission
Transfer students must apply early for admission to the senior institution they have selected. An application fee may be required. Many schools have application deadlines, as well as a limit on the number of new students to be admitted. To assist transfer students, representatives from many universities and some private colleges visit community college campuses every semester to talk with transferring students about their college or university.

A certain cumulative grade point average earned at the community college and/or the SAT or ACT test will usually be admission requirements at senior institutions. There may also be additional admission or program requirements. For example, a specific program may have fall admissions only.

Financial Aid
Students transferring during the current academic year will need to have a duplicate copy of their Student Aid Report (SAR) forwarded to the college/university. Transfer students should check with their new financial aid advisor to determine what other information may be required.

Transfer scholarships to senior institutions may be available to students transferring from a community college. Scholarship application deadlines usually fall between December and March each year.

NOTE: Some schools have separate scholarship application forms.

Campus Visit
Before transferring, students should visit the institution to which they plan to transfer, preferably during daytime campus hours. When visiting the campus, it is important that students talk to an advisor in their program of study.

Student Housing at the Senior Institution
Students in need of off-campus housing at the school to which they will be transferring should start looking at least four to five months in advance for the best selection. Most senior institutions have on-campus or family housing available. In some cases, transfer students must qualify to live off-campus.

Transferring Credit
Students must submit a written request for an official copy of their Kirtland transcript from the records office. This copy must be sent directly from the records office to the college or university of their choice. Upon the student's admission, the senior institution will perform a credit evaluation of his/her transcript.

When students transfer to a senior institution that operates on terms or quarters rather than semesters, they need to be aware of possible credit hour differences. For example, two (2) semester credits = three (3) term or quarter credits.

MACRAO Transfer Agreement
Kirtland Community College is a participating member of the MACRAO Transfer Agreement. Member colleges and universities participate in a state-wide transfer agreement proposed by the Michigan Association of Collegiate Registrars and Admissions Officers (MACRAO).

The intent of the MACRAO Transfer Agreement is to ensure that a student who completes a transfer degree will have satisfied the basic two-year requirements of the four-year college or university. This agreement can also be fulfilled if a student completes the following 30 credit hours of course work (100-level or above):

A.   English composition - 6 credits

B. Science and Mathematics - 8 credits
    (Courses may include but are not limited to the following: biology, chemistry, geology, mathematics or physics. At least one course must have a laboratory. Courses taken must be in more than one subject area.)

C. Social Science - 8 credits
    (Courses may include but are not limited to the following: anthropology, economics, geography, psychology, political science, or sociology. Courses taken must be in more than one subject area.)

D. Humanities - 8 credits
    (Courses may include but are not limited to the following: art, foreign language, history, literature, music, philosophy or theatre. Courses taken must be in more than one subject area.)

Transcripts of Kirtland Community College students graduating with a transfer degree will automatically have the "MACRAO Agreement Satisfied" designation added to the end of their transcript. Students just completing the 30 credit hour program, as stated above, **must request** that the designation be added to their transcript. Please contact the student services office for more information.

NOTE: Not all credits that are considered transferable to a senior institution's general education requirements may be used for specific programs of study. Students must be careful in researching credit transferability.

SUPPORTING ACADEMIC SUCCESS

LEARNING RESOURCES
Library
The library exists to serve the information needs of the Kirtland community and the public in the Kirtland service area. These needs are met by a professional staff who are able to help patrons find information in a variety of formats, including print and electronic. Academic reference services are available in-house or by phone. In-depth reference assistance for term papers, speeches, and business plans, along with library instruction for classes and individuals, is available by appointment. For more information, call 989-275-5000, extension 246.

Resources available in the library include a 30,000-volume collection and over 15,000 e-books, accessible through the online catalog (www.kirtland.edu). The library subscribes to over 200 magazines, journals, and newspapers, with an additional 1,000 available in electronic format. These can be found through the four online indexes. Materials not available in the library can be obtained by inter-library loan from an international consortia of libraries. Internet connections and a variety of programs are available in the computer lab, which is also located in the library.

Open Hours for the Library
Fall and Winter Semesters
8 a.m. to 8 p.m.   Monday through Thursday
8 a.m. to 4:30 p.m.   Friday

Breaks and Summer Session
8 a.m. to 4:30 p.m.   Monday through Friday

Term-Paper Counseling
Term-paper counseling is available in the library during library hours, and after hours, by appointment. This service helps students with topic formulation and research. Call the director of the library, extension 246, for an appointment.
eServices Department
The eServices department consists of the eLearning and eTechnology Department. We provide a wide range of services for students, faculty, and staff. Including but not limited to computing services, audio/video dubbing, Kirtland email accounts, online accounts, and media services in classrooms.

eTechnology
A variety of audiovisual services are provided to students, faculty, and staff at Kirtland, including technology classrooms connected to the Internet and equipped with big screen projectors that display computer data, videotapes, DVDs, computer technology support, and software/hardware for classrooms.

eLearning

The distance learning center is located in the library building. Services provided to students, faculty, and staff include online internet classes, satellite video-teleconferences, interactive television, Kirtland Email accounts, "free" dial up services, and 24/7 technology support.

For more information on eServices, eTechnology, and eLearning visit our web site: http://eservices.kirtland.edu or if you have any questions please feel free to either email us eservices@kirtland.edu or call 989-275-5000 ext. 499 Monday-Thursday 8:00 a.m. – 6:30 p.m. and Fridays 8:00 a.m. – 4:30 p.m.

FACULTY ADVISING

Faculty advisors assist students prior to and during registration with the selection of classes to meet individual educational needs. Faculty advising assignments are listed in the class schedule by program of study. Faculty advisors are available throughout the year for consultation and assistance with academic problems that may be interfering with a student's progress (see "Faculty Office Hours").

FACULTY OFFICE HOURS

All faculty maintain office hours. Students are encouraged to take advantage of this time for discussion of future class selection, academic problems, or class assignments. Faculty office hours are posted in the hallway outside the faculty office area in the instructional center.

TUTORIAL CENTER

Tutors are available in most subject areas, and tutoring is free for any Kirtland Community College student. Individual appointments can be scheduled for two hours per week for an entire semester (or for as long as tutoring is needed) at a time convenient to both tutor and tutee. In addition, the following services are offered:

- Drop-in math tutoring by a paraprofessional tutor is provided to those students needing occasional help in math classes; check with the tutorial center for days and times.
- Study groups (Supplemental Instruction or SI) are available for students in the same class who can benefit by studying together under the guidance of a student leader.
- Study skills workshops are available covering such topics as note-taking, test-taking, textbook reading and time management; help is also available with spelling, vocabulary building, and memory improvement.
- Classes in English as a Second Language are offered through the tutorial center.
- EDU 12500 (Learning Theory) is offered, as well as workshops for tutors, supplemental instruction leaders, and other interested people on learning styles, learning disabilities, and tutoring techniques.
- Online tutoring, as well as off campus tutoring, are available in some subject areas.

Need for Tutors

Any student who is above average academically, can relate sensitively to other students, and has the recommendation of an instructor, may apply to be a paid tutor. For an application or more information about becoming a tutor, contact the tutorial office in room 18 of the instructional center, call extension 211, or e-mail silvermc@kirtland.edu.

WRITING CENTER

The writing center is staffed by specially-trained members of the Kirtland faculty and offers guided instruction to students seeking to improve their writing skills. The self-paced writing course ENG-10000 (Writing Lab) is taught here. Because the skills taught in Writing Lab support those taught in English Composition, most students take ENG-10000 concurrently with ENG-10300 or ENG-10303.

Drop-in services, to help with specific questions or specific pieces of writing, are also provided to Kirtland students, faculty, and staff in the writing center, room 134, in the administration center. For further information, call extension 338 or 386.

Online services (similar to the on-campus drop-in services) are available through the Kirtland HOWL (Helpful Online Writing Lab), located at: http://sbox.kirtland.cc.mi.us/writlab

STUDENT SUPPORT SERVICES

The college, with partial funding from the Michigan Department of Labor and Economic Growth, provides support services to meet the needs of certain populations. Members of special populations include students who are economically or academically disadvantaged, students with disabilities, those with limited English proficiency, single parents (including single pregnant women), displaced homemakers, and students who are pursuing careers that are nontraditional for their gender. Support services and assistance to help them reach their career goals include the following:

- Education Development Plan (EDP)
- Free individual and group tutoring
- Workshops on study skills, test taking, and time management

- Personal, career, and academic counseling
- Referrals to other departments or community agencies
- Attendance costs
- Services for students with disabilities

SERVICES FOR STUDENTS WITH DISABILITIES

Students who qualify for services are identified under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students must provide the special populations office with documentation of disability from an appropriate licensed professional, such as a medical doctor, psychologist, or psychiatrist. Verification of disability forms and a request form for auxiliary aides or services, academic adjustment or other accommodations are available in the student support services office. Some examples of services and accommodations follow:

- Instructional accommodations—scribes, readers, sign language interpreters
- Testing adaptations—extended time, oral examinations
- Technological assistance—wireless amplification devices, a reading machine
- Liaison with Michigan Rehabilitation Services and Michigan Commission for the Blind.

STUDENT ASSISTANCE PROGRAM

Kirtland Community College's Student Assistance Program has been developed in response to U.S. Department of Education directives and through the cooperation of local health care agencies. The program is designed to provide Kirtland students with help in dealing with emotional, medical, social, family, alcohol and/or drug abuse problems. Since such problems are considered treatable, students are urged to seek help before personal problems seriously damage academic performance or the future quality of their life.

The Student Assistance Program can help by:
- Providing the opportunity to discuss a personal situation with a caring professional
- Offering referral information on local agencies or specialized treatment services
- Suggesting a local support group sharing the same concern
- Providing information on the use and abuse of drugs including alcohol
- Providing information on how to deal with emotional, medical, social, or family problems

For a copy of the Student Assistance Program brochure, contact Kirtland's director of guidance & counseling at 989-275-5000, ext. 280.

RECOGNIZING EXCELLENCE

SCHOLARSHIPS

Scholarships that recognize academic excellence are available for both new and returning students. Please refer to "Scholarships" in this catalog.

HONORS PROGRAM

The Kirtland Honors Program is designed to meet the needs of students of high academic standing who are seeking additional challenges and rewards in both general education and occupational programs.

Honors students may earn honors credits in Kirtland "honors option" courses and in individually designed honors and service learning projects. Students who complete 12 honors credits may be awarded an honors degree.

Admission to the Honors Program is competitive, and enrollment is limited. Honors students enjoy a number of benefits, including the following:
• More challenging and stimulating course work
• Interaction in a community of scholars
• Honors options in regular Kirtland courses
• New courses with an interdisciplinary focus
• An opportunity for independent study in special honors and service learning projects
• All honors courses noted on transcript
• The opportunity to earn an honors degree
• Eligibility for honors scholarships
• Recognition at commencement

Interested students should contact either Fred Giacobazzi, honors coordinator, by calling 989-275-5000, extension 321, (or e-mail giacobaf@kirtland.edu) or Elaine Thiboult, honors secretary at 989-275-5000, extension 359, (or e-mail thiboule@kirtland.edu). The office is located in the south wing of the library.

HONOR LISTS
Each fall and winter semester, a President's honor list and dean's honor list will be issued. The President's and dean's honor lists shall consist of names of full-time (12 or more credit hours earned, excluding developmental courses) students whose current/term grade point averages are 3.800 to 4.000 (President's list) and 3.400 to 3.799 (dean's list) at the time grade reports (see "Grade Reporting System") are processed.

Credits earned in developmental courses will not be used when determining a student's full-time status. In addition, students receiving an incomplete grade ("I") for the semester will not be considered for either list. (However, honors notations will be posted to transcripts when completion of "I" grades results in grade point averages that meet honor list criteria.)

GRADUATION HONORS
Students may graduate with honors from Kirtland Community College providing they have met the following criteria:
• Completed all the requirements needed for a certificate or an associate degree
• Earned at least 15 credit hours at Kirtland if receiving a certificate or associate degree
• Achieved the cumulative grade point average (determined by the last completed semester) required for one of the following honors:

Summa Cum Laude	3.800-4.000 cumulative GPA
Magna Cum Laude	3.600-3.799 cumulative GPA
Cum Laude	3.400-3.599 cumulative GPA

The registrar will review transcripts of all candidates for graduation. Authorization to wear honor cords will be given by the registrar to candidates who have achieved a minimum cumulative grade point average of 3.40 prior to the semester in which commencement ceremonies are held. The commencement program will list candidates who have been authorized to receive the honors. Final grades will determine the honors appearing on the student's transcript.

PHI THETA KAPPA, ALPHA OMICRON GAMMA
Phi Theta Kappa is an international honor society for students enrolled in two-year colleges. Since 1918, it has recognized academic excellence by inducting more than 1.2 million members at over 1,200 colleges in the United States, Canada, Japan, U.S. territorial possessions, and military installations abroad.

Membership in Phi Theta Kappa is based primarily upon academic achievement. Invitation to membership is extended to students who have completed 12 credit hours, 100-level or above, or more with a minimum cumulative grade point average of 3.5.

In 1989, Kirtland Community College began its Phi Theta Kappa chapter, Alpha Omicron Gamma. Immediately, the chapter won many regional and national awards and became known as one of the finest in the nation. In 1995, the chapter became inactive. In the fall of 1998, Alpha Omicron Gamma was reactivated and currently has a membership of 95 students. Each year, Alpha Omicron Gamma engages in projects and services related to scholarship (study topics) and community service. In 2004-05, the study topic is "Pop Culture: Shaping and Reflecting Who We Are." The service project theme is "Conquering Cancer: Continuing the Fight." The themes for the study topic and service project are provided by the International Phi Theta Kappa Headquarters.

For more information about membership in Kirtland Community College's local chapter, Alpha Omicron Gamma, contact Kathy Koch by calling 989-275-5000, extension 253, or e-mail: kochk@kirtland.edu. Additional information about Phi Theta Kappa can also be obtained at the following web site address: www.ptk.org

GETTING INVOLVED

STUDENT ACTIVITIES
The college encourages student activities that supplement the instructional program by providing recreational activities that will add to the student's enjoyment of life and stimulate personal growth and social development. Opportunities for development of constructive leadership, cooperative planning, and special interests will be fostered through participation in student activities.

Cultural events include lectures, films, art exhibits, and concerts made available by the college. Students interested in art, drama, and journalism may further their experiences, training and talents in art shows, theatre productions, and newspaper production. Recreational and social events might include picnics, intramural sports, travel excursions, and dances sponsored by the student senate. Some clubs also sponsor activities. Annual activities include the fall and spring picnics, movie nights, comedy days, and game room tournaments.

STUDENT I.D. CARD
Each Kirtland student is entitled to a student identification card. The career and employment services office in the administration center will issue cards upon request to all students who register for classes. The identification cards are nontransferable and are valid for one semester. The card permits the student's entry to many college- or student-senate-sponsored functions at no charge or at a reduced rate. The card is also used for checkout privileges for borrowing recreational equipment from the game room (see "Game Room"). In addition, some area businesses offer student discounts to cardholders.

STUDENT SENATE
The student senate is the student government organization at Kirtland. The senate is the means through which students can participate in institutional governance by representation on college standing committees. Also, senate members assist in planning a variety of extracurricular and co-curricular activities held throughout the year.

The officers and senators who comprise the student senate are elected each year by the student body. Senate meetings are held regularly during the year and are announced on the monitors located around the campus. These meetings are open to all who are interested. For a copy of the senate's constitution, for a petition for nomination, or for other information, contact the student senate office or student services.

STUDENT CLUBS AND ORGANIZATIONS
There are many special interest clubs and organizations that offer opportunities for students to broaden the scope of their educational experiences. Students are encouraged to participate in the activities sponsored by the clubs and organizations listed or to contact any member of the student senate, or faculty members, with suggestions for forming new organizations. Membership in all organizations is open to any interested student.

Some organizations that are currently active in sponsoring activities are the Cosmetology Club, Art Club, Science Club, and the Criminal Justice Club.

Establishment of Student Clubs and Organizations
No student club or organization may be established, conduct business, solicit funds, or sponsor activities unless the organization has been approved by the student senate and has been authorized by the college. Students who wish to form a student organization should contact the student activities coordinator at 989-275-5000, extension 289.

GAME ROOM
Pool and ping pong tables, foosball and air hockey machines are located in the game room in the student center. Equipment for volleyball, soccer, basketball, tennis, etc., is also available for checkout. Student identification cards are required for equipment checkout (see "Student I.D. Card").

KIRTLAND CENTER FOR THE PERFORMING ARTS
Kirtland Center for the Performing Arts exists as the cultural and entertainment establishment at Kirtland Community College. Its purpose is to present a variety of performing arts events catering to the diversity of interests among the members of the Kirtland Community College service district and beyond. Kirtland Center for the Performing Arts presents an annual performing arts series that brings world-class entertainment to the campus of Kirtland Community College.

Kirtland Youth Theatre presents an annual youth theater series that introduces the students of the area to the live performing arts.

Kirtland Theatre Arts Department is the academic organization that offers classes in performance and technical theatre. It also produces plays using Kirtland Community College students and area citizens.

Kirtland Center for the Performing Arts, Kirtland Youth Theatre, and Kirtland Theatre Arts Department are all located in the Performing Arts Center on campus, and rely on the talents and abilities of many volunteers in all areas. Volunteers are always welcome.

For more information on scheduled events, tickets, classes, and/or becoming a Kirtland Center volunteer, contact Gary Carton, Director of the Performing Arts Center at 989-275-5000, extension 311.

SERVICE LEARNING
Service learning combines relevant community service experiences with academic courses. Service learning activities are academically meaningful. Kirtland Community College offers four courses as part of its commitment to service learning: Volunteerism in the Community (CAR-11500), Learning Styles (CAR-11600), Service Learning Lab (CAR-12600), and Service Learning Project (CAR-20000). Service learning projects are also offered as part of some classes at Kirtland. Seminars and classes relevant to service learning issues will also be offered through the Community Education Center. Additional service learning opportunities are tracked and made available by contacting the service learning coordinator at 989-275-5000, extension 412.

A Service Learning Library has been established as part of the main collection in the library. A bibliography of material available in this collection is available.

SAFETY, SECURITY, AND EMERGENCIES

DEPARTMENT OF PUBLIC SAFETY
The personal safety and security of those on campus are the primary concerns of the department of public safety. The goal is to ensure a safe environment in which all of the campus community members can work and learn. In order to attain this goal, cooperation is needed. Members of the campus community must take responsibility for the safety and security of themselves, their neighbors, and their belongings.

PUBLIC SAFETY SERVICES
The department of public safety is located in room 127 in the administration center. Office hours are 8 a.m. to 11 p.m., Monday through Friday. Public Safety services include:
- After-dark escort service from the buildings to students' vehicles
- Response to criminal behavior complaints
- Preventative workshops/seminars on drug/alcohol awareness, rape awareness, use of weapons, etc.
- The addressing of parking and traffic violations
- Provision of vehicle emergency assistance (keys locked inside of vehicle, jump-starting vehicle, etc.)

CRIME REPORTING
If anyone witnesses a crime or is a victim of any criminal activity, he or she should take immediate action by contacting the public safety office at extension 355, 390, 283, or 0, or by contacting the Roscommon County Sheriff's Department at 911.

NOTE: Upon request, data can be obtained from the department of public safety or the student services office regarding incidents reported, during 1999-2001, to either the Kirtland department of public safety or the Roscommon County Sheriff's office.

PARKING AND TRAFFIC ON CAMPUS
Through enforcement of parking and traffic policies, it is Kirtland's desire to provide a safe means for entry and departure from campus lots. It is also hoped that fire, safety, and maintenance vehicle access lanes, handicap spaces, and loading/unloading opportunities can be provided with the least amount of inconvenience.

Parking on campus is free and allowed in approved areas only. Parking is not allowed in fire lanes, on or beside walking paths, or next to buildings. In addition, parking in the lot adjacent to the career technology center is reserved for patrons of automotive and cosmetology services. Students should park in designated areas only. A Vehicle Identification sticker is required. Students should call 989-275-5000, extension 348, for more information.

Parking spaces for service vehicles and the handicapped are posted. A permanent or temporary handicapped sticker from the Secretary of State's office is needed to park in the handicapped areas.

Parking and traffic violators on campus will be ticketed by Kirtland's public safety officers. The following fines are imposed on violators:

$40.00	Parked in handicap space	$25.00	Blocking emergency exit
$25.00	Parking in fire lane	$10.00	All other parking violations
$25.00	Parked within 15 feet of fire hydrant		

FIRE SAFETY AND FIRE ALARMS
Students and employees of the college are encouraged to know where fire alarms, fire extinguishers, and emergency exits are located in each building.

If a fire alarm sounds, get **out of the building**! Treat all fire alarms as real, even if there is reason to believe the alarm is a false alarm. Do not reenter the building until given permission to do so by college officials.

NOTE: A false alarm is dangerous and a felony. Anyone sounding a false alarm will receive the minimum sanction of suspension from college.

POLICY ON USE OF ALCOHOL/DRUGS
Unauthorized possession or use of alcoholic beverages on the college campus or at a college-sponsored event, and use, possession, or distribution of narcotic or other dangerous drugs (including look-alike drugs) are strictly prohibited. Violation of these regulations could lead to removal from college property, suspension, or dismissal from the college, and/or liability for legal prosecution.

NOTE: For a more detailed position on the possession/use of illicit drugs and alcohol, please refer to "Rights and Responsibilities of Students" and "Student Code of Conduct" sections in this catalog.

POLICY ON WEAPONS (FIREARMS, KNIVES, EXPLOSIVES)
Possession or use of knives (blade in excess of 3-1/8 inches), firearms, firecrackers, explosives, other lethal weapons, and/or toxic or dangerous chemicals on campus or at any college- sponsored events, unless specifically authorized in writing by a college administrator for educational/safety purposes, is prohibited. However, possession in a locked vehicle may be permitted according to state laws. Law enforcement officers are exempt from this policy.

CAMPUS SAFETY AND SECURITY
The campus is nestled in a beautifully wooded setting. The surroundings are tranquil and peaceful. Yet, although Kirtland is a relatively safe place to be, it is certainly not exempt from many of the same crime problems that exist in the surrounding communities. Kirtland has implemented measures to promote safety awareness and strives to ensure that the campus is a safe environment for the campus community. The department of public safety in room 127 in the administration center can provide more information about the ways Kirtland works toward this goal.

CAMPUS CRIME OCCURRENCE STATISTICS
The Crime Awareness and Campus Security Act of 1990 requires colleges to collect and share occurrence statistics for certain crimes reported as occurring on the college campus. Kirtland's on-campus occurrence statistics (reported offenses; does not infer alleged offenders were convicted) are listed below:

Reported Offenses	2000	2001	2002		Arrests	2000	2001	2002
Murder	0	0	0		Liquor Law Violations	0	0	34
Sex Offenses-Forcible	0	0	2		Drug Abuse Violations	0	0	0
Sex Offenses-Non-forcible	0	0	0		Weapons Possessions	0	0	0
Robbery	0	0	0					
Aggravated Assault		0	0	0				
Burglary	0	0	0					
Motor Vehicle Theft	0	0	0					

NOTE: For more information regarding the college's compliance with the Crime Awareness and Campus Security Act of 1990, contact the director of criminal justice.

EMERGENCIES

Sometimes emergencies arise on campus that require the services of the fire department, county sheriff's office, Michigan State Police, or an ambulance. The services can be reached by calling extension 355 or 390. The public safety department can assist with these situations and refer them to the proper authorities. Battery jumps and assistance in unlocking car doors are performed by the public safety office and campus security.

ACCIDENT REPORTING

Students having an accident or needing medical assistance while on campus should call public safety office at extension 355.

CLASS CANCELLATIONS

When classes are cancelled due to inclement weather or other unusual circumstances, the procedure below is followed.

CAMPUS CLASSES: When it is necessary to cancel classes due to inclement weather or other unusual circumstance, please DO NOT CALL THE COLLEGE. Announcements of college closings will be made on the radio and TV stations listed below. Visit the Kirtland website for urgent announcements such as class or event cancellations, room changes, or anything that is different than expected at: www.kirtland.edu.

EVENING CLASSES: Announcements that refer to evening classes mean any class beginning at 5 p.m. or later.

SATURDAY CLASSES: Cancellations will not be announced on radio or TV. The decision to cancel a Saturday class will be communicated through a student telephone fan-out list that will be established in each class.

OFF-CAMPUS CLASSES: If the radio/TV announcement states that Kirtland classes are cancelled, that announcement includes Kirtland off-campus classes (Houghton Lake, Roscommon, Grayling, Mio, West Branch, Gaylord).

M-TEC^{SM} AT KIRTLAND-GAYLORD CLASSES: Students should call the M-TECSM weather line at 989-705-3696. A pre-recorded message will indicate whether or not classes are being held.

LOCAL SCHOOL CLOSINGS: If local schools which are sites of off-campus classes are closed due to inclement weather, Kirtland classes will also be cancelled at that site.

NURSING CLINICAL:
• Students having classes on campus should listen to the radio for campus closing announcements.
• Students scheduled for clinical sites will not hear announcements regarding clinical site closings on the radio. The instructor of the clinical site will decide the cancellation of a class and students will receive word by means of a predetermined clinical phone tree. (For more information, refer to the nursing student handbook.)

TV: Cadillac WWTV - TV 9 & 10
Cadillac FOX 33
Bay City WNEM - TV 5
Traverse City WPBN - TV 7 & 4
Traverse City WGTU - TV-29

RADIO:
Houghton Lake .... WHGR-WUPS .... 98.5 FM
Grayling .... WGRY .... 101 FM
Grayling .... WQON Kool .... 100 FM
Gaylord .... WKPK .... 107 FM
Gaylord .... WPHN .... 90.5 FM
Gaylord .... WMJZ Magic .... 101.5 FM
Tawas City .... WIOS-WKJC .... 104.7 FM
Tawas City .... NEW BAY 108 .... 107.3 FM
Traverse City .... WTCM .... 103.5 FM
Alpena .... WHSB .... 107.7 FM
Mt. Pleasant .... WCMU (NPR) .... 89.5 FM
Alpena .... WCML (NPR) .... 91.7 FM
Petoskey .... WKHQ .... 96 FM
West Branch........WBMI……………Kool 105.5

COLLEGE CLOSINGS

In the event of impending severe weather, prolonged utility failure, or any condition jeopardizing the safety or well-being of students, the college President may find it necessary to suspend classes or cease college operations until such threatening conditions are corrected. After such a decision has been made, radio stations within the college's district and service area will broadcast several announcements about the closing decision. For information, see the previous section entitled "Class Cancellations."

PROTECTING STUDENT RIGHTS

STUDENT'S RIGHT TO KNOW

Upon request, the college is required to disclose the following information to both prospective and enrolled students:

Rights Under Family Education Rights and Privacy Act (FERPA)

- *Right to and procedures for inspecting and reviewing student's education records.* Some records are available in the Student Services office for the student to review any time during office hours. Students should contact the registrar and identify the record(s) they wish to inspect. If the records are not maintained by the registrar, he/she will advise the student of the correct official to whom the request should be addressed. This official will make arrangements for access and notify the student of the time and place where the records may be inspected.

- *Right to and procedures for requesting amendment of students' education records that student/parent believes to be inaccurate, misleading, or in violation of student privacy rights.* Students should write to the registrar and clearly identify the part of the record they want changed and specify why it is inaccurate or misleading. If Kirtland decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

- *Right to the criteria used to determine what constitutes a school official and a legitimate educational interest if school's or educational agency's policy is to disclose personally identifiable information from student's education records without prior consent.*

- *Right to consent to disclosure of personally identifiable information contained in student's education record, except to the extent that FERPA authorizes disclosure without consent.* Kirtland Community College will disclose information from a student's education record only with the written consent of the student except:

  1. To school officials with legitimate educational interests. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility. A school official is: A person employed by Kirtland Community College, a member of the Board of Trustees who is empowered by the board, a person employed by or under contract with the college to perform a special task, such as the attorney or auditor or a student serving in an official capacity.

  2. To Federal, State, and local authorities involving an audit or evaluation of compliance with educational programs.

  3. In connection with Financial Aid.

  4. To State and local authorities pursuant to a State law adopted before November, 1974 requiring the disclosure.

  5. To organizations conducting studies for or on behalf of educational institutions.

  6. To accrediting organizations.

  7. To comply with a judicial order or a lawfully issued subpoena.

  8. In a health or safety emergency.

  9. For directory information so designated by Kirtland Community College. (see below).

  10. As a result of any disciplinary proceeding conducted by Kirtland Community College to an alleged victim of a crime of violence

- *Right to file a complaint with U.S. Department of Education for alleged school or educational agency failure to comply with FERPA requirements*

Directory Information Disclosure
- Kirtland Community College designates the following items as Directory Information: Student Name, whether a student is or has been registered, Degrees and Awards Received. This enables Kirtland to use the student's name for various publications, electronic bulletin boards, newspaper articles regarding academic achievements, graduation programs, or phone inquiries. Kirtland may disclose any of these items without prior written consent, unless notified in writing to the contrary.
- The student must notify the Records office by the end of the first week of each semester if he/she does not wish to have any information disclosed. This notification must in writing; forms are available in the Records office.

FFEL/Direct Loan Deferments for Peace Corps or Volunteer Service
- Terms and conditions of deferments for service in the Peace Corps, service under the Domestic Volunteer Service Act of 1973, or comparable volunteer service for a tax-exempt organization of demonstrated effectiveness in the field of community service

Available Financial Assistance
- Description of all available federal, state, local, private, and institutional financial need-based and non-need-based assistance programs and, for each program, a description of application form and procedures, student eligibility requirements, selection criteria, and criteria for determining the amount of a student's award
- Rights and responsibilities of students receiving Title IV and other financial aid

Institutional Information
- Cost of attending the school
- Any applicable refund policy
- Requirements for officially withdrawing from the school
- Summary of requirements for the return of Title IV grant or loan assistance by withdrawn students
- Information regarding school's academic programs
- Entities that accredit, license, or approve the school and its programs, and procedures for reviewing school's accreditation, licensing, or approval documentation
- Description of any special services and facilities for disabled students
- Title and availability of employee(s) responsible for dissemination of institutional and financial assistance disclosure information and how to contact designated employees
- Statement that enrollment in a study abroad program approved for credit may be considered enrollment at the school for the purpose of applying for Title IV assistance

Completion/Graduation Rates
- Completion or graduation rate of cohort of certificate or degree-seeking, full-time undergraduates who graduated or completed their program within 150% of the standard time for graduation or completion.

Campus Security Report
- Statistics for three most recent calendar years concerning the occurrence on campus, in or on non-campus buildings or property, and public property of certain offenses reported to campus security authority or local police.

Athletic Program Participation Rates and Financial Support Date
- Number of male and female full-time undergraduates
- Varsity teams that compete in intercollegiate athletic competitions
- Unduplicated number of students, by gender, who participated on at least one varsity team as of the date of the first scheduled contest
- Institutional revenues
- Total spent on athletically related student aid awarded to men and to women
- Aggregate total recruiting expenses for men's teams and for women's teams
- Average annual institutional salary of non-volunteer coaches of all men's teams and of all women's teams on a per person and per full-time basis
- Average annual institutional salary of non-volunteer assistant coaches of all men's teams and of women's teams on a per person and a per full-time basis

NOTE: While much of this information can be found in the class schedule and in the college catalog, a full report of disclosure information may be obtained at the following web site: www.kirtland.edu. (Kirtland Community College will also provide, upon request, a paper copy of the disclosure information.)

NONDISCRIMINATION

Kirtland Community College complies with all general laws and regulations prohibiting discrimination and with all requirements and regulations of the U.S. Department of Education. It is the policy of Kirtland Community College that no person shall, on the basis of race, color, religion, sex, disability, marital status, age, height, weight, national origin or ancestry, Vietnam-era veteran status, or other protected category under Michigan and federal law, be discriminated against, excluded from participation in, or denied the benefits of any program or activity for which it is responsible or for which it receives financial assistance from the U.S. Department of Education.

All educational, employment, and business opportunities, as well as community services are offered without regard to individual circumstance, except as otherwise restricted by law. The college Title IX and Section 504 coordinator is Dale Shantz, Kirtland Community College, 10775 N. St. Helen Road, Roscommon, Michigan 48653, 989-275-5000, extension 271. Doty Latuszek is the Section 504 coordinator for M-TECSM at Kirtland-Gaylord.

Compliance with the Americans with Disabilities Act (ADA) is a priority of Kirtland Community College. An individual seeking accommodation or redress under the provisions of the act should contact Dale Shantz, Kirtland Community College, 10775 N. St. Helen Road, Roscommon, Michigan 48653, 989-275-5000, extension 271, or the college business office at extension 239. For the M-TECSM at Kirtland-Gaylord campus, Doty Latuszek may be contacted at 989-705-3600.

HARASSMENT

It is the policy of Kirtland Community College, consistent with its efforts to foster an environment of respect for the dignity and worth of all members of the college community, that harassment, in any form, of students, employees, or other individuals at Kirtland Community College is unacceptable and impermissible conduct which will not be tolerated. Harassment is any statement or conduct which constitutes an illegal quid pro quo (an unwelcome demand for an exchange of favors), or otherwise creates or fosters an intimidating, hostile, or offensive campus environment. Anyone facing an immediate physical threat should contact the department of public safety at extension 283 (emergency extension, 355). For more information, or to file a harassment complaint, please contact the business office, located in rooms 226 - 228 of the administration center, or call 989-275-5000, extensions 239 or 271.

Kirtland's policies on nondiscrimination and harassment are consistent with federal and state statutes that prohibit discrimination against employees and require fair and equal treatment of students, including Titles VII and IX of Civil Rights Act of 1964 and the Michigan Elliot-Larsen Civil Rights Act, 1976, which prohibit discrimination because of race, color, religion, sex, disability, marital status, age, height, weight, national original or ancestry, Vietnam-era veteran status, or other protected category under Michigan and federal law.

SMOKE-FREE LEARNING ENVIRONMENT

In compliance with state and federal law, Kirtland Community College has reduced exposure to tobacco products by taking the following steps:

1. Smoking or use of any tobacco products will be prohibited in all leased or owned college facilities, except in private college housing.

2. Smoking or use of any tobacco products will be prohibited in vehicles owned, leased, or operated by the college.

3. Smoking or use of any tobacco products may occur no closer than 10 feet from outer door entrances. In some circumstances, other standards will apply and will be posted.

4. The sale of tobacco products will be prohibited on college premises.

The responsibility for implementing this policy lies with each individual in the Kirtland Community College community. Successful implementation requires the understanding, consideration, and cooperation of students, staff, and visitors to the campus.

DRUG-FREE LEARNING ENVIRONMENT

Kirtland Community College recognizes that the use of illicit substances is wrong and harmful to the physical, social, and emotional well-being of its students and directly affects their ability to learn, function, and be successful in school. Therefore, the college has adopted and implemented policies which promote drug prevention and education, and which prohibit the unlawful possession, use, distribution, or being under the influence of illicit substances by all students on school premises or as part of any school business, activity, or function. Specific information on standards of conduct, disciplinary sanctions, and other aspects of this policy are available in other sections of this catalog (please refer to the "Student Code of Conduct"), other appropriate publications, and from the counseling office. For more detailed information about drug and alcohol counseling, rehabilitation, and/or re-entry programs, please contact the counseling office.

PRIVACY OF STUDENT RECORDS

The college complies fully with the Family Educational Rights and Privacy Act of 1974, also known as FERPA, which is designed to protect the privacy of student educational records. For more information regarding the confidentiality of records or release of student information contact the records office located in the student services office in the administration building, or call 989-275-5000, extension 291. For details of the rights, please refer to "Student's Right to Know" (page 32).

SOCIAL SECURITY NUMBER

The college requests the student's Social Security number at time of admission to verify identification. The Social Security numbers of students accepted for admission prior to April 1996 are their student identification numbers (I.D.). Due to new software used for record keeping, a separate I.D. number is issued to new students admitted after April 1996. The student I.D. is used for grade reporting, class list identification, transcript services, and additional services, such as financial aid and VA benefits for those who are eligible.

As a part of the college's instructional program improvement efforts, and to meet the requirements of the Carl D. Perkins Vocational and Technical Education Act, Section 113, and the Workforce Investment Act (WIA) of 1998, Section 122, student Social Security numbers will be used to compile certain data for the purpose of instructional program improvement and Perkins and WIA reporting.

RIGHTS AND RESPONSIBILITIES OF STUDENTS

College student conduct expectations are essential to the establishment of an environment conducive to learning, to the protection of Kirtland Community College's educational purpose, and to the maintenance of a reasonable level of order on the campus. The college strives to maintain these standards through educational programs, services to the students, and the promotion of student conduct standards.

Kirtland's policy and procedure, Rights and Responsibilities of Students, was designed to promote student conduct standards. The policy outlines certain student freedoms, conduct expected of all students, the right to due process, and sanctions that may be imposed on students found in violation of the code of conduct. Further, it must be noted that certain programs of study (e.g., Nursing and Criminal Justice) may have different or stronger standards of conduct, due process, and/or sanctions for its students.

Kirtland Community College recognizes those enrolled in a course or program of study as students and, therefore, as members of the academic community. As members of this community, they are subject to the obligations that accrue to them by virtue of this membership. While enjoying freedoms of speech, peaceful assembly, right of petition, and the right to due process, all students are expected to conduct themselves in a manner that will reflect favorably on them, the community, and Kirtland Community College.

Academic Freedom

The student in the classroom and in conference should enjoy free discussion, inquiry, and expression. Student performance shall be evaluated on an academic basis, as defined in the syllabus for each course.

A. **Protection of Freedom of Expression**
   Students shall be free, and be encouraged, to offer opinions and insights in any course of study and be allowed to reserve judgment about matters of opinion expressed by the instructor or other students. Also, students are responsible for learning the content of any course of study for which they are enrolled.

B. **Protection Against Improper Academic Evaluation**
   Students shall have protection through due process against prejudiced or capricious academic evaluation. At the same time, they are responsible for maintaining standards of academic performance established for each course in which they are enrolled. Students may use the procedures outlined under "Procedure for Academic Due Process" when a dispute over grades occurs.

Freedom of Assembly

No person or persons shall assemble in a manner that obstructs the free movements of persons about the college or the standard and normal use of the college buildings and facilities, or prevent or obstruct the usual operations of the college.

Right to Due Process

An individual charged with a violation of the student code of conduct has the right to due process. A student who is dissatisfied with an academic decision also has the right to due process. Due process at Kirtland Community College means that a student is assured that his/her rights as a student will be protected. Further, and specifically, a student has the right:

A. To be informed in writing of the specific charges and the grounds for such charges.

B. To have a chosen advisor, counselor, or lawyer (at the student's own expense) present for advice before, during, and/or after the hearing. The role of this individual is limited to an advisory capacity with no right of cross-examination.

C. To be present at the hearing, if desired.

D. To exercise the privilege against self-incrimination.

E. To hear or examine evidence presented to a committee reviewing the case and to present evidence by witnesses or affidavit of any defense the student desires. Further, the student shall be given the opportunity to cross-examine witnesses.

F. To be informed in writing of a hearing committee's recommendation to the dean of student services.

G. To appeal the committee's decision to the President.

H. To waive the right of a formal hearing before the committee and to have the case heard by the director of human resources.

NOTE: For a detailed description of nonacademic and academic due process, please see pages 39 and 40 respectively.

Laws, Regulations and College Policy

Students shall obey the laws enacted by federal, state, and local governments, as well as the policies and regulations of Kirtland Community College. If a student is charged with a misdemeanor or felony, the college will fully cooperate with civil authorities while recognizing the student's rights under the Family Educational Rights and Privacy Act (FERPA).

NOTE: Under FERPA, an educational institution, including a community college, may not disclose personally identifiable information found in a student's education record to law enforcement officials, unless such disclosure is "to comply with a judicial order or lawfully issued subpoena." In such a situation, the college must make a reasonable effort to notify the parent or student of the order or subpoena in advance of compliance.

Student Code of Conduct

Enrollment as a student at Kirtland Community College carries with it behavioral obligations inside and outside the classroom. Students are responsible for obeying municipal, state, and federal laws that govern the community, as well as for obeying the rules and regulations of the college. If a student participates individually or as a member of a group in any of the forms of misconduct listed below, he or she can be subject to disciplinary action. Further, sanctions may be imposed upon student groups or organizations, including the sanction of deactivation, which entails the loss of all the privileges and/or college recognition for a specified period of time.

Generally, college jurisdiction and discipline shall be limited to conduct that occurs on college premises or which adversely affects the college community and/or the pursuit of its objectives. The student code of conduct is in effect for students while they are on any campus property, as well as other property in the possession of or owned, used, or controlled by the college.

The code of conduct also applies to off-campus activities such as field trips, off-campus classes, and college-sponsored events. On a case-by-case basis, the dean of student services or the appropriate dean or associate dean will decide whether jurisdiction should be asserted to address the adverse effects of an off-campus activity.

A. **Forms of Misconduct**
    The following forms of misconduct will not be tolerated by the college. Minimum sanctions, disciplinary actions typically taken by the college, are indicated in parenthesis following each violation. This list is not inclusive of all possible forms of misconduct. The college's administration may add to this list if needed.

    College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of the student code of conduct, i.e., if both violations result from the same factual situation, without regard to the pendency of civil litigation in court or criminal arrest and prosecution. Such proceedings under this student code of conduct may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.

1. Arrest for or conviction of any civil or criminal laws committed while on campus or at college-sponsored events. **(Probation)**

2. Threatening, attempting, or using physical force or intimidation (including stalking) against any person on the college properties or at any off-campus college-sponsored events. This includes the interference with the freedom of movement of any person. **(Suspension)**

3. Deliberate interference with academic freedom or freedom of speech, including disruption of a class, or interference with the freedom of any speaker invited by the college to express his/her views. **(Warning)**

4. Discrimination based on race, color, religion, national origin or ancestry, age, sex, marital status, or handicap. **(Probation**)

5. Sexual harassment in the educational environment, as defined by the Elliott-Larson Civil Rights Act. **(Suspension)**

   NOTE: The Elliott-Larson Civil Rights Act defines sexual harassment in the educational environment as "unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications of a sexual nature when...such conduct or communication has the purpose or effect of substantially interfering with an individual's education...or creating an intimidating, hostile, or offensive...educational...environment."

6. Conduct or expression which is disorderly, lewd, indecent, or obscene on college property or at a college-sponsored event**. (Warning)**

   NOTE: To determine conduct or expression which is disorderly, lewd, indecent, or obscene, the U.S. Supreme Court has set forth the following three-pronged test to determine obscenity:

   The basic guidelines for the trier of fact must be: (a) whether the average person applying contemporary community standards would find that the work/action, taken as a whole, appeals to the prurient interest; (b) whether the work/action depicts or describes, in a patently offensive way, sexual conduct specifically defined by the applicable state law; and (c) whether the work/action, taken as a whole, lacks serious literary, artistic, political, or scientific value.

7. Engaging in any kind of hazing action on or off campus that endangers the mental health, physical health, or safety of a student, or which destroys or removes public or private property for purpose of initiation or admission into, affiliation with, or participation in any student organization. **(Suspension)**

8. Failure to comply with reasonable requests and orders by authorized college officials or representatives acting on behalf of the college. (This requirement includes reasonable requests for students to meet appointments in administrative or faculty offices and at investigative/disciplinary hearings.) **(Warning)**

9. Initiating false alarms which endanger the health and safety of any person on college properties or at any off-campus, college-sponsored events. **(Suspension)**

10. Possession or use of knives (blade in excess of 3-1/8 inches), firearms, firecrackers, explosives, other lethal weapons, and/or toxic or dangerous chemicals on campus or at any college-sponsored events, except when specifically authorized in writing by a college administrator for educational/safety purposes. Further, possession in a locked vehicle may be permitted according to state laws. Law enforcement officers are exempt from this policy. **(Suspension)**

11. Unauthorized distribution or sale of items on campus. (To be eligible for authorization, students must follow the steps outlined in Board policy/procedure 3.015, Community Use of College Facilities.) **(Warning)**

12. Manufacture, possession, control, sale, transmission or use of:
    a. Any controlled substance (illegal drugs) in violation of state or federal laws; or
    b. Substances purported to be illegal, abusive, or performance enhancing, i.e., look-alike drugs.

    The college has the policy of full cooperation with law enforcement agencies in such cases. **(Suspension)**

13. Possession (outside of state laws), distribution, consumption, or abuse (including intoxication) of any alcoholic beverages on any college-owned or rented facility except in employee-rented dwellings on campus. **(Suspension)**

14. Consumption of food or beverages in unauthorized areas on campus. **(Warning)**

15. Smoking in classrooms or other designated nonsmoking areas. **(Warning)**

16. Gambling with money or anything else of value on campus or at any college-sponsored event. **(Probation)**

17. Dress that fails to meet established safety or health standards in specific on- or off-campus classes or at college-sponsored events. **(Warning)**

18. Parking of vehicles in unauthorized areas. **(Warning)**

19. Unauthorized presence of pets on campus. (Animals who assist students with disabilities are permitted on campus.) **(Warning)**

20. Cheating, plagiarism, or other forms of academic dishonesty, including the unauthorized acquisition of tests or other academic materials. This includes students who aid and abet, as well as those who attempt, such behavior. (A recommended sanction must be provided by the instructor to the student judiciary committee and may include expulsion.)

    NOTE: Cheating includes, but is not limited to:
    a. The use of any unauthorized assistance in taking quizzes, tests, or examinations.
    b. Dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments.
    c. The acquisition, without permission, of tests or other academic material belonging to a member of the college faculty or staff.

    NOTE: Plagiarism includes, but is not limited to, the use, whether by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

21. Misrepresentation, alteration, forging, or misuse of college documents, records, or identification cards. (Students are required to present identification when requested by authorized college officials.) **(Expulsion)**

22. Unauthorized representation or contracting in the name of Kirtland Community College. (A student may not claim to be an official representative of the college for any commercial purpose.) **(Suspension)**

23. Use and/or misuse of the college computer system, facilities, hardware, software, and all computerized information is prohibited in the following circumstances, including, but not to be limited to:
    a. Unauthorized entry into a file, whether to use, read, change, or for any other purpose.
    b. Unauthorized transfer of a file.
    c. Unauthorized use of another individual's identification and password.
    d. Use of computing facilities to interfere with the work of another student, faculty member, or college official.
    e. Use of computing facilities to send obscene or abusive messages.
    f. Use of computing facilities to interfere with typical operation of the college's computing system.
    g. Use of computing facilities in a way that violates state or federal copyright laws, e.g., unauthorized duplication of copyrighted or licensed software. **(Suspension)**
24. Unauthorized entry to and/or use of college facilities and equipment. Also, the possession of keys, or duplication of the college's keys without proper authorization. **(Suspension)**

25. Attempted or actual theft from, damage to, or the defacing of college property or the property of other students, faculty, or staff while on the campus or at any college-sponsored event. **(Expulsion)**

26. Littering of college facilities and grounds. (This includes the disposal of cigarette butts in locations other than ashtrays or trash receptacles.) **(Warning)**

27. Dishonesty, including knowingly furnishing false information to the college or a college officer, whether orally, in writing, or in completing required forms. **(Probation)**

28. Violation of college policies and regulations not already addressed in the previously listed forms of misconduct. **(Warning)**

B. Disciplinary Actions

Violations of the student code of conduct are subject to disciplinary action and will be given immediate attention by the college. The dean of student services may impose any of the following disciplinary actions:

1. **Warning:** an official reprimand that expresses college dissatisfaction with the student's conduct and clarifies expected behavior in the future. Such action is in effect for the duration of the semester in which the warning was issued. A warning typically does not include any restrictions. If the same offense is repeated after a warning is given, probation will be the minimum sanction awarded.

2. **Probation:** status indicates that any violation of the code of conduct within the probationary period shall result in more severe disciplinary action against the student that could include suspension or dismissal from the institution. Usually, the probationary period extends for a specified time or until completion of a specific requirement. Probation in itself does not carry with it any restrictions, but, in addition to probation, it is possible for a student to be expected to complete a work assignment, pay a fine, or be prohibited from holding an office or representing the college in any activity.

3. **Removal from a Course:** a student may continue to attend other classes but may not resume attendance in the course from which he or she has been removed for the remainder of the semester in which the removal occurs. In the event a student is removed from a course, he or she will be given either a withdrawal or a failure in accordance with the college's "Withdrawal From Courses" policy.

4. **Suspension:** an action that separates the student from the institution for a definite period of time (days, weeks, semesters, etc.) and is to be appropriate to the circumstances of the violation. Such action will specify the conditions required for readmission, as well as the date the student will be eligible to return.

5. **Expulsion:** an action that permanently separates the student from the institution.

6. **Specific Orders:** actions that may stand alone or be issued with another sanction. Specific orders may include, but are not limited to, performance or nonperformance of specific acts, loss of certain privileges, payment of fines, restitution, and work assignments.

Any disciplinary action imposed on a student will be recorded in the student's confidential file in the student services office. A disciplinary action cannot be recorded on a student's transcript.

Disclosure of Student Rights and Responsibilities

Both policy and procedure for Student Rights and Responsibilities will be made available to all students and employees. To ensure this occurs, any college catalog, student handbook, or faculty handbook printed after December 31, 1990, must include this information.

DUE PROCESS PROCEDURE

At Kirtland Community College, two procedural forms of due process exist: Nonacademic Due Process and Academic Due Process. As conditions permit, either form of due process is provided to the student within a reasonable amount of time. In certain circumstances, the dean of student services, or his/her designee, may impose a suspension prior to the hearing before the student judiciary committee.

A. Interim suspension may be imposed only:

1. To ensure the safety and well-being of members of the college community or the preservation of college property;

2. To ensure the student's own physical or emotional safety and well-being;

3. If the student poses a definite threat of disruption of or interference in the usual conduct of operations of the college.

B. During the period of interim suspension, the student shall be denied access to the campus (including being barred from classes) and/or all other college activities or privileges for which the student might otherwise be eligible, as the dean of student services may determine to be appropriate.

C. The interim suspension shall continue until the student's due process procedures are complete. The hearing for this matter should follow the dean of student services' actions as soon as practicable.

Procedure for Nonacademic Due Process

Any member of the college community may file charges against a student for an alleged violation of the student code of conduct. These charges must be filed in writing by completing a Student Conduct Complaint form and be submitted to the dean of student services as soon as possible after the incident. These forms can be obtained from the student services office. Once charges have been formally filed, the following procedure for nonacademic due process must be observed:

A. The director of guidance and counseling shall meet with the person (complainant) who has filed a charge against another person or student organization. During this meeting, the director of guidance and counseling will review the charge and procedure with the complainant. The director of guidance and counseling will also meet with the individual(s) charged with the violation and attempt to resolve the situation between the two parties. If the complainant elects to withdraw the charge, a Student Conduct Complaint Withdrawal form will be completed and signed by the complainant. If the charge stands, the dean of student services will notify the person or organization (in writing) of the charges filed against him/her/it and of the college's policy regarding due process.

B. The dean of student services will appoint a student judiciary committee composed of three full-time college employees and two students. The dean of student services will appoint one of the employees to chair the hearing. The members of this committee must have no vested interest in the matter. The dean of student services cannot serve on this committee.

C. The person filing the complaint and the person or student organization charged with violating the student code of conduct are responsible for providing statements from witnesses and other evidence. Witness statements can be provided verbally during the hearing or in written (signed and dated) form. Both parties may have other individuals at the hearing. These individuals are limited to an advisory capacity with no right of cross-examination.

D. The student judiciary committee has the responsibility of hearing the charges against the student and reviewing the evidence. The hearing will take place within 10 working days following the student's receipt of the written charges. A verbatim record, such as a tape recording, will be made of all hearings. This record remains the property of the college and must be maintained for a period of two years. Within one working day following the hearing, the committee will submit (in writing) its recommendation to the dean of student services.

E. The dean of student services will render a decision on the case, which may include sanctions imposed on the student. The dean of student services will then inform (in writing) all parties involved of his/her decision within three working days of the receipt of the student judiciary committee's recommendation.

F. If the student wishes to contest the dean of student services' decision, he/she may appeal to the President within three working days following notification of the decision (refer to "Appeal Process"). The President's decision will be final.

NOTE: A student who commits a drug- or alcohol-related infraction (Forms of Misconduct #12, #13 or #14) will be immediately referred to the director of guidance and counseling. The director may provide the student with a choice of the following options:

Option #1:   Referral to the Kirtland student assistance program and/or to a substance abuse professional for a substance abuse intake interview and assessment. The director will also give a formal "warning" to the student.

Option #2:   Referral to the student judiciary committee for a hearing. If found in violation by the committee, the student will be suspended for the remaining portion of the current semester with no refund of tuition and fees. Further, if suspended, the student must show evidence of an intake interview and assessment with a substance abuse professional in order to return to Kirtland.

Procedure for Academic Due Process

A. If a student wishes to appeal a grade or academic decision, he/she must first meet with the faculty member to discuss his/her grievance.

B. If the student and faculty member do not come to a satisfactory agreement, the student may appeal to the dean or associate dean of his/her program (see page 46).

C. If the student chooses to appeal to the dean or associate dean, a written request (which includes a brief summary of the grievance) must be submitted. The dean or associate dean will review the appeal and make a recommendation within three working days to the dean or his/her designee. Within three working days after receiving the recommendation, the dean/designee shall render a decision.

D.   Should the student wish to pursue the matter further, the dean/designee will refer the complaint to the academic appeals committee. The dean will appoint an academic appeals committee composed of full-time faculty members and two students. The dean will appoint one of the faculty members to chair the hearing. The members of this committee must have no vested interest in the matter. Any dean or associate dean cannot serve on this committee.

E.   The academic appeals committee has the responsibility of hearing the grievance and reviewing the evidence. The hearing will take place within 10 working days following the student's request for a hearing. A verbatim record, such as a tape recording, will be made of all hearings. This record remains the property of the college and must be maintained for a period of two years. Within one working day following the hearing, the committee will submit (in writing) its recommendation to the dean/designee.

F.   The dean/designee will render a decision on the case. The dean/designee will then inform (in writing) all parties involved of his/her decision within three working days of the receipt of the academic appeals committee's recommendation.

G.   If the student wishes to contest the dean's/designee's decision, he/she may appeal to the President within three working days following notification of the dean's/ designee's decision (refer to "Appeal Process"). The President's decision will be final.

Appeal Process
An appeal shall be limited to review of the verbatim record of the initial hearing and supporting documents for one or more of the following purposes, except as required to explain the basis of new evidence:

A.   To determine whether the original hearing was conducted fairly, in light of the charges and evidence presented, and in conformity with prescribed procedures, giving the complaining party a reasonable opportunity to prepare and present evidence that the student code of conduct was violated and giving the accused student a reasonable opportunity to prepare and to present his or her rebuttal of those allegations.

B.   To determine whether the decision reached regarding the accused student was based on substantial evidence (i.e., whether the facts in the case sufficient to establish whether there was or was not a violation of the student code of conduct).

C.   To determine whether the sanction(s) imposed was appropriate to the violation of the student code of conduct that the student was found to have committed.

D.   To consider new evidence, sufficient to alter a decision, or other relevant facts not brought out in the original hearing because such evidence and/or facts were not known to the person appealing at the time of the original hearing.

SUBSTANCE ABUSE INFORMATION ON ALCOHOL AND DRUGS
Information regarding the misuse and abuse of alcohol and drugs can be found in the student center near the entrance or by contacting the director of guidance and counseling in the student services office.

STATEMENT/GUIDELINES REGARDING AIDS
In response to the epidemic of infection with Human Immunodeficiency Virus (HIV), which causes the Acquired Immunodeficiency Syndrome (AIDS), Kirtland Community College has adopted these guidelines based upon the recommendation of the American College Health Association.

AIDS is a serious illness, a public health problem, and an immediate concern to the college community. AIDS is characterized as a defect in natural immunity against disease. People who have AIDS are vulnerable to critical illnesses that are not a threat to anyone whose immune system is functioning in a standard and typical fashion.

AIDS is caused by a virus commonly called HIV. Presently, there is no known cure or effective vaccine. However, the consensus of authoritative medical opinion, as reflected by the Center for Disease Control and Public Health Service, is that AIDS is not a readily communicable disease.

There are no known cases of AIDS transmission by food, water, insects, or casual social contact, and no spread of the virus has been found within family groups in which one or more persons have been diagnosed with AIDS, except from sexual and/or intravenous transmission. The current scientific understanding is that the AIDS virus is transmitted only through an exchange of infected body fluids, blood, or blood products. Such exchanges may occur when the needle of an infected person (in most cases, a drug addict) is used by someone else, through a blood transfusion from an infected person, or through intimate contact involving the transfer of semen and vaginal fluids.

NOTE: The use of condoms can significantly reduce spread of this virus. AIDS has not been shown to be transmitted by saliva, tears, nasal secretions, vomitus, urine, or feces. Considering current authoritative medical opinion, there is no basis for routinely excluding or dismissing employees or students because they have AIDS, ARC (AIDS-Related Complex), or AIDS virus antibodies. Since these conditions have been designated as handicaps and are treated as such by the Elliott-Larson Civil Rights Act, it is also against the law to dismiss someone on this basis. Depending on the medical circumstances of each situation, the college may require the monitoring of the medical condition of an infected person, which includes the counseling of that person on the nature of the disease and the importance of not engaging in behavior that could transmit it, if that is appropriate. No broad blood screening test will be required.

The right to privacy of all individuals will be respected and protected, and the confidentiality of any required records that may be required will be maintained. Because the virus is not transmitted by ordinary contact, it is neither necessary nor appropriate for the protection of roommates, classmates, or employees to share with them any information regarding a student or employee with AIDS and AIDS-related conditions.

Kirtland Community College will comply with all federal and state laws and regulations, including those of the United States Public Health Service and the guidelines from the Center for Disease Control and the American Health Association, which bear on the welfare of persons within the college community who test positively to that antibody. It has also adopted the safety guidelines as proposed by the United States Public Health Service "for the handling of blood and body fluids of all persons...." All appropriate college personnel will be trained in and will follow these procedures.

The college will continue to provide information programs designed to acquaint the community with current information about AIDS and how to avoid or minimize the risks of transmission of the virus.

Anyone with questions about AIDS may contact Jacquelyn Smith, nursing instructor. Materials on AIDS will be available in information-dispensing units on campus.

In addition, any student who is concerned or has questions about AIDS or HIV may contact the Grand Traverse, Leelanau, Benzie District Health Department (Tri-County) in Traverse City, P.O. Box 905, Traverse City, MI 49685-0905, 616-922-4381 or the District Health Department #1 in Cadillac for free counseling and/or HIV testing.

ADDITIONAL INFORMATION

FACILITIES, SERVICES, AND PARKING

BOOKSTORE
The campus bookstore is located in the student center and provides textbooks, reference books, computer software, classroom supplies, clothing, gift items, and souvenirs. Bookstore hours are 8:00 a.m. to 4:30 p.m., Monday through Thursday, and 8:00 a.m. to 2:00 p.m. on Fridays. Also, special evening hours are provided during registration and the first two weeks of fall and winter semesters.

NOTE: Federal guidelines require that students be informed that they are not in any way required to purchase books and supplies at the campus bookstore.

CAFETERIA
The cafeteria is located in the student center and is open Monday through Friday. A variety of hot and cold food, snacks, and beverages are available. Cafeteria hours and daily specials are posted in the student bulletin. Breakfast is available until 10 a.m.

CHILD CARE
The children's learning center provides a day care and pre-school program in a developmentally appropriate setting for children ages 2 ½ weeks to 12 years. The center is located at 15 College Drive, Kirtland Community College.

The program assists children in growing to their fullest potential by nurturing a sense of self, developing intellectual skills, learning to relate to other children and adults, and being a contributing member of the group.

The daily schedule provides a framework for children to explore, create, enjoy good food, develop good health habits, exercise, and rest, all within a caring and nurturing environment. A nutritious breakfast, lunch, and two snacks are provided by the center. The cost for day care at the center is $2 per hour for 2 ½-12 years of age and $2.25 per hour for those under 2½. Family Independence Agency payments are accepted.

The hours for the center are 7:00 a.m. to 6:00 p.m., Monday through Friday. Evening hours are available by special arrangement. The center follows Kirtland Community College's academic calendar.

For more information, contact the director of the center, Amy Hesse, at 989-275-5000, extension 232, or the Children's Learning Center, 15 College Drive, Roscommon, MI 48653.

PUBLIC SAFETY OFFICE
Kirtland's response to the Campus Security Act of 1990 includes a statement of current policies concerning security and access to campus facilities; security considerations used in the maintenance of campus facilities; campus law enforcement; a description of the type and frequency of programs designed to inform students about campus security procedures and practices; programs designed to inform students about the prevention of crimes; statistics concerning the occurrence of crimes on campus and the number of arrests for liquor law violations, drug abuse violations, and weapons possessions; a statement of policy regarding the possession, use, and sale of alcoholic beverages and enforcement of state underage drinking laws; a statement of policy regarding the possession, use, and sale of illegal drugs and enforcement of federal and state drug laws; and a description of any drug or alcohol abuse education program provided by the college. Please refer to the department of public safety for more information.

COSMETOLOGY SERVICES
Students enrolled in the cosmetology program provide shampoos, sets, facials, haircuts, manicures, tints, perms, and many other services, under the direct supervision of a licensed cosmetology instructor. These services are performed in the cosmetology laboratory, which is located in the career technology center. Fees range from $1 to $30. The cosmetology laboratory hours for service are from 9:30 a.m. to 4 p.m., Tuesday through Friday. For more information or an appointment, call 989-275-5000, extension 274.

VENDING MACHINES
Vending machines providing snacks and beverages are found in the student center, instructional center, career technology center, and the administration center.

LOST AND FOUND
Lost and found is located in the reception area of the student center. Students should contact the receptionist to report items they find or to inquire about lost items.

DUPLICATING SERVICES
A coin-operated copy machine is located in the back of the library. The cost is .10 cents per copy. A copy machine is also located in the college bookstore. The bookstore personnel will provide copies of material at .15 cents per copy.

TYPEWRITERS FOR STUDENT USE
Typewriters and word processors for student use can be found in the administration center, room 247 (FLEX Lab), and the library computer lab. Typewriters in the FLEX Lab are available Monday through Thursday from 8:00 a.m. to 8:00 p.m. Fridays 8:00 a.m. to 4:30 p.m.; typewriters in the library are available for use during regular library hours. Students using this equipment must have the knowledge and skills to operate it.

OPEN COMPUTER LABS FOR STUDENTS USE
Computers for general student use can be found in the library and in the administration center, room 247 (FLEX Lab). Assistance is available for students in the library during normal library hours. Assistance in the FLEX Lab is available Monday through Thursday from 8:00 a.m. to 8:00 p.m. Fridays 8:00 a.m. to 4:30 p.m.

TELEPHONES
Pay telephones are placed in all five main buildings on campus. Please do not request use of office telephones; they are strictly for college business.

PUBLIC TRANSPORTATION
Public transportation services are provided Monday through Friday, depending on destination and on varying availability of county transit authorities. Contact your local agency for availability of public transportation, information regarding arrival/departure times, and ride fees:

Crawford County Dial-A-Ride 348-5409   Regional Ride………………..877-4-MY-LIFT
Ogemaw Public Transit…………………………...345-5790   Roscommon Mini-Bus………………275-4034

PARKING
Parking on campus is free and allowed in approved areas only.

Parking is not allowed in fire lanes, on or beside walking paths, or next to buildings. In addition, parking in the lot adjacent to the career technology center is reserved for patrons of cosmetology services.

STUDENT HOUSING
Student housing is available on campus on a limited basis. The college also maintains a list of rental housing available in the college district. Those students with questions about housing should contact the student services office at 989-275-5000, extension 289.

COMMUNITY SUPPORT SERVICES

COMMUNITY EDUCATION
Community education offers educational programs to students and other members of the community. Programs such as the Stepping Stones Series feature courses such as Starting Your Own Business; Marketing Research Plans and Strategies; How to Sell Your Product or Service; Legal and Tax Issues for Business Owners; Introduction to Accounting and Recordkeeping; Financial Management; Sources of Financing and Meeting with a Lender; and Developing a Business Plan. Computer courses such as Windows; Introduction to Computers; Microsoft Word; Excel; Access; and PowerPoint are offered each semester. In many instances, arrangements can be made to provide computer training at work sites through the Customized Training Program. Personal interest courses such as Aikido, Karate, and Gunsmithing may also be offered. For more information on these courses, contact the community education director at 989-275-5000, extension 351.

COMMUNITY BASED STUDENT EMPLOYMENT
Part-time student employment with off-campus employers is an option for eligible Kirtland students. Off-campus employers considering participation in this program should contact financial aid at 989-275-5000, extension 257. Since financial aid may not cover 100% of the student's wages, off-campus employers may be obligated to contribute matching funds.

M-TEC^{SM} AT KIRTLAND-GAYLORD

The M-TEC^{SM} at Kirtland-Gaylord is a state-of-the art facility offering technical education in a unique, flexible, student-friendly manner. The M-TEC^{SM} campus is located in Gaylord and features state-of-the-art equipment, pedagogy, and curriculum taught by experienced faculty. Students can choose a course of study and build it from hundreds of skill-specific modules, resulting in a dynamic, flexible program preparing graduates to enter into high-paying jobs.

The mission of the M-TEC^{SM} is to provide educational programs and services to individuals in preparation for employment in high-skill, high-wage, high-demand occupations. In addition, through customized training and contracted education, business and industry partners in the Northern Michigan Region and their employees will be provided with educational opportunities specifically designed to upgrade and/or enhance the job skills necessary to compete in a local, state, national, and global economy.

For information, contact the M-TEC^{SM} at Kirtland-Gaylord at 989-705-3605. Additional information is also available beginning on page 101 of this catalog.

COMMUNICATION WITH THE COLLEGE COMMUNITY

COLLEGE CATALOG

The college catalog is the official publication issued by the college, and is available online at: www.kirtland.edu. The catalog includes detailed information concerning programs of study, course descriptions, admission and graduation requirements, and services for students. The contents of the college catalog are subject to change. The catalog is not to be considered as a contract or agreement between the student or the college. For the most current information, check the student class schedule.

CLASS SCHEDULES

A class schedule is a list of courses offered by the college during a semester. This publication provides day, time, and location of each class. Also included is information concerning testing, advising, registration, and other services provided by the college.

The class schedule is available in early April for both summer and fall semesters and in early November for the winter semester.

INFORMATION MONITORS

Monitors that display information that is important to students are stationed in the administration center, the instructional center, and the student center. Information includes cafeteria specials, registration dates, athletic highlights, scholarship deadlines, commencement details, and other information that is updated regularly.

CAMPUS NEWSPAPER

The Paper is a college newspaper published bi-weekly and produced entirely by Kirtland students. It includes news stories, feature articles, columns and opinion pieces, sports, and photography of interest to the college community.

Most, but not all, students helping to produce The Paper are enrolled in journalism classes in which students can learn reporting, editing, photography, graphic design, and advertising skills while earning up to three humanities credits toward their associate degree.

Opinions expressed in The Paper are attributed to individual writers and do not reflect the policy of the Kirtland Board of Trustees, administration, faculty, or staff. For more information about joining The Paper's staff, phone the advisor, Keith Gave, 989-275-5000, extension 242, or e-mail him at gavek@kirtland.edu

WEB SITE

Kirtland's web site can be accessed at: www.kirtland.edu

GLOSSARY OF COLLEGE TERMS

Associate Degree - The degree given for completing college programs of at least two but less than four years of study (60 credit hours or more), usually in a two-year institution such as a junior college or community college.

Certificate - An award for completing a particular program or course of study of 30 or more credit hours, sometimes given by two-year colleges instead of the associate degree.

Contact Hours - The total hours of lecture and laboratory instruction for each class. (Fifty instructional minutes equal one contact hour.)

Corequisite - A required course which, if not taken ahead of time, must be taken at the same time as another class.

Developmental Class - A corrective course designed to assist students who need additional assistance in reading, mathematics, or English.

Elective - A subject or course which is open to choice, i.e., a subject which is optional and not required.

Freshman - Class level for students with less than 30 completed credit hours in their program of study.

Full-Time Students - A student who is enrolled for 12 or more credit hours during the fall or winter semester or six or more credit hours during the summer session.

Humanities Elective - A course chosen from a specific list that includes the following subject areas: art, creative writing, foreign language, history, humanities, journalism, literature, music, philosophy, and theatre.

Part-Time Student - A student who is enrolled for 11 or fewer credit hours during the fall or winter semester or five or fewer credit hours during the summer session.

Prerequisite - A requirement for registration in a particular course. For example, Calculus I is a prerequisite for Calculus II.

Science Elective - A course chosen from a specific list, which includes the following subject areas: (1) natural science (biology, chemistry) or (2) physical science (geology, mathematics or physics).

Social Science Elective - A course chosen from a specific list, which includes the following subject areas: anthropology, economics, geography, political science, psychology, and sociology.

Sophomore - Class level for students with 30 or more completed credit hours in their program of study.

PROGRAMS OF STUDY

Key: AAS = Associate in Applied Science; CC = Certificate of Completion; SC – Special Certificate

ARTS
Graphic Design, AAS
Graphic Design, CC
Graphic Design, SC

AUTOMOTIVE
Automotive Chassis Specialist, SC
Automotive Electrical Systems Specialist, SC
Automotive General, SC
Automotive Powertrain Specialist, SC
Automotive Technology, AAS
Automotive Technology Master Certification, CC

BUSINESS
Associate in Business Administration
Business Management, AAS
Entrepreneurship
General Business, CC

COSMETOLOGY
Cosmetology, CC
Cosmetology Instructor, CC
Nail Technician, CC
Skin Care Technician, CC
Salon Management - Cosmetology, AAS
Salon Management - Cosmetology Instructor, AAS
Salon Management - Nail Technician, AAS
Salon Management – Skin Care Technician, AAS

CRIMINAL JUSTICE
Associate in Criminal Justice - Generalist
Corrections Administration, AAS
Corrections Administration - Jail Administration, AAS
Correctional Officer, CC
Criminal Justice Administration, AAS
Criminal Justice Pre-Service, AAS

CUSTOMIZED TRAINING
Contracting with Business and Industry
      (CWB&I), AAS
Contracting with Business and Industry
      (CWB&I), CC

EDUCATION
Paraprofessional, AAS

HEALTH CAREERS
Basic Emergency Medical Technician (EMT), SC
Emergency Medical Services (Paramedic), AAS
Massage Therapy, AAS
Massage Therapy, CC
Medical Assistant, AAS
Medical Assistant, CC
Nursing - Associate Degree in Nursing - Level II, AAS
Paramedic, CC
Nursing - Practical Nursing – Level I, CC
Nursing – RN from LPN/LVN

Radiography

HONORS PROGRAM

INDUSTRIAL TECHNOLOGIES
CAD Operator Level I-III, CC
CAD Operator – Architectural
Computer Aided Drafting & Design Technology, AAS
Machine Tool Operation, CC
Manufacturing Processes Technology, AAS
Multi-Technology, Computer Aided Drafting and
  Design/Manufacturing Processes, AAS
Welding, CC
Welding Technology, AAS

M-TEC^{SM} at KIRTLAND-GAYLORD
Carpentry, AAS
Carpentry, CC
Electrical Technology, AAS
Electrical Technology, CC
Heating/Ventilation/AC/Refrigeration, AAS
Heating/Ventilation/AC/Refrigeration, CC
Industrial Maintenance, AAS
Industrial Maintenance, CC
Machine Tool Technology, AAS
Machine Tool Technology, CC
Welding and Fabricating, AAS
Welding and Fabricating, CC

OFFICE INFORMATION SYSTEMS
Administrative Assistant, AAS
Advanced Word Processing Specialist, AAS
Legal Secretary, AAS
Medical Billing and Coding, CC
Medical Clerk, CC
Medical Secretary, AAS
Medical Transcription, AAS
Medical Transcription, CC
Office Assistant, CC
Word Processing Specialist, CC

SCIENCE
Plant Science, AAS

TECHNOLOGY MANAGEMENT
Technology Management

TRANSFER
Associate in Arts, AA
Associate in Business Administration, ABA
Associate in Computers
Associate in Criminal Justice - Generalist
Associate in Fine Arts, AFA
Associate in Science, AS

KIRTLAND PROGRAMS AND INSTRUCTIONAL ADMINISTRATORS

Business & Technology, Math, Science, & Health	Industrial & Construction Technology	Arts & Communication, Human Services & Social Science	
PROGRAMS:	**PROGRAMS:**	**PROGRAMS:**	**PROGRAMS:**
Associate in Business Administration Business Management Entrepreneurship, General Business	**Industrial Technologies** Computer Aided Design Machine Tool Manufacturing Processes Multi-Technology Welding	**Associate in Arts**	**Assessment Program**
Associate in Computers Computer Science, Information Systems		**Associate in Fine Arts** Creative Writing Studio Art Theatre Arts	**Contracting with Business & Industry**
Associate in Science Life Science & Physical Science	**M-TEC^{SM} Programs** Carpentry Electrical Technology Heating/Ventilation/AC/Refrigeration Industrial Maintenance Machine Tool Welding & Fabricating		**Chair of Instructional Deans**
Automotive Chassis, Electrical Systems, General Powertrain., Master Certification		**Associate in Criminal Justice**	**Chief Instructional Officer**
		Criminal Justice Administration Corrections Generalist Pre-Service	**Controlled Burn**
Aviation			**COOR**
Cosmetology Cosmetology, Cosmetology Instructor Nail Technician, Salon Management			**EAGs**
		Graphic Design	**Honors Program**
Health Careers Emergency Medical Technician Massage Therapy, Medical Assistant Nursing, Paramedic, Radiography		**Police Academy**	**High School Counselors**
			High School Principles
			MODAC
Office Information Systems Administrative Assistant, Legal Secretary Medical Billing & Coding Medical Clerk, Medical Secretary Medical Transcription Office Assistant, Word Processing			**Perkins**
			Retention
			Secretarial Supervision
			Technical Prep Oversight
Plant Science Horticulture, Turfgrass, Landscape & Nursery			**Testing Services**
			The Paper
			TSB FT Faculty
			TSPS PT Faculty
			Tutoring
			Young Writers
COURSES: Accounting Allied Health Automotive Aviation Biology Business Chemistry Communication Computer Info Sys Cosmetology Developmental Math Economics ESL Geology Language Massage Therapy Mathematics Nursing Office Info Systems Physics Speech	**COURSES:** Carpentry Design Technology Electrical HVAC-R Industrial Maintenance Machine Tool Manufacturing Welding	**COURSES:** Anthropology Art DEV Reading & Writing Criminal Justice Education English Geography History Music Philosophy Physical Education Political Science Psychology Sociology Theatre	
OTHER: Campus Wellness MLAD Service Learning TSB	**OTHER:** Administrator of MTEC Workforce Development	**OTHER:** Academic Amnesty Campus Security CIC Chair CJ Advising Fitness Center Public Safety TSPS PT Faculty	
Administrator *Karen Brown* Associate Dean 989-275-5000, ext. 298	**Administrator** *Doty Latuszek* Provost - MTEC 989-705-3683	**Administrator** *Jerry Boerema* Associate Dean 989-275-5000, ext. 283	**Administrator** *Kathy Marsh* Dean 989-275-5000, ext. 245

A R T S

Special Certificates
- Graphic Design

Certificates
- Graphic Design

Associate in Applied Science
- Graphic Design

Associate
- Fine Arts – Studio Arts

For more information, please contact Art.	
Joe Donna	989-275-5000, extension 226
Scott Rice	989-275-5000, extension 300

GRAPHIC DESIGN
Special Certificate (SGRA0)   **Minimum Credits: 19**

Introduction
Kirtland's Special Certificate - Graphic Design is designed to provide the student with the basic skills necessary to gain entry-level employment in the graphic design and visual communication industry. The emphasis in the curriculum is comprised of the six required studio art courses based upon traditional practices. Students may also elect to pursue a Certificate – Graphic Design, an Associate of Applied Science – Graphic Design, or an Associate in Fine Arts – Studio Art at any point in this program.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program.

Course	Title	Cr
ART-10600	Fundamentals of Drawing I	3
ART-11500	Photography I	3
ART-19000	Digital Communications I	3

Course	Title	Cr
ART-25000	Illustration I	3
ART-27545	DS-Computer Generated Images I	3
ART-28000	Portfolio	3
CIS-21900	MacIntosh O.S. X	1

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a special certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the certificate or associate degree level.

GRAPHIC DESIGN
Certificate of Completion (CGRA0)   **Minimum Credits: 31**

Introduction
Kirtland's Certificate - Graphic Design is designed to provide the student with the advanced training that is necessary for entry and continuing success in the graphic design and visual communication industry. The curriculum is based upon solid studio art courses focusing on conceptual, practical, and technical skills. The major core curriculum is based upon traditional practices and in-depth use of technology. Students may also elect to pursue an Associate of Applied Science – Graphic Design, or an Associate in Fine Arts – Studio Art at any point in this program.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*
- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ART-10500	Introduction to Design	3	ART-25000	Illustration I	3
ART-10600	Fundamentals of Drawing I	3	ART-27545	DS-Computer Generated Images I	3
ART-11500	Photography I	3	ART-28000	Portfolio	3
ART-19000	Digital Communications I	3	CIS-21900	MacIntosh O.S. X	1

and two electives from the following list:					
ART-20600	Drawing II	3	ART-23500	Digital Communications II	3
ART-21500	Photography II	3	ART-27546	DS-Computer Generated Images II	3

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)

GRAPHIC DESIGN

Associate in Applied Science (DGRA0)   **Minimum Credits: 63**

Introduction

Kirtland's Associate in Applied Science - Graphic Design is designed to provide specialized instruction that is necessary for entry and success in the graphic design and visual communication industry. The curriculum is based upon solid academic and studio art courses focusing on conceptual, theoretical, practical, and technical skills. The major core curriculum is based upon traditional practices and in-depth use of technology. After completing the second semester in the program, associate degree candidates need to meet with an advisor to determine if they wish to continue in the program or pursue the Associate in Fine Arts – Studio Art degree to transfer to an institution that grants four-year degrees.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ART-10000	Art History I	3	ART-21500	Photography II	3
ART-10103	Art History II	3	ART-23500	Digital Communications II	3
ART-10500	Introduction to Design	3	ART-25000	Illustration I	3
ART-10600	Fundamentals of Drawing I	3	ART-27545	DS-Computer Generated Images I	3
ART-11500	Photography I	3	ART-27546	DS-Computer Generated Images II	3
ART-19000	Digital Communications I	3	ART-28000	Portfolio	3
ART-20600	Drawing II	3	ART-	Studio Art elective	3
			CIS-21900	MacIntosh O.S. X	1

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below and on the following page indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• ENG-10000 – Writing Lab (1) (if required)
		• COM-10000 – Written & Oral Communication (3)
		• ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)

(continued)

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Math/Natural	8-9	• MTH-10100 – Finite Math or higher (4) • One science with a lab selected from the following list. Students selecting those courses listed with **AND** must take both the lecture and the lab. Those courses listed without an **AND** have the lab and lecture combined into one course. BIO-10100 – General Biology (4) BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1) BIO-11500 – Anatomy & Physiology I (4) BIO-12000 – Life Science I (4) BIO-20100 – Zoology (4) BIO-20200 – Botany (4) BIO-21300 – Nature Study (4) BIO-21500 – Pathophysiology (4) CHE-10003 – Chemical Science (3) **AND** CHE-10004 – Lab (1) CHE-10101 – General Chemistry I (4) **AND** CHE-10102 – Lab (1) CHE-10201 – General Chemistry II (4) **AND** CHE-10202 – Lab (1) CHE-20101 – Organic Chemistry I (4) **AND** CHE-20102 – Lab (1) CHE-20201 – Organic Chemistry II (4) **AND** CHE-20202 – Lab (1) GEL-10500 – Physical Geology (4) PHY-10501 – Physical Science (3) **AND** PHY-10502 Lab (1) PHY-20101 – General Physics I (4) **AND** PHY-20102 – Lab (1) PHY-20201 – General Physics II (4) **AND** PHY-20202 – Lab (1) PHY-22101 – College Physics I (4) **AND** PHY-22102 – Lab (1) PHY-22201 – College Physics II (4) **AND** PHY-22202 – Lab (1)

Associate in Applied Science
- Automotive Technology

Certificate
- Automotive Technology Master Certification

Special Certificates
- Automotive Chassis Specialist
- Automotive Electrical Systems Specialist
- Automotive General
- Automotive Powertrain Specialist

For more information, please contact Automotive.	
Robert Shingledecker	989-275-5000, extension 241
Richard Bonk	989-275-5000, extension 329

AUTOMOTIVE TECHNOLOGY
Associate in Applied Science (DAUT0)   **Minimum Credits: 71**
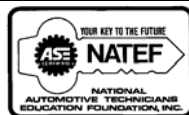
Introduction
Kirtland's program in Automotive Technology is designed to provide instruction in manipulative skills, technical knowledge and related trade information. Students are given the opportunity to prepare for employment in the automotive industry as certified technicians, service salesmen, or service managers.

This program is certified by the National Automotive Technicians Education Foundation (NATEF), and graduates of this program will be prepared for the Michigan Bureau of Automotive Regulation Technician Certification and the National Institute for Automotive Service Excellence (ASE) Technician Certification. Graduates will demonstrate competence in all eight of the following areas: 1) engine repair, 2) automatic transmission and transaxle, 3) manual drivetrain, 4) suspension and steering, 5) brakes, 6) electrical/electronic systems, 7) heating and air conditioning, and 8) engine performance. It is recommended that students make an appointment for an interview with an automotive advisor prior to entering the program.

Kirtland Community College has had an ongoing 2 + 2 transfer agreement with Ferris State University for students who want to pursue a bachelor's degree. Both Kirtland and Ferris are currently revising curricula. The expectation is that the agreement will remain in place. Any Automotive Technology major who plans to acquire a bachelor's degree after completion of the associate degree should contact his/her advisor during the first semester at Kirtland Community College.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*   ☐   ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐   English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section on the next page. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
AUT-16100	Engine Fundamentals & Overhaul	4	AUT-17702	Automotive Braking Systems	5
AUT-16201	Fuel Systems & Emission Control	4	AUT-17901	Manual Transmission/ Drivelines/ Axles	4
AUT-16302	Automotive Fundamentals	4	AUT-20402	Intro to Auto Service Management	2
AUT-16401	Basic Electricity	3	AUT-20403	Advanced Auto Service Management	1
AUT-16500	Steering, Suspension & Alignment	4	AUT-21800	Automatic Transmissions	4
AUT-16801	Automotive Electrical Systems	4	AUT-23104	Automotive Internship	8
AUT-17001	Heating & Air Conditioning	3	AUT-26601	Engine Performance & Diagnostics	4

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 - Individual & Society (3) **OR** POL-10500 – American Government with Humanities (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1)

AUTOMOTIVE TECHNOLOGY MASTER CERTIFICATION

Certificate of Completion (CAUT1)   **Minimum Credits: 53**
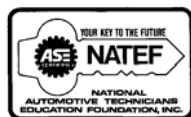
Introduction

Kirtland's Automotive Technology Master Certification program is designed to provide instruction in manipulative skills and technical knowledge required for employment as an automotive technician. This program is certified by the National Automotive Technicians Education Foundation (NATEF), and graduates will be prepared to take the Michigan State Certification and National Institute for Automotive Service Excellence (ASE) test. Graduates will demonstrate competence in all eight of the following areas: 1) engine repair, 2) automatic transmission and transaxle, 3) manual drivetrain, 4) suspension and steering,
5) brakes, 6) electrical/electronic systems, 7) heating and air conditioning, and 8) engine performance. Students wanting to continue in this program may pursue the Associate in Applied Science – Automotive Technology.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
AUT-16100	Engine Fundamentals & Overhaul	4	AUT-17702	Automotive Braking Systems	5
AUT-16201	Fuel Systems & Emission Control	4	AUT-17901	Manual Transmission/Drivelines/Axles	4
AUT-16302	Automotive Fundamentals	4	AUT-20402	Intro to Auto Service Management	2
AUT-16401	Basic Electricity	3	AUT-21800	Automatic Transmissions	4
AUT-16500	Steering, Suspension & Alignment	4	AUT-23104	Automotive Internship	8
AUT-16801	Automotive Electrical Systems	4	AUT-26601	Engine Performance & Diagnostics	4
AUT-17001	Heating & Air Conditioning	3			

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

AUTOMOTIVE CHASSIS SPECIALIST
Special Certificate (SAUT0)   **Minimum Credits: 23**
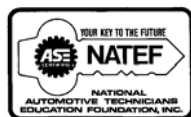
Introduction

Kirtland's Automotive Chassis Specialist certificate program is designed to provide the student with the necessary skills to gain employment in the automotive industry. This program is certified by the National Automotive Technicians Education Foundation (NATEF). Successful completion of this program will qualify the student for the Michigan State Certification and National Institute for Automotive Service Excellence (ASE) testing and certification. Students will demonstrate competence in suspension, steering, and brakes. Students wanting to continue in this program may pursue the Certificate – Automotive Technology Master Certification or the Associate in Applied Science – Automotive Technology.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
AUT-16100	Engine Fundamentals & Overhaul	4	AUT-17702	Automotive Braking Systems	5
AUT-16302	Automotive Fundamentals	4	AUT-20402	Intro to Auto Service Management	2
AUT-16500	Steering, Suspension & Alignment	4	AUT-23101	Auto Service Area – Chassis	4

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a special certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the certificate or associate degree level.

AUTOMOTIVE ELECTRICAL SYSTEMS SPECIALIST
Special Certificate (SAUT1)   **Minimum Credits: 25**
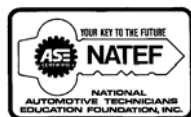
Introduction

Kirtland's Automotive Electrical Systems Specialist certificate is designed to provide the student with the necessary skills and knowledge to gain employment in the automotive electrical field. This program is certified by the National Automotive Technicians Education Foundation (NATEF). Successful completion of this program will qualify the student for the Michigan State and National Institute for Automotive Service Excellence (ASE) testing and certification in the following: 1) electricity/electronics, and 2) engine performance. Students wanting to continue in this program may pursue the Certificate – Automotive Technology Master Certification or the Associate in Applied Science – Automotive Technology.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

| Course	Title	Cr	Course	Title	Cr
AUT-16201	Fuel Systems & Emission Controls	4	AUT-20402	Intro to Auto Service Management	2
AUT-16302	Automotive Fundamentals	4	AUT-23103	Auto Service Area – Electrical	4
AUT-16401	Basic Electricity	3	AUT-26601	Engine Performance & Diagnostics	4
AUT-16801	Automotive Electrical Systems	4			

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a special certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the certificate or associate degree level.

AUTOMOTIVE GENERAL
Special Certificate (SAUT2)   **Minimum Credits: 18**
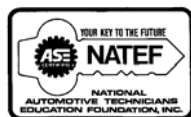
Introduction
Kirtland's Automotive General certificate is designed to introduce the student to automotive technology. The student will have the flexibility to choose a specialty area and, upon completion, be qualified to take certification tests in two areas of repair. Areas of instruction will include automotive fundamentals and two automotive electives, as well as a section of the service area course. This program is certified by the National Automotive Technicians Education Foundation (NATEF). Students wanting to continue in this program may pursue the Certificate – Automotive Technology Master Certification or the Associate in Applied Science – Automotive Technology.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr		Course	Title	Cr
AUT-16302	Automotive Fundamentals	4		AUT-	At least six credits from below	
AUT-23104	Automotive Internship	8				

and six or more credit hours from the following list:

| Course	Title	Cr	Course	Title	Cr
AUT-16100	Engine Fundamentals & Overhaul	4	AUT-17001	Heating & Air Conditioning	3
AUT-16201	Fuel Systems & Emission Control	4	AUT-17702	Automotive Braking Systems	5
AUT-16401	Basic Electricity	3	AUT-17901	Manual Transmission/Drivelines/Axles	4
AUT-16500	Steering, Suspension & Alignment	4	AUT-21800	Automatic Transmissions	4
AUT-16801	Automotive Electrical Systems	4			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a special certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the certificate or associate degree level.

AUTOMOTIVE POWERTRAIN SPECIALIST
Special Certificate (SAUT3)   **Minimum Credits: 23**
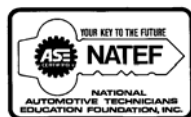
Introduction
Kirtland's Automotive Powertrain Specialist certificate is designed to provide the student with the necessary skills to gain entry-level employment in the automotive industry. This program is certified by the National Automotive Technicians Education Foundation (NATEF). Successful completion of this program will qualify the student for the Michigan State and National Institute for Automotive Service Excellence (ASE) testing and certification in the following: 1) brakes, and 2) manual drivetrain and axles. Students wanting to continue in this program may pursue the Certificate – Automotive Technology Master Certification or the Associate in Applied Science – Automotive Technology.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

| Course	Title	Cr	Course	Title	Cr
AUT-16100	Engine Fundamentals & Overhaul	4	AUT-17901	Manual Transmission/ Drivelines/Axles	4
AUT-16302	Automotive Fundamentals	4	AUT-20402	Intro to Auto Service Management	2
AUT-17702	Automotive Braking Systems	5	AUT-23102	Auto Service Area - Powertrain	4

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a special certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the certificate or associate degree level.

Certificates
- Entrepreneurship
- General Business

Associate in Applied Science
- Business Management

Associate
- Business Administration

PARTNERSHIP PROGRAMS

Bachelor of Business Administration
- Management – Northwood University

Bachelor of Science
- Applied Management – Franklin University
- Business Administration – Central Michigan University
- Business Administration – Franklin University
- Business Administration – Management – Lake Superior State University
- Business Administration – Marketing – Lake Superior State University

For more information, please contact Business.

Judith Grenkowicz   989-275-5000, extension 219

ENTREPRENEURSHIP

Certificate of Completion (CENT0)   **Minimum Credits: 33**

Introduction
Kirtland's program in Entrepreneurship offers the student a broad exposure to the business world through a selected set of courses, which may be completed in one year. This program is ideal for the small business owner, manager, or those opting to get into small business for the first time. It also works well for those who have technical degrees and want to incorporate knowledge of business with their technical expertise. Students may also elect to pursue the Associate in Applied Science – Business Management at any point in this program.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

| Course	Title	Cr	Course	Title	Cr
ACC-12100	Accounting Principles I[1]	4	BUS-21500	Legal Environment of Business	3
ACC-12200	Accounting Principles II	4	BUS-24500	Personnel Management	3
ACC-12500	Computer Accounting/QuickBooks	4	BUS-250--	Business Seminar	3
BUS-10100	Introduction to Business	3	MKT-20000	Principles of Marketing	3
BUS-21000	Principles of Management	3	OIS-10500	Business Correspondence	3

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

_____
Note
[1] Students should have basic algebra skills before enrolling in accounting courses.

GENERAL BUSINESS

Certificate of Completion (CBUS0)   **Minimum Credits: 31**

Introduction

Kirtland's program in General Business is designed to provide an overall background of training that is necessary for entry and success in the business world. The program is intended to lay a foundation for a great variety of entry-level positions that may ultimately lead to mid-management positions in business or industry. Students are given the opportunity to enhance decision-making, problem-solving and creative abilities. Emphasis is placed on management and business communications. Students may also elect to pursue the Associate in Applied Science – Business Management at any point in this program.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ACC-10600	Fundamentals/Accounting **OR**		OIS-10401/2/3	Keyboarding I-A/B/C[2] **OR**	
ACC-10601	Fund/Accounting/Computers **OR**		OIS-11401/2/3	Keyboarding II-A/B/C **OR**	
ACC-12100	Accounting Principles I[1]	4	--- ---	Business Elective	3
BUS-10100	Introduction to Business	3	OIS-10500	Business Correspondence	3
CIS-10500	Introduction to Computers **OR**		--- ---	Six credits from below	
CIS-17001	Microsoft Office	3			

and six credit hours from the following list:

|					
ACC-12500	Computer Accounting/QuickBooks	4	MKT-20000	Principles of Marketing	3
BUS-201--	Internship in Business & Marketing	3-9	MKT-20100	Principles of Retailing	3
BUS-20200	Grant Writing	3	MKT-20200	Internet Marketing	3
BUS-21500	Legal Environment of Business	3	MKT-20400	Advertising	3
BUS-24500	Personnel Management	3	OIS-18201/2/3	Word Processing I-Word-A/B/C	3
BUS-250--	Business Seminar	1-6	OIS-21500	Desktop Publishing for the Office	3
CIS-17001	Microsoft Office	3			

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3) • ENG-10400/ENG-10403 – English Composition II (3)
Math/Natural Science	3-4	• MTH-12000 – Intermediate Algebra (4) **OR** OIS-11201 – Business Calculations (3)

_____

Notes

[1] Students should have basic algebra skills before enrolling in accounting courses.

[2] Students who have completed one year of high school typing may substitute OIS-11401/2/3 Keyboarding II-A/B/C or a Business elective.

BUSINESS MANAGEMENT
Associate in Applied Science (DBSM0)   **Minimum Credits: 62**

Introduction

Kirtland's program in Business Management is designed to provide an overall background of training that is necessary for entry and success in the business world. The program is intended to lay a foundation for a great variety of entry-level positions that may ultimately lead to mid-management positions in business or industry. Students are given the opportunity to enhance decision-making, problem-solving, and creative abilities. Emphasis is placed on management, marketing, and business communications. Any Business Management major who plans to eventually acquire a bachelor's degree after completion of the associate degree is encouraged to follow the Associate in Business Administration degree.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ACC-12100	Accounting Principles I[1]	4	ECO-20200	Principles of Economics-MICRO	3
ACC-12200	Accounting Principles II	4	MKT-20000	Principles of Marketing	3
BUS-10100	Introduction to Business	3	OIS-10401/2/3	Keyboarding I-A/B/C **OR**	
BUS-21000	Principles of Management	3	BUS-	Business elective	3
BUS-21500	Legal Environment of Business	3	OIS-10500	Business Correspondence	3
BUS-24500	Personnel Management	3	--- ---	Three or more credits from below	
ECO-20100	Principles of Economics-MACRO	3			

and three or more credit hours from the following list:					
ACC-12500	Computer Accounting/QuickBooks	4	CIS-	CIS elective with advisor approval	3
ART-27545	DS-Computer Generated Images I	3	MKT-11000	Principles of Selling	3
BUS-201--	Internship in Business & Marketing	3-9	MKT-20100	Principles of Retailing	3
BUS-20200	Grant Writing	3	MKT-20200	Internet Marketing	3
BUS-250--	Business Seminar	1-6	OIS-18201/2/3	Word Processing I-Word-A, B, & C	3

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)

(continued)

_____

Note

[1] Students with little or no accounting background will be required to take ACC-10600 or ACC-10601 before taking ACC-12100.

BUSINESS MANAGEMENT
Associate in Applied Science (DBSM0)   (continuation)

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Humanities/Social Science	6	• POL-10500 – American Government with Humanities (3) • PSY-10100 – Introduction to Psychology (3)
Life Skills	4	• CAR-10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3) **OR** CIS Elective
Math/Natural Science	8	• MTH-10100 – Finite Math (4) **OR** MTH-12000 (4) – Intermediate Algebra • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1)

APPLIED MANAGEMENT
Bachelor of Science

Franklin University	**Kirtland Community College**
Bob Morris	Judith Grenkowicz
1-888-341-6237 or 614-651-4471	989-275-5000, extension 219
morrisb@franklin.edu	grenkowj@kirtland.edu

The Applied Management Degree is a collaborative program offered by an agreement between Kirtland Community College and Franklin University. The program is designed to prepare graduates to pursue careers in management, business, industry, government, and non-profit organizations. In addition to classroom instruction, the student will also have an option to receive on-the-job practical education through college-provided internships.

To enter the Kirtland Community College/Franklin University program, students must meet one of the following admissions criteria:

- Have earned an Associate in Business Administration or an Associate in Applied Science - Business Management
- Have earned any other Associate in Arts, Associate in Science, or Associate in Applied Science degree
- Have completed 60 semester/90 quarter credit hours and earned a 2.5 GPA

The final year of courses are taken online through Franklin University. Students need to work with a Franklin advisor to determine exactly what courses will be taken online.

The collaborative program has many benefits for students at Kirtland including the following:

- Students never have to leave home or northern Michigan because Franklin courses can be taken online. Many of the required Kirtland courses are also offered online. This is a great program for those that may find it difficult to travel.
- Advisors at both schools are well trained to assist students in planning their program.

Students should contact those listed at the top of the page for specific program information.

BUSINESS ADMINISTRATION
Bachelor of Science

Central Michigan University	**Kirtland Community College**
David Karmon, 989-774-6506	Judith Grenkowicz, 275-5000, extension 219
E-Mail: David.Karmon@cmich.edu	E-Mail: grenkowj@kirtland.edu

This degree is a collaborative program offered by an agreement between Kirtland Community College and Central Michigan University. The program is designed to prepare graduates to pursue careers in management, business, industry, government, and non-profit organizations. In addition to classroom instruction, the student will also have an option to receive on-the-job practical education through college-provided internships.

Kirtland students will first earn an Associate in Business Administration degree at Kirtland. They may then complete their last two years with Central Michigan University in an online program that will enable them to obtain their Bachelor of Science in Business Administration.

The collaborative program has many benefits for students at Kirtland including the following:

- Kirtland students never have to leave the area and can obtain a Bachelor of Science in Business Administration from a well-known university.
- Advisors at both schools are well trained to assist students in planning their program.
- Central Michigan University is only a one-hour ride from Kirtland.

Students should contact those listed at the top of the page for specific program information.

BUSINESS ADMINISTRATION
Bachelor of Science

PARTNERSHIP PROGRAM

Franklin University	**Kirtland Community College**
Bob Morris	Judith Grenkowicz
1-888-341-6237 or 614-651-4471	989-275-5000, extension 219
morrisb@franklin.edu	grenkowj@kirtland.edu

The Business Administration degree is a collaborative program offered by an agreement between Kirtland Community College and Franklin University. The program is designed to prepare graduates to pursue careers in management, business, industry, government, and non-profit organizations. In addition to classroom instruction, the student will also have an option to receive on-the-job practical education through college-provided internships.

To enter the Kirtland Community College/Franklin University program, students must meet one of the following admissions criteria:

- Have earned an Associate in Business Administration or an Associate in Applied Science - Business Management
- Have earned any other Associate in Arts, Associate in Science, or Associate in Applied Science degree
- Have completed 60 semester/90 quarter credit hours and earned a 2.5 GPA

The final year of courses are taken online through Franklin University. Students need to work with a Franklin advisor to determine exactly what courses will be taken online.

The collaborative program has many benefits for students at Kirtland including the following:

- Students never have to leave home or northern Michigan because Franklin courses can be taken online. Many of the required Kirtland courses are also offered online. This is a great program for those that may find it difficult to travel.
- Advisors at both schools are well trained to assist students in planning their program.

Students should contact those listed at the top of the page for specific program information.

BUSINESS ADMINISTRATION - MANAGEMENT
Bachelor of Science

PARTNERSHIP PROGRAM

Lake Superior State University	**Kirtland Community College**
John Erkkila, 888-800-5778, extension 2108	Judith Grenkowicz, 275-5000, extension 219
E-Mail: jerkkila@gw.lssu.edu	E-Mail: grenkowj@kirtland.edu

The Business Administration Degree with an emphasis on Management is a collaborative program offered by an agreement between Kirtland Community College and Lake Superior State University. The program is designed to prepare graduates to pursue careers in management, business, industry, government, and non-profit organizations.   In addition to classroom instruction, the student will also have an option to receive on-the-job practical education through college-provided internships.

The collaborative program has many benefits for students at Kirtland including the following:

- Most of the general education, business basics, and prerequisite courses can be taken at Kirtland.
- Advisors at both schools are well trained to assist students in planning their program.
- Lake Superior State University is only a two and one-half-hour ride from Kirtland

Students should contact those listed at the top of the page for specific program information.

BUSINESS ADMINISTRATION - MARKETING
Bachelor of Science

PARTNERSHIP PROGRAM

Lake Superior State University	Kirtland Community College
John Erkkila, 888-800-5778, extension 2108	Judith Grenkowicz, 275-5000, extension 219
E-Mail: jerkkila@gw.lssu.edu	E-Mail: grenkowj@kirtland.edu

The Business Administration degree with an emphasis on Marketing is a collaborative program offered by an agreement between Kirtland Community College and Lake Superior State University. The program is designed to prepare graduates to pursue careers in management, business, industry, government, and non-profit organizations.   In addition to classroom instruction, the student will also have an option to receive on-the-job practical education through college-provided internships.

The collaborative program has many benefits for students at Kirtland including the following:

- Most of the general education, business basics, and prerequisite courses can be taken at Kirtland.
- Advisors at both schools are well trained to assist students in planning their program.
- Lake Superior State University is only a two and one-half-hour ride from Kirtland

Students should contact those listed at the top of the page for specific program information.

MANAGEMENT
Bachelor of Business Administration

PARTNERSHIP PROGRAM

Northwood University	Kirtland Community College
Rachel Rodriquez, 989-671-9405	Judith Grenkowicz, 275-5000, extension 219
E-Mail: rachel@northwood.edu	E-Mail: grenkowj@kirtland.edu

The Business Administration degree with an emphasis on Management is a collaborative program offered by an agreement between Kirtland Community College and Northwood University. The program is designed to prepare graduates to pursue careers in management, business, industry, government, and non-profit organizations.   In addition to classroom instruction, the student will also have an option to receive on-the-job practical education through college-provided internships.

Kirtland students may earn any associate degree at Kirtland, as long as the associate degree includes English Composition, history or sociology, science, and speech. There is an additional third year of courses that can be taken at Kirtland. If students get a business degree and have already taken some of these third-year courses, they will then work with a Northwood or Kirtland advisor and take other Kirtland courses for their third year. A minimum of 90 semester hours must be completed at Kirtland prior to transferring to Northwood to take full advantage of this agreement.

The collaborative program has many benefits for students at Kirtland including the following:

- Most of the general education, business basics, and prerequisite courses can be taken at Kirtland.
- Advisors at both schools are well trained to assist students in planning their program.
- Northwood is only a one and one-half-hour ride from Kirtland.

Students should contact those listed at the top of the page for specific program information.

Certificates
- Cosmetology
- Cosmetology Instructor
- Nail Technician
- Skin Care Technician

Associate in Applied Science
- Salon Management – Cosmetology
- Salon Management – Cosmetology Instructor
- Salon Management – Nail Technician
- Salon Management – Skin Care Technician

For more information, please contact Cosmetology.

Mary Scott-Rom   989-275-5000, extension 274

COSMETOLOGY
Certificate of Completion (CCOS1)   **Minimum Credits: 40**

Introduction
Kirtland's certificate program in cosmetology is designed to provide specialized instruction and practical application for employment in beauty salons. This program prepares students to successfully pass the Michigan State Board Exam, which is required by law to practice cosmetology in Michigan. Students must earn a minimum of 40 credit hours to qualify for graduation. Job placement in this program is excellent. The courses are taught in modern facilities utilizing cutting-edge equipment. Students wanting to continue in this program may pursue an Associate in Applied Science – Salon Management degree after they obtain a license. **We welcome high school students into cosmetology programs.**

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
COS-12100	Cosmetology I	2.5	COS-12900	Cosmetology IX	2.5
COS-12200	Cosmetology II	2.5	COS-13000	Cosmetology X	2.5
COS-12300	Cosmetology III	2.5	COS-13100	Cosmetology XI	2.5
COS-12400	Cosmetology IV	2.5	COS-13200	Cosmetology XII	2.5
COS-12500	Cosmetology V	2.5	COS-13300	Cosmetology XIII	2.5
COS-12600	Cosmetology VI	2.5	COS-13400	Cosmetology XIV	2.5
COS-12700	Cosmetology VII	2.5	COS-13500	Cosmetology XV	2.5
COS-12800	Cosmetology VIII	2.5	COS-13600	Cosmetology XVI	2.5

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

SALON MANAGEMENT - COSMETOLOGY

Associate in Applied Science (DSMN0)   **Minimum Credits: 69**

Introduction

Kirtland's associate degree program in Salon Management - Cosmetology is designed to provide specialized instruction in practical application, communication skills, and general knowledge for employment as a licensed cosmetologist. This program prepares students to successfully pass the Michigan State Board of Cosmetology Exam. The student must earn a minimum of 69 credit hours to qualify for graduation. Job placement in this program is excellent. Students must submit a copy of a current cosmetology license prior to completing this program. Students also have the opportunity to continue their education by enrolling in the Cosmetology Instructor program after obtaining a license. **We welcome high school students into cosmetology programs.**

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr
ACC-12500	Computer Accounting/QuickBooks	4
BUS-10100	Introduction to Business	3
COS-17500	Salon Management	1

Course	Title	Cr
Kirtland Certificate – Cosmetology **OR** Current Michigan Cosmetology License		40
--- ---	Elective with advisor approval	0-3

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• POL-10500 – American Government with Humanities (3) **OR** HUM-20500 – The Individual & Society (3)
Life Skills	4	• CAR-10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher (excluding MTH-20500 or MTH-20600) • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1)

COSMETOLOGY INSTRUCTOR
Certificate of Completion (CCIN1)   **Minimum Credits: 55**

Introduction
Kirtland's Cosmetology Instructor program is designed to provide instruction and practice to become a cosmetology instructor. The student must be a licensed cosmetology prior to entering the program. This program prepares students to pass the State of Michigan State Exam for Cosmetology Instructors. The student must have a high school diploma or GED certificate in order to take this exam. Students must earn a minimum of 55 credit hours to qualify for graduation. Students wanting to continue in this program may pursue an Associate in Applied Science – Salon Management degree after they obtain a license. **We welcome high school students into cosmetology programs.**

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
COS-22100	Cosmetology Instructor I	2.5	COS-22500	Cosmetology Instructor V	2.5
COS-22200	Cosmetology Instructor II	2.5	COS-22600	Cosmetology Instructor VI	2.5
COS-22300	Cosmetology Instructor III	2.5	Kirtland Certificate – Cosmetology **OR**		
COS-22400	Cosmetology Instructor IV	2.5	Current State of Michigan Cosmetology License		40

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

SALON MANAGEMENT – COSMETOLOGY INSTRUCTOR
Associate in Applied Science (DSMN2)   **Minimum Credits: 84**

Introduction
Kirtland's associate degree program in Salon Management - Cosmetology Instructor is designed to provide specialized instruction in practical application, communication skills, and general knowledge for employment as a cosmetology instructor. This program prepares students to successfully pass the State of Michigan Exam for Cosmetology Instructors. The student must earn a minimum of 84 credit hours to qualify for graduation. Job placement in this program is excellent. Students must also submit a copy of a current cosmetology instructor license prior to completing this program. State of Michigan licensure exam may be taken after 500 contact hours. **We welcome high school students into cosmetology programs.**

Prerequisite
Students must submit a copy of a current cosmetology license prior to beginning the courses.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐   ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐   English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr
ACC-12500	Computer Accounting/QuickBooks	4
BUS-10100	Introduction to Business	3
COS-17500	Salon Management	1

Course	Title	Cr
Kirtland Certificate – Cosmetology Instructor **OR** Current Michigan Cosmetology Instructor License		55
--- ---	Elective with advisor approval	0-3

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• POL-10500 – American Government with Humanities (3) **OR** HUM-20500 – The Individual & Society (3)
Life Skills	4	• CAR-10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher (excluding MTH-20500 or MTH-20600) • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1)

NAIL TECHNICIAN
Certificate of Completion (CNTC0)   **Minimum Credits: 34**

Introduction
Nail Technician is a 34-credit-program designed to prepare the student to pass the Michigan State Board Exam and for employable skills as a nail technician. Students wanting to continue in this program may pursue an Associate in Applied Science – Salon Management degree after they obtain a license. State of Michigan licensure exam may be taken after 400 contact hours. **We welcome high school students into cosmetology programs.**

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ACC-12500	Computer Accounting/QuickBooks	4	COS-11600	Manicuring V	2.5
COS-11200	Manicuring I	2.5	COS-11700	Manicuring VI	2.5
COS-11300	Manicuring II	2.5	COS-17500	Salon Management	1
COS-11400	Manicuring III	2.5	OIS-10500	Business Correspondence	3
COS-11500	Manicuring IV	2.5			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/10303 – English Composition I (3)
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	4	• MTH-10100 – Finite Math (4) or higher (excluding MTH-20500 or MTH-20600)

SALON MANAGEMENT – NAIL TECHNICIAN

Associate in Applied Science (DSMN1)   **Minimum Credits: 60**

Introduction

Kirtland's associate degree program in Salon Management - Nail Technician is designed to provide specialized instruction in practical application, communication skills, and general knowledge for employment as a licensed nail technician.   This program prepares students to successfully pass the Michigan State Board Exam. The student must earn a minimum of 60 credit hours to qualify for graduation. Job placement in this program is excellent. Students must submit a copy of a current nail technician license prior to completing this program. Students also have the opportunity to continue their education by enrolling in the Cosmetology Instructor program after obtaining a license. **We welcome high school students into cosmetology programs.**

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐   ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐   English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr
ACC-12500	Computer Accounting/QuickBooks	4
BUS-10100	Introduction to Business	3
COS-17500	Salon Management	1
OIS-10500	Business Correspondence	3

Course	Title	Cr
Kirtland Certificate – Nail Technician **OR**		
Current Michigan Nail Technician License		34
--- ---	13 credit hours from below	13

and 13 credit hours from the following list:

ALH-12401	Lifetime Wellness & Nutrition	2	MKT-20400	Advertising	3
ART-10600	Fundamentals of Drawing I	3	PSY-10100	Introduction to Psychology	3
ART-10800	Ceramics I	3	SPE-10500	Fundamentals of Speech	3
MKT-11000	Principles of Selling	3	THE-21000	Theatre Makeup	3
MKT-20100	Principles of Retailing	3			

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I
Humanities/Social Science	3	• POL-10500 – American Government with Humanities (3) **OR** HUM-20500 – The Individual & Society (3)
Life Skills	4	• CAR-10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher (excluding MTH-20500 or MTH-20600) • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1)

SKIN CARE TECHNICIAN

Certificate of Completion (CSCT0)   **Minimum Credits: 34**

Introduction

Kirtland's certificate program in Skin Care (Esthetician) is designed to provide specialized instruction and practical application for employment. This program prepares students to successfully pass the Michigan State Board of Esthetician Exam, which is required to practice skin care in Michigan. State of Michigan licensure exam may be taken after 400 contact hours of skin care (esthetician) courses. The student must earn a minimum of 34 credit hours to qualify for graduation. Job placement in this program is excellent. Students wanting to continue in this program may pursue an Associate in Applied Science – Salon Management degree after they obtain a license. **We welcome high school students into cosmetology programs.**

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ACC-12500	Computer Accounting/QuickBooks	4	COS-14500	Skin Care V	2.5
COS-14100	Skin Care I	2.5	COS-14600	Skin Care VI	2.5
COS-14200	Skin Care II	2.5	COS-17500	Salon Management	1
COS-14300	Skin Care III	2.5	OIS-10500	Business Correspondence	3
COS-14400	Skin Care IV	2.5			

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3)
		• ENG-10000 – Writing Lab (1) (if required)
		• ENG-10300/ENG-10303 – English Composition I
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	4	• MTH-10100 – Finite Math (4) or higher (excluding MTH-20500 or MTH-20600)

SALON MANAGEMENT – SKIN CARE TECHNICIAN

Associate in Applied Science (DSMN3)   **Minimum Credits: 61**

Introduction

Kirtland's associate degree program in Salon Management – Skin Care (Esthetician) is designed to provide specialized instruction and practical application for employment. This program prepares students to successfully pass the Michigan State Board of Esthetician Exam. The student must earn a minimum of 61 credit hours (832 clock hours) to qualify for graduation. Job placement in this program is excellent. Students must submit a copy of a current skin care license prior to completing this program. **We welcome high school students into cosmetology programs.**

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr
ACC-12500	Computer Accounting/QuickBooks	4
COS-17500	Salon Management	1
OIS-10500	Business Correspondence	3

Course	Title	Cr
Kirtland Certificate – Skin Care Technician **OR**		
Current Michigan Skin Care Technician License		15
--- ---	17 credit hours from below	17

and 17 credit hours from the following list:

ALH-12401	Lifetime Wellness & Nutrition	2	MKT-20400	Advertising	3
ART-10600	Fundamentals of Drawing I	3	PSY-10100	Introduction to Psychology	3
ART-10800	Ceramics I	3	SPE-10500	Fundamentals of Speech	3
MKT-11000	Principles of Selling	3	THE-21000	Theatre Makeup	3
MKT-20100	Principles of Retailing	3			

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I
Humanities/Social Science	3	• POL-10500 – American Government with Humanities (3) **OR** HUM-20500 – The Individual & Society (3)
Life Skills	4	• CAR-10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher (excluding MTH-20500 or MTH-20600) • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1)

Certificates

- Correctional Officer

Associate in Applied Science

- Corrections Administration
- Corrections Administration – Jail Administration
- Criminal Justice Administration
- Criminal Justice Pre-Service

Associate

- Criminal Justice – Generalist

PARTNERSHIP PROGRAMS

- Police Academy – Alpena Community College, Mid Michigan Community College, North Central Michigan College

For more information, please contact Criminal Justice.	
Shawn Kaniewski	989-275-5000, extension 283
Jerry Boerema	989-275-5000, extension 323

CRIMINAL JUSTICE

CORRECTIONAL OFFICER

Certificate of Completion (CCRR1)   **Minimum Credits: 32**

Introduction
The Correctional Officer certificate prepares graduates for jobs in a prison system as a corrections officer. This one- year certificate of completion incorporates the 15 semester hours of corrections, criminal justice, psychology, sociology, and human relations credits required by the Michigan Department of Corrections. All candidates must maintain a 2.0 cumulative GPA or better, with a C or better in all criminal justice courses. A mandatory dress code is in effect for all students enrolled in the corrections curriculum. Students have the opportunity to plan for transfer to a four-year college or university, and credits may be used toward a corrections administration degree.

Prerequisites
Applicants admitted to this program must meet the following special entrance requirements: 1) have no felony convictions; 2) have a high school diploma or GED; 3) interview by appointment with a criminal justice advisor before entering the program; 4) provide personal background information and sign a release form to facilitate possible background investigation (information and/or investigation may determine eligibility to enter the program); 5) sign and abide by the Criminal Justice Code of Conduct, which includes mandatory dress code; 6) submit proof of a physical examination, if required.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

   ☐ ENG-10000 Writing Lab (if required) ☐ Mathematics:_____
   ☐ English:_____ ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CJS-10000	Introduction to Criminal Justice	3	CJS-17000	Correctional Institutions & Facilities	3
CJS-10900	Introduction to Corrections	3	CJS-17103	Correctional Officer's Report Writing	1
CJS-11000	Careers in Criminal Justice	1	CJS-17200	Client Relations in Corrections	3
CJS-11100	Legal Issues in Corrections	3	CJS-24000	Criminology	3
CJS-11200	Client Growth & Development	3	CJS-	CJS elective with advisor approval	3

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	3	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Life Skills		• CIS-10500 – Introduction to Computers (3)

CORRECTIONS ADMINISTRATION

Associate in Applied Science (DCRA0) **Minimum Credits: 64**

Introduction

The Corrections Administration program is concerned with all segments of the criminal justice system. The major emphasis is placed on corrections history, development, sentencing, incarceration, community-based programs, diversion, probation, parole, prisoner's rights, offender violence, supervision, and corrections of the future. Graduates are prepared for jobs within a prison system. All candidates must maintain a 2.0 cumulative GPA or better, with a grade of C or better in all criminal justice courses. A mandatory dress code is in effect for all students enrolled in the corrections curriculum. Students have the opportunity to plan for transfer to a four-year college or university.

Prerequisites

Applicants admitted to this program must meet the following special entrance requirements: 1) have no felony convictions; 2) have a high school diploma or GED; 3) interview by appointment with a criminal justice advisor before entering the program; 4) provide personal background information and sign a release form to facilitate possible background investigation (information and/or investigation may determine eligibility to enter the program); 5) sign and abide by the Criminal Justice Code of Conduct, which includes mandatory dress code; 6) submit proof of a physical examination, if required.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CJS-10000	Introduction to Criminal Justice	3	CJS-17200	Client Relations in Corrections	3
CJS-10900	Introduction to Corrections	3	CJS-20800	Criminal Justice Internship[1]	3
CJS-11000	Careers in Criminal Justice	1	CJS-21100	Narcotics Investigation	3
CJS-11100	Legal Issues in Corrections	3	CJS-24000	Criminology	3
CJS-11200	Client Growth & Development	3	CJS-27000	Community Based Corrections	3
CJS-17000	Correctional Institutions & Facilities	3	CJS-	One elective from below	3
CJS-17103	Correctional Officer's Report Writing	1			

and three credit hours from the following list:

CJS-10200	Physical Training I	3	CJS-24500	Social Deviant Behavior	3
CJS-10800	Firearms	3	CJS-28001	Institutional Jail/Prison Administration	3
CJS-12100	Photography for Police/Firefighters	3			

(continued)

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Note

[1] Students may take up to nine credits in Criminal Justice Internship.

CORRECTIONS ADMINISTRATION
Associate in Applied Science (DCRA0)   (continuation)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-10	• COM-10000 – Written & Oral Communication (3) **OR** ENG-10400/ENG-10403 – English Composition II (3) **AND** SPE-10500 – Speech (3) **OR** ENG-10400/ENG-10403 (3) **AND** SPE-11400 – Interpersonal Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	12	• POL-10100 – American Government (3) • PSY-10100 – Introduction to Psychology (3) • SOC-10100 - Introduction to Sociology (3) • Humanities **OR** Social Science elective (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3) **OR** OIS-10401/2/3 – Keyboarding I A, B, & C (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher • Science Elective (3) **AND** Lab (1)

CORRECTIONS ADMINISTRATION – JAIL ADMINISTRATION
Associate in Applied Science (DCRA1)   **Minimum Credits: 64**

Introduction
The Corrections Administration - Jail Administration program is concerned with all segments of the criminal justice system. The major emphasis is placed on a 160-hour Local Corrections Academy, dealing with booking, intake and release, suicide awareness, report writing, prison behavior, correctional law, custody and security, PPCT defensive tactics, interpersonal communication, fire and safety, cultural diversity, sexual harassment, ethics, and stress management. Graduates are prepared for jobs within the local jail systems. All candidates must maintain a 2.0 cumulative GPA or better, with a grade of C or better in all criminal justice courses. A mandatory dress code is in effect for all students enrolled in the corrections curriculum. Students have the opportunity to plan for transfer to a four-year college or university.

Prerequisites
Applicants admitted to this program must meet the following special entrance requirements: 1) have no felony convictions; 2) have a high school diploma or GED; 3) interview by appointment with a criminal justice advisor before entering the program; 4) provide personal background information and sign a release form to facilitate possible background investigation (information and/or investigation may determine eligibility to enter the program); 5) sign and abide by the Criminal Justice Code of Conduct, which includes mandatory dress code; 6) submit proof of a physical examination, if required.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐   ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐   English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CJS-10000	Introduction to Criminal Justice	3	CJS-21100	Narcotics Investigation	3
CJS-10900	Introduction to Corrections	3	CJS-24000	Criminology	3
CJS-11000	Careers in Criminal Justice	1	CJS-26007	Corrections Academy	10
CJS-17200	Client Relations in Corrections	3	CJS-27000	Community Based Corrections	3
CJS-20800	Criminal Justice Internship[1]	3	CJS-	One elective from below	

and three credit hours from the following list:

Course	Title	Cr	Course	Title	Cr
CJS-10200	Physical Training I	3	CJS-24500	Social Deviant Behavior	3
CJS-10800	Firearms	3	CJS-28001	Institutional Jail/Prison Administration	3
CJS-12100	Photography for Police/Firefighters	3			

(continued)

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Note
[1] Students may take up to nine credits in Criminal Justice Internship.

CORRECTIONS ADMINISTRATION – JAIL ADMINISTRATION

Associate in Applied Science (DCRA1)   (continuation)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-10	• COM-10000 – Written & Oral Communication (3) **OR** ENG-10400/ENG-10403 – English Composition II (3) **AND** SPE-10500 – Speech (3) **OR** ENG-10400/ENG-10403 **AND** SPE-11400 – Interpersonal Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	12	• POL-10100 – American Government (3) • PSY-10100 – Introduction to Psychology (3) • SOC-10100 - Introduction to Sociology (3) • Humanities **OR** Social Science elective (3) – see glossary, page 44, for choices
Life Skills	3	• CIS-10500 – Introduction to Computers (3) **OR** OIS-10401/2/3 – Keyboarding I A, B, & C (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher • Science Elective (3) **AND** Lab (1)

CRIMINAL JUSTICE ADMINISTRATION

Associate in Applied Science (DCJA0)   **Minimum Credits: 60**

Introduction

Criminal Justice Administration is a program concerned with all branches of law enforcement - federal, state, local, and private agencies - in crime prevention, law enforcement, detection and apprehension of criminals, deterrence of delinquency, corrections, probation, and parole. Graduates are prepared for jobs in any law enforcement agency for positions other than a certified police officer, i.e., corrections, dispatch, juvenile officer. All candidates must maintain a 2.0 cumulative GPA or better, with a grade of C or better in all CJS courses. A mandatory dress code is in effect for all students enrolled in the criminal justice administration curriculum. Students have the opportunity to plan for transfer to a four-year college or university, and credits may be used toward a Corrections Administration degree. Students should contact a criminal justice advisor for further questions.

Prerequisites

Applicants admitted to this program must meet the following special entrance requirements: 1) have no felony convictions; 2) have a high school diploma or GED; 3) interview by appointment with a criminal justice advisor before entering the program; 4) must provide personal background information and sign a release form to facilitate possible background investigation (information and/or investigation may determine eligibility to enter the program); 5) sign and abide by the Criminal Justice Code of Conduct, which includes mandatory dress code; 6) submit proof of a physical examination, if required.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CJS-10000	Introduction to Criminal Justice	3	CJS-20800	Criminal Justice Internship[1]	3
CJS-11000	Careers in Criminal Justice	1	CJS-24000	Criminology	3
CJS-17000	Correctional Institutions & Facilities	3	CJS-	18 hours of electives from below	18

and 18 credit hours from the following list:

Course	Title	Cr	Course	Title	Cr
CJS-10200	Physical Training I	3	CJS-17200	Client Relations in Corrections	3
CJS-10800	Firearms	3	CJS-21100	Narcotics Investigation	3
CJS-10900	Introduction to Corrections	3	CJS-24500	Social Deviant Behavior	3
CJS-11100	Legal Issues in Corrections	3	CJS-27000	Community Based Corrections	3
CJS-11200	Client Growth & Development	3	CJS-28001	Institutional Jail/Prison Administration	3
CJS-12100	Photography for Police/Firefighters	3			
CJS-17103	Correctional Officer's Report Writing	1			

(continued)

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Note

[1]Up to 9 credits in internship

CRIMINAL JUSTICE ADMINISTRATION
Associate in Applied Science (DCJA0)   (continuation)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-10	• COM-10000 – Written & Oral Communication (3) **OR** ENG-10400/ENG-10403 – English Composition II (3) **AND** SPE-10500 – Speech (3) **OR** ENG-10400/ENG-10403 **AND** SPE-11400 – Interpersonal Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	12	• POL-10100 – American Government (3) • PSY-10100 – Introduction to Psychology (3) • SOC-10100 - Introduction to Sociology (3) • Humanities **OR** Social Science elective (3) – see glossary, page 44, for choices
Life Skills	3	• CIS-10500 – Introduction to Computers (3) **OR** OIS-10401/2/3 – Keyboarding I A, B, & C (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher • Science Elective (3) **AND** Lab (1)

CRIMINAL JUSTICE PRE-SERVICE
Associate in Applied Science (DCJP0)   **Minimum Credits: 66**

Introduction
Criminal Justice Pre-Service is a program leading to certification by the Michigan Commission on Law Enforcement Standards (MCOLES). Upon completion of Police Academy and successfully passing a mastery exam administered by MCOLES, students will be eligible for employment as law enforcement officers in most police agencies in Michigan and some other states. Candidates in this program must maintain a GPA of 2.0 or better, with a C or better in all criminal justice courses. A mandatory dress code is in effect for all students enrolled in the criminal justice curriculum. Students have the opportunity to plan for transfer to a four-year college or university, and credits may also be used toward the criminal justice administration degree.

Prerequisites
Applicants admitted to the Pre-Service program must be qualified according to the rules and regulations of MCOLES and follow their policies and procedures. This program has special entrance requirements: 1) possess a valid Michigan motor vehicle operator's or chauffeur's license; 2) have no felony convictions; 3) have a high school diploma or GED; 4) interview by appointment with a criminal justice advisor before entering the program; 5) provide personal background information and sign a release form to facilitate possible background investigation (information and/or investigation may determine eligibility to enter the program); 6) sign and abide by the Criminal Justice Code of Conduct, which includes mandatory dress code; 7) have a physical examination before enrolling in Physical Training class; 8) successfully complete the MCOLES literacy and physical agility exams before entering Police Academy. A complete physical examination and hearing and vision tests are also required prior to entering the Police Academy.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CJS-10000	Introduction to Criminal Justice	3	CJS-24000	Criminology	3
CJS-10200	Physical Training I	3	CJS-24500	Social Deviant Behavior	3
CJS-11000	Careers in Criminal Justice	1	CJS-26600	Police Academy	21
CJS-20800	Criminal Justice Internship	3			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-10	• COM-10000 – Written & Oral Communication (3) **OR** ENG-10400/ENG-10403 – English Composition II (3) **AND** SPE-10500 – Speech (3) **OR** ENG-10400/ENG-10403 – English Composition II (3) **AND** SPE-11400 – Interpersonal Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)

Humanities/Social Science	12	• POL-10100 – American Government (3) • PSY-10100 – Introduction to Psychology (3) • SOC-10100 – Introduction to Sociology (3) • PSY-20200 – Abnormal Psychology (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3) **OR** OIS-10401/2/3 – Keyboarding I A, B, & C (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher • Science Elective (3) **AND** Lab (1)

POLICE ACADEMY*
The Academy is a 17-week, 40-hour per week, **MCOLES** (Michigan Commission on Law Enforcement Standards)-certified program that covers the following:
Investigation - Introduction to investigation, substantive criminal law, criminal procedure, investigation, court functions and civil law, crime scene process, special investigation, and investigation of domestic violence.
Patrol Procedures - Patrol operations, interpersonal relations and conflict mediation, patrol techniques, report writing, and juveniles.
Detention and Prosecution - Receiving and booking process, case prosecution, and civil process.
Police Skills - First aid, firearms, police physical skills, and emergency vehicle operation.
Traffic - Motor vehicle law, vehicle stops, traffic control and enforcement, operating under the influence of liquor, and motor vehicle traffic crash investigation.
Special Operations - Emergency preparedness/disaster control, civil disorders, and tactical operations.

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Note
*Students should refer to the next page for more information about articulation agreements that are in place with other colleges.

POLICE ACADEMY

3 + 1 Transfer Agreement – Alpena Community College
3 + 1 Transfer Agreement – Mid Michigan Community College
3 + 1 Transfer Agreement – North Central Michigan College

PARTNERSHIP PROGRAM

Alpena Community College Contact: Michael Roy 989-358-7208 roym@ns.alpena.cc.mi.us **Mid Michigan Community College** Contact: Mary Trombley 989-773-6622, ext. 230 mtromble@midmich.cc.mi.us **North Central Michigan College** Contact: James Carter Phone # 231-439-6379 jcart@ncmc.cc.mi.us	**Kirtland Community College** Contact: Jerry Boerema or Cindy Gibbs 989-275-5000, extension 323 boeremaj@kirtland.edu

Articulation agreements allow criminal justice students at Alpena Community College, Mid Michigan Community College, and North Central Michigan College to complete their general education and prerequisites at any of the three schools and then transfer to Kirtland for the police academy program. Upon completion, the student's academy credits are transferred back to their home institution, which then issues the appropriate associate degree.

Benefits for the students include the following:

- Students in the Harrison/Mt. Pleasant, Alpena, and Petoskey areas may complete their general education and prerequisite courses in their home area.
- Alpena Community College, Mid Michigan Community College, and North Central Michigan College students who are accepted into the police academy will pay Kirtland's in-district tuition rates.

Students should contact those listed at the top of the page for specific program information.

Certificates

- CWB&I – Automobile Body Repairer
- CWB&I – Computer Technician
- CWB&I – Golf Course Operations
- CWB&I – Hotel/Motel Management
- CWB&I – Insurance Sales
- CWB&I – Pharmacy Technician
- CWB&I – Recreational Engine Technician
- CWB&I – Restaurant Manager Trainee
- CWB&I – Retail Manager Trainee
- CWB&I – Title Research and Abstract
- CWB&I – Web Master I
- CWB&I – Web Master II

Associate in Applied Science

- Available in areas listed above

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For more information, please contact CWB&I.

Steve Oppy   989-275-5000, extension 440

CONTRACTING WITH BUSINESS AND INDUSTRY (CWB&I)
Certificate of Completion (CBIO0)   **Minimum Credits: 32**

Introduction
Contracting with Business and Industry (CWB&I) is a program for specialized career training combining off-campus "hands-on" experience with related on-campus instruction. Students enrolled in CWB&I train 192 hours per semester at a local business. Placement is determined by the student's personal interview with the business trainer, which is arranged by the CWB&I advisor. Students may begin with the fall, winter, or summer semester and usually complete all requirements within the academic year.

This program is intended to provide students with the required training to gain entry-level positions in their chosen career field.
CWB&I is a unique program that has great flexibility. The career training options appear to be limitless. Students may select from the following list of training programs. If a needed program is not listed, the CWB&I advisor may develop a different career option to meet an individual need.

Automobile Body Repairer	Insurance Sales	Retail Manager Trainee
Computer Technician	Pharmacy Technician	Title Research and Abstract
Golf Course Operations	Recreational Engine Technician	Web Master I
Hotel/Motel Management	Restaurant Manager Trainee	Web Master II

Students wanting to continue in this program may pursue the Associate in Applied Science – CWB&I degree. Students are encouraged to discuss additional educational opportunities (i.e., two-year or four-year degrees) with their program advisor.

Prerequisites
In addition to submitting an Application for Admission to Kirtland Community College, students are required to complete a CWB&I Application form and interview with the CWB&I advisor, Steve Oppy. Students are encouraged to call 989-275-5000, extension 440, for an appointment.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐   ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐   English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult the CWB&I advisor for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CBI-101--	Off Campus Training	8	CBI-102--	Off-Campus Training	8

Each program will be customized to the needs of the student. Therefore, focus courses will vary. An example is included below.

Hotel/Motel Management

Course	Title	Cr	Course	Title	Cr
BUS-10100	Introduction to Business	3	CBI-10211	Off-Campus Training	8
BUS-21000	Principles of Management	3	ENG-10000	Writing Lab (if required)	0-1
BUS-24500	Personnel Management	3	ENG-10303	English Composition I/Computers	3
CAR-10300	Career Development Skills	1			
CBI-10111	Off-Campus Training	8	SPE-11400	Interpersonal/Public Communication	3

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

CONTRACTING WITH BUSINESS AND INDUSTRY (CWB&I)
Associate in Applied Science (DBIO0)   **Minimum Credits: 60**

Introduction

Contracting with Business and Industry (CWB&I) is a program for specialized career training combining off-campus "hands-on" experience with related on-campus instruction. Students enrolled in CWB&I train 192 hours per semester at a local business. Placement is determined by the student's personal interview with the business trainer, which is arranged by the CWB&I advisor. Students may begin with the fall, winter, or summer semester and usually complete all requirements within the academic year. This program is intended to provide students with the required training to gain entry-level positions in their chosen career field.

CWB&I is a unique program that has great flexibility. The career training options appear to be limitless. Students may select from the following list of training programs. If a needed program is not listed, the CWB&I advisor may develop a different career option to meet an individual need.

Automobile Body Repairer	Insurance Sales	Retail Manager Trainee
Computer Technician	Pharmacy Technician	Title Research and Abstract
Golf Course Operations	Recreational Engine Technician	Web Master I
Hotel/Motel Management	Restaurant Manager Trainee	Web Master II

Students are encouraged to discuss additional educational opportunities (i.e., two-year or four-year degrees) with their program advisor.

Prerequisites

In addition to submitting an Application for Admission to Kirtland Community College, students are required to complete a CWB&I Application form and interview with the CWB&I advisor, Steve Oppy. Students are encouraged to call 989-275-5000, extension 440, for an appointment.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required) ☐ Mathematics:_____
☐ English:_____ ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult the CWB&I advisor for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CBI-101--	Off Campus Training	8	CBI-102--	Off Campus Training	8

and 25 credits hours of courses specific to each program

CONTRACTING WITH BUSINESS AND INDUSTRY (CWB&I)
Associate in Applied Science (DBIO0)   (continuation)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10303 – English Composition I (3)

Humanities/Social Science	9	• HUM-20500 – Individual & Society (3)
		• POL-10100 – American Government (3) **OR**
		  POL-10500 – American Government with Humanities (3)
		• PSY-10100 – Introduction to Psychology (3) **OR**
		  SOC-10100 – Introduction to Sociology (3)

Math/Natural Science	4	• MTH-10100 – Finite Math (4) **OR** MTH-12000 – Intermediate Algebra or higher

EDUCATION

Associate in Applied Science

- Paraprofessional

<table>
<tr><td colspan="2">For more information, please contact Education advisor.</td></tr>
<tr><td>Don Dyer</td><td>989-275-5000, extension 231</td></tr>
</table>

PARAPROFESSIONAL
Associate in Applied Science (DPRO0)   **Minimum Credits: 60**

Introduction
Most paraprofessionals who work in schools who receive Title I funds are now required to complete an associate's degree or two years of study at an institution of higher learning, and/or pass a formal assessment to demonstrate knowledge and ability to assist in reading, writing, and mathematics instruction. There are many different associate degrees at Kirtland from which a student may select, but this program is tailored to those who want to focus primarily on education courses.*

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult their advisor for assistance in planning their schedules.

Course	Title	Cr	Course	Title	Cr
EDU-10000	Introduction to Teaching	3	EDU-12500	Learning Theory & Techniques for Tutors and Prospective Teachers	1
EDU-10300	Strategies for Paraprofessionals	3	--- ---	Electives – Select any 100-level or higher courses	16-18
EDU-10500	Lesson Design & Classroom Management	3		(Three credits in Physical Education courses	
EDU-11100	Math Support in K-6 Classrooms	3		can be used to meet degree requirements.)	
EDU-11200	Literacy Support in K-6 Classrooms	3			

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Note
*The education classes (EDU) in this program will be offered when there are a sufficient number of students to form a cohort.

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table on the following page indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• ENG-10000 – Writing Lab (1) (if required) • COM-10000 – Written & Oral Communication (3) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	9	• HUM-20500 – Individual & Society (3) **OR** POL-10500 – American Government with Humanities (3) • PSY-10100 – Introduction to Psychology (3) • PSY-20100 – Educational Psychology (3)

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)
Math/Natural	8-9	• MTH-10100 – Finite Math or higher (4) • One science with a lab selected from the following list. Students selecting those courses listed with **AND** must take both the lecture and the lab. Those courses listed without an **AND** have the lab and lecture combined into one course. BIO-10100 – General Biology (4) BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1) BIO-11500 – Anatomy & Physiology I (4) BIO-12000 – Life Science I (4) BIO-20100 – Zoology (4) BIO-20200 – Botany (4) BIO-21300 – Nature Study (4) BIO-21500 – Pathophysiology (4) CHE-10003 – Chemical Science (3) **AND** CHE-10004 – Lab (1) CHE-10101 – General Chemistry I (4) **AND** CHE-10102 – Lab (1) CHE-10201 – General Chemistry II (4) **AND** CHE-10202 – Lab (1) CHE-20101 – Organic Chemistry I (4) **AND** CHE-20102 – Lab (1) CHE-20201 – Organic Chemistry II (4) **AND** CHE-20202 – Lab (1) GEL-10500 – Physical Geology (4) PHY-10501 – Physical Science (3) **AND** PHY-10502 Lab (1) PHY-20101 – General Physics I (4) **AND** PHY-20102 – Lab (1) PHY-20201 – General Physics II (4) **AND** PHY-20202 – Lab (1) PHY-22101 – College Physics I (4) **AND** PHY-22102 – Lab (1) PHY-22201 – College Physics II (4) **AND** PHY-22202 – Lab (1)

Special Certificates
- Basic Emergency Medical Technician

Certificates
- Massage Therapy
- Medical Assistant
- Paramedic
- Practical Nursing – Level I

Associate in Applied Science
- Emergency Medical Services (Paramedic)
- Massage Therapy
- Medical Assistant
- Nursing – Level II

PARTNERSHIP PROGRAMS
Associate in Applied Science
- RN from LPN/LVN – Monroe County, Kalamazoo Valley, and Kirtland
- Radiography – Mid Michigan

For more information, please contact Health Careers.	
Anne Essmaker	989-275-5000, extension 372
Karen Brown	989-275-5000, extension 298

BASIC EMERGENCY MEDICAL TECHNICIAN (EMT)
Special Certificate (SEMT0)   **Minimum Credits: 10**

Introduction
The Basic EMT Certification program covers all basic techniques in emergency medical care within the responsibilities of the Basic Emergency Medical Technician (EMT) as a first responder and basic life supporter. Upon successful completion of this program, the student will be eligible to take the national certification examination, which is required to obtain a state license. Students wanting to continue in this program may pursue the Certificate - Paramedic or the Associate in Applied Science – Emergency Medical Services (Paramedic) degrees.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
The following course is the required focused course in this program.

Course	Title	Cr
ALH-21701	Basic Emergency Medical Technician	10

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a special certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the certificate or associate degree level.

_____
Notes
- Conviction for some criminal offenses may render a candidate ineligible for taking the national certification examination.
- There are abilities (with or without accommodation) that a student in this program must have. A list of these abilities can be obtained from the health careers advisor. Based on history and physical examination findings, and these required abilities, a recommendation from a health care provider is required prior to beginning the program.
- Students are required to complete all required courses with a grade of C or better.

PARAMEDIC
Certificate of Completion (CPAR0)   **Minimum Credits: 52**

Introduction
The Paramedic program is designed to provide basic knowledge and skills training necessary for entry-level positions as paramedics in advanced life support and transport. Following successful completion of this program, students are eligible to take the national certification examination for paramedics, which is required to obtain a state license. Students wanting to continue in this program may pursue the Associate in Applied Science – Emergency Medical Services (Paramedic) degree.

Prerequisites
Students must have completed the Basic EMT program and be eligible for licensure, **or** have current valid State of Michigan Basic EMT license.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-21500	Paramedic I	13	ENG-10000	Writing Lab (if required)	0-1
ALH-22500	Paramedic II	13	ENG-10300	English Composition I **OR**	
ALH-23500	Paramedic III	16	ENG-10303	English Composition I w/Computer	3
ALH-24500	Paramedic IV	7			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Some general education courses have been included in this program to provide this preparation. Additional WRAP courses are addressed at the associate level.

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Notes
- Conviction for some criminal offenses may render a candidate ineligible for taking the national certification examination.
- There are abilities (with or without accommodation) that a student in this program must have. A list of these abilities can be obtained from the health careers advisor.
- Students are required to complete all required courses with a "C" or better.

EMERGENCY MEDICAL SERVICES (PARAMEDIC)
Associate in Applied Science (DEMS0)   **Minimum Credits: 72**

Introduction

The Associate in Applied Science degree in Emergency Medical Services (E.M.S.) is designed to prepare students for entry-level positions as paramedics while providing a solid basis for continued professional growth and career mobility. This program will provide students with the basic knowledge and skills necessary to function as an advanced emergency care provider, as well as give them additional education that will prepare them for advancement in EMS or in another related health field, such as nursing. Following successful completion of this program, students are eligible to take the national certification examination for paramedic.

Prerequisites

Students must have completed the Basic EMT program and be eligible for licensure, **or** have current valid State of Michigan Basic EMT license.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	COM-10000	Written & Oral Communication	3
ALH-11201	Medical Ethics & Law	1	ENG-10000	Writing Lab (if required)	0-1
ALH-21500	Paramedic I	13	ENG-10300 ENG-10303	English Composition I **OR** English Composition I w/Computer	3
ALH-22500	Paramedic II	13			
ALH-23500	Paramedic III	16	HUM-20500 POL-10500	Individual & Society **OR** American Government w/Humanities	3
ALH-24500	Paramedic IV	7			
BIO-10701	Essentials of Anatomy & Physiology	3	MTH-10100	Finite Math or higher	4
BIO-10702	Essentials of A & P Lab	1	PSY-10100	Introduction to Psychology	3

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— <u>W</u>ell <u>R</u>ounded <u>A</u>cademic <u>P</u>rogram. Some general education courses have been included in this program to provide this preparation.
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Notes

- Conviction for some criminal offenses may render a candidate ineligible for taking the national certification examination.
- There are abilities (with or without accommodation) that a student in this program must have. A list of these abilities can be obtained from the health careers advisor
- Students are required to complete all required courses with a grade of "C" or better.

MASSAGE THERAPY
Certificate of Completion (CMAS0)   **Minimum Credits: 38.5**

Introduction

The Kirtland Community College Massage Therapy program is dedicated to advancing the science and art of massage therapy. Students completing the program will be prepared to practice massage therapy and to register for the National Certification Examination for Professional Massage and Bodywork. A minimum of 38.5 credit hours and 664 contact hours are required. Students wanting to continue in this program may pursue the Associate in Applied Science – Massage Therapy degree.

Prerequisites

Students must successfully complete the following courses before being admitted to the program.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	BIO-10702	Essentials of Anatomy/Physiology Lab	1
BIO-10701	Essentials of Anatomy/Physiology	3	MAS-10000	Introduction to Massage Therapy	1

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules. Courses that are marked with an asterisk (*) below may be taken in any of the four semesters, as long as the student takes the prerequisite general education courses first (i.e., ENG-10303 before COM-10000).

Course	Title	Cr	Course	Title	Cr
	Semester I – Fall			**Semester III – Summer**	
	Prerequisite courses		MAS-12200	Clinic I	2
ALH-20201	Standard First Aid*	1	MAS-13004	Topics I	1
			MAS-12401	Structural Based Bodywork II	3
			MAS-13005	Topics II	1
	Semester II – Winter			**Semester IV – Fall**	
ALH-12401	Lifetime Wellness & Nutrition*	2	ALH-11201	Medical Ethics & Law*	1
MAS-10200	Introduction to Clinic Operations	1	BUS-10100	Introduction to Business*	3
MAS-10300	Swedish Massage I	2	MAS-12500	Structural Based Bodywork III	1
MAS-10400	Swedish Massage II	2	MAS-12600	Energy Based Bodywork I	2
MAS-11000	Massage Skills Lab	1	MAS-12700	Energy Based Bodywork II	2
MAS-12801	Integrated Structural Dynamics	2	MAS-13100	Clinic II	2
MAS-12300	Structural Based Bodywork I	1	MAS-13200	Internship	1.5

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Some general education courses have been included in this program to provide this preparation. Additional WRAP courses are addressed at the associate level.

Notes

- There are abilities (with or without accommodation) that a student in this program must have. A list of these abilities can be obtained from the health careers advisor. Based on history and physical examination findings, and these required abilities, a recommendation from a health care provider is required prior to beginning the program.
- Students are required to complete all required courses with a grade of C or better.
- A student must be at least 18 years old by Semester II.
- An authorization for release of information with regard to criminal history is required.

MASSAGE THERAPY

Associate in Applied Science (DMAS0)   **Minimum Credits: 62.5**

Introduction

Kirtland's Massage Therapy program is dedicated to advancing the science and art of massage therapy. Students completing the program will be prepared to practice massage therapy and to register for the National Certification Examination for Professional Massage and Bodywork. A minimum of 62.5 credit hours and 1,048 contact hours are required.

Prerequisites

Students must successfully complete the following courses before being admitted to the program.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	BIO-10702	Essentials of Anatomy/Physiology Lab	1
BIO-10701	Essentials of Anatomy/Physiology	3			

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules. Courses that are marked with an asterisk (*) below may be taken in any of the four semesters, as long as the student takes the prerequisite general education courses first (i.e., ENG-10303 before COM-10000).

Course	Title	Cr	Course	Title	Cr
	Semester I – Fall			**Semester III – Summer**	
	Prerequisite courses		CIS-10500	Introduction to Computers *	3
ALH-20201	Standard First Aid*	1	MAS-12200	Clinic I	2
ENG-10000	Writing Lab (if required) *	0-1	MAS-13004	Topics I	1
ENG-10303	English Composition I *	3	MAS-12401	Structural Based Bodywork II	3
MAS-10000	Introduction to Massage Therapy	1	MAS-13005	Topics II	1
PSY-10100	Introduction to Psychology *	3	MTH-10100	Finite Math *	4
	Semester II – Winter			**Semester IV – Fall**	
ALH-10801	Pathology *	3	ALH-11201	Medical Ethics & Law*	1
ALH-12401	Lifetime Wellness & Nutrition*	2	BUS-10100	Introduction to Business*	3
MAS-10200	Introduction to Clinic Operations	1	COM-10000	Written & Oral Communication *	3
MAS-10300	Swedish Massage I	2	HUM-20500	Individual & Society * **OR**	
MAS-10400	Swedish Massage II	2	POL-10500	American Government w/Humanities	3
MAS-11000	Massage Skills Lab	1	MAS-12500	Structural Based Bodywork III	1
MAS-12801	Integrated Structural Dynamics	2	MAS-12600	Energy Based Bodywork I	2
MAS-12300	Structural Based Bodywork I	1	MAS-12700	Energy Based Bodywork II	2
			MAS-13100	Clinic II	2
			MAS-13200	Internship	1.5
			MAS-27500	Directed Study I*	2

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— <u>W</u>ell <u>R</u>ounded <u>A</u>cademic <u>P</u>rogram. Some general education courses have been included in this program to provide this preparation.

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Notes
- There are abilities (with or without accommodation) that a student in this program must have. A list of these abilities can be obtained from the health careers advisor. Based on history and physical examination findings, and these required abilities, a recommendation from a health care provider is required prior to beginning the program.
- Students are required to complete all required courses with a grade of C or better.
- A student must be at least 18 years old by Semester II.

MEDICAL ASSISTANT

Certificate of Completion (CMEA0)   **Minimum Credits: 37**

Introduction

A Medical Assistant is an allied health professional that functions as a member of the health care delivery team and performs administrative and clinical procedures. Administrative duties may include scheduling patients, preparing medical records, performing basic secretarial skills and medical transcription, handling telephone calls and writing correspondence, serving as a liaison between the health care provider and other individuals, and managing finances of the practice. Clinical duties may include infection control, taking patient histories and vital signs, performing first aid and CPR, preparing patients for procedures, assisting the health care provider with examinations and treatments, collecting and processing specimens, performing selected diagnostic tests, and preparing and administering medications as directed by the health care provider. Upon successful completion, the student will receive a certificate of completion and be eligible to write the American Association of Medical Assistants' CMA Certification Exam. Students wanting to continue in this program may pursue the Associate in Applied Science – Medical Assistant degree.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____

☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	BIO-10702	Essentials of Anatomy/Physiology Lab	1
ALH-10801	Pathology	3	COM-10000	Written & Oral Communication	3
ALH-11201	Medical Ethics & Law	1	ENG-10000	Writing Lab (if required)	0-1
ALH-11400	Math for Medical Administration	1	ENG-10300	English Composition I **OR**	
ALH-12300	MA Administrative Procedures	3	ENG-10303	English Composition I w/Computer	3
ALH-12600	MA Clinical Procedures*	3	OIS-18201	Word Processing I-Word-A	1
ALH-15000	Basic Pharmacology	3	OIS-18202	Word Processing I-Word-B	1
ALH-20201	Standard First Aid	1	OIS-18203	Word Processing I-Word-C	1
ALH-25500	Professional Issues & Internship*	4	PSY-10100	Introduction to Psychology	3
BIO-10701	Essentials of Anatomy/Physiology	3			

* ALH-12600 must be taken the semester immediately prior to ALH-25500, which is taken the last summer of the program.

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— <u>W</u>ell <u>R</u>ounded <u>A</u>cademic <u>P</u>rogram. Some general education courses have been included in this program to provide this preparation.

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Notes

- There are abilities (with or without accommodation) that a student in this program must have. A list of those abilities can be obtained from the health careers advisor. Based on history and physical examination findings, and these required abilities, a recommendation from a health care provider is required prior to beginning the program.
- Students are required to complete all required courses with a grade of C or better.

MEDICAL ASSISTANT
Associate in Applied Science (DMEA0)   **Minimum Credits: 60**

Introduction
The Medical Assistant program is designed to prepare students for entry-level positions as medical assistants while providing a solid basis for continued professional growth and career mobility. This program will provide additional education that will prepare the medical assistant for advancement in the field, such as office management. A Medical Assistant is an allied health professional that functions as a member of the health care delivery team and performs administrative and clinical procedures. Administrative duties may include scheduling patients, preparing medical records, performing basic secretarial skills and medical transcription, handling telephone calls and writing correspondence, serving as a liaison between the health care provider and other individuals, and managing finances of the practice. Clinical duties may include infection control, taking patient histories and vital signs, performing first aid and CPR, preparing patients for procedures, assisting the health care provider with examinations and treatments, collecting and processing specimens, performing selected diagnostic tests, and preparing and administering medications as directed by the health care provider. Following successful completion of this program, graduates are eligible to write the American Association of Medical Assistants' CMA Certification Exam.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*   ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
                                         ☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	ENG-10300	English Composition I **OR**	
ALH-10801	Pathology	3	ENG-10303	English Composition I w/Computer	3
ALH-11201	Medical Ethics & Law	1	HUM-20500	Individual & Society	3
ALH-11400	Math for Medical Administration	1	MTH-10100	Finite Math **OR** demonstrated competency	0-4
ALH-12300	MA Administrative Procedures	3	OIS-10701/2/3 OIS-20800	Medical Office Transcription-A-C **OR** Medical Keyboarding	3
ALH-12401	Lifetime Wellness & Nutrition	2	OIS-11401	Keyboarding II-A	1
ALH-12600	MA Clinical Procedures*	3	OIS-11402	Keyboarding II - B	1
ALH-15000	Basic Pharmacology	3	OIS-11403	Keyboarding II-C	1
ALH-20201	Standard First Aid	1	OIS-18201	Word Processing I-Word-A	1
ALH-25500	Professional Issues & Internship*	4	OIS-18202	Word Processing I-Word-B	1
BIO-10701	Essentials/Anatomy/Physiology	3	OIS-18203	Word Processing I-Word-C	1
BIO-10702	Essentials/Anatomy/Physiology Lab	1	PSY-10100	Introduction to Psychology	3
COM-10000	Written & Oral Communication	3	POL-10100	Intro to American Government	3
ENG-10000	Writing Lab (if required)	0-1	--- ---	Electives with advisor approval	4-9

*ALH-12600 must be taken the semester immediately prior to ALH-25500, which is taken the last summer of the program.

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Some general education courses have been included in this program to provide this preparation.

Note
- There are abilities (with or without accommodations) that a student in this program must have. A list of those abilities can be obtained from the health careers advisor. Based on history and physical examination findings, and these required abilities, a recommendation from a health care provider is required prior to beginning the program.
- Students are required to complete all required courses with a grade of C or better.

RADIOGRAPHY
Associate in Applied Science – Mid Michigan Community College

PARTNERSHIP PROGRAM

Mid Michigan Community College	Kirtland Community College
John Skinner, Program Director	Anne Essmaker
989-386-6646	989-275-5000, extension 372
jskinner@midmich.cc.mi.us	essmakea@kirtland.edu

The Radiography program is a collaborative program offered by an agreement between Kirtland Community College and Mid Michigan Community College. The program is designed to prepare graduates to function as members of the health team in hospitals, clinics, government and military installations, industry, and public health. In addition to classroom instruction and experience in the laboratory, the student will receive on-the-job practical education in radiology departments of local hospitals participating in the program.

The prerequisite and general education courses are taken at Kirtland Community College and can be completed in one year. The second year will be taken at Mid Michigan Community College. The third year will be a clinical internship at area hospitals. Program graduates are eligible to take the American Registry of Radiologic Technologists certification examination. Mid Michigan Community College confers the associate degree.

The collaborative program has many benefits for students at Kirtland including the following:

- Most of the general education and prerequisite courses can be taken at Kirtland. HUM 200 must be taken at Mid Michigan Community College.
- Mid Michigan has a limited number of reserved seats for qualified Kirtland students ready to be admitted into the program.
- Kirtland students who are accepted into the program and transfer to Mid Michigan for their radiography courses will pay in-district tuition at Mid Michigan.
- Kirtland students who are in the program and ready for their clinical internship in a hospital will be assigned to an in-district hospital.

Students should contact those listed at the top of the page for specific program information.

PRACTICAL NURSING – LEVEL I

Certificate of Completion (CLPN0)   **Minimum Credits: 35**

Introduction

The Level I Nursing program at Kirtland is designed to prepare students for entry-level positions as practical nurses. Following successful completion of this program, graduates are eligible to take the licensure exam to practice as a Licensed Practical Nurse (LPN). The program is also designed to provide career mobility and a foundation for continued learning by serving as the first year of the associate degree nursing program. Students can attend school and complete the nursing program on a part- or full-time basis. The program must be completed within two years after beginning the nursing courses. Outreach programs are offered in Gaylord and Tawas periodically.

Each class of nursing students is considered a cohort (group), so students must consult with the health careers advisor before making any schedule changes or changing from full-time to part-time.

Admission Requirements - Practical Nursing - Level I

Applicants must be granted regular admission to Kirtland and meet the following requirements to be considered for admission to the Practical Nursing program:

- Demonstrate proficiency in basic academic skills in writing, reading, and mathematics according to the guidelines set forth on page 11 of this catalog. If placement testing indicates that developmental writing and/or reading courses must be taken by the student, then such courses must be completed successfully with an SC or better unless otherwise noted.
- Successfully complete all required courses with grade of C or better, unless otherwise noted.
- Students requesting admission to the program must submit a Request for Admission to Nursing form available in Health Careers and Student Services and turn it into the Health Careers office between January 1 and March 1 of the calendar year in which the student is requesting admission to the nursing program.
- If applicants exceed the number of available seats in the program, priority will be given to students with required prerequisites and general education courses completed, and then by date of program application.
- Students must maintain an active e-mail account to ensure timely communication between students, faculty, and staff.

Prerequisites
Students must successfully complete the following courses before being admitted to the nursing program.

Course	Title	Cr		Course	Title	Cr
ALH-10101	Medical Terminology	2		CIS-10500	Introduction to Computers **OR** competency	0-3
ALH-20201	Standard First Aid (taken just prior to program **OR** substitute professional CPR taken 3 months prior to start of clinical)	0-1		DEV-06300	Basic Math (or test out)	0-4
				ENG-10000	Writing Lab (if required)	0-1
ALH-12401	Lifetime Wellness & Nutrition	2		ENG-10300 ENG-10303	English Composition I **OR** English Composition I/Computers	3
BIO-10701/2	Essentials of Anatomy & Physiology **AND** Lab (with grade of B or better)	3/1	**OR**	BIO-11500 BIO-11600	Anatomy & Physiology I **AND** Anatomy & Physiology II (with grade of B or better)	8

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr
	Semester I – Fall	
ALH-11400	Math for Medication Administration	1
ALH-15000	Basic Pharmacology	3
NUR-10502	Foundations of Nursing	3
NUR-10700	Mental Health Concepts	1
NUR-10803	Nursing Practice Lab	3
NUR-10804	Nursing Clinical I	2
	Semester II - Winter	
NUR-12304	Nursing Clinical II	5
NUR-12503	Adult Medical-Surgical Nursing	4
NUR-12602	Nursing Care of Children	2
NUR-12702	Nursing Care of Childbearing Family	2

Course	Title	Cr
	Semester III – Summer	
NUR-13302	Current Issues in Nursing	1
NUR-13402	Nursing Clinical III	2

PART-TIME OPTION
Students also have the option of completing this program on a part-time basis in five semesters. Information about the semester sequence for part-time students is available from the health careers advisor.

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Some general education courses have been included in this program to provide this preparation. Additional WRAP courses are addressed at the associate level.

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Notes

- Conviction for some criminal offenses may render a candidate ineligible for writing the examination (NCLEX-PN) for state licensure.
- There are abilities (with or without accommodation) that a student in this program must have. A list of these abilities can be obtained from the health careers advisor. Based on history and physical examination findings, and these required abilities, a recommendation from a health care provider is required prior to beginning the program.
- Professional provider CPR certification must be obtained no earlier than three months prior to the start of the first clinical semester.
- An authorization for release of information with regard to criminal history is required. Forms are available in the health careers department.
- The above information is applicable for students entering the nursing program in 2004. Students entering the program in future years will be subject to the requirements outlined in the applicable catalog.

ASSOCIATE DEGREE IN NURSING – LEVEL II

Associate in Applied Science (DADN1)   **Minimum Credits: 66.5**

Introduction

The Associate in Applied Science in Nursing program is designed to prepare students for entry-level positions as registered nurses and to provide continued learning and career mobility in nursing for licensed practical nurses. The Associate in Applied Science in Nursing Program is the Level I (practical nursing) plus the Level II program.

Graduates of Level I with a GPA of 3.0 in applicable academic courses may be considered for admission into the full-time Level II program. Students can attend school and complete the Level II program on a full- or part-time basis; however, once the program has begun, it must be completed within two years. Following successful completion of Level II, graduates are eligible to take the licensure exam to practice as a Registered Nurse (RN). Each class of nursing students is considered a cohort (group), so students must consult with the health careers advisor before making any schedule changes or changing from full-time to part-time. Graduates of the Level II program are qualified to enter the many B.S.N. completion programs available.

Admission Requirements Associate Degree Nursing - Level II

Applicants must be granted regular admission to Kirtland and meet the following requirements to be considered for admission to the Associate Degree Nursing program:

- Submit official transcripts demonstrating successful completion of an approved practical nursing program within the last three years. The applicant who graduated more than three years ago must demonstrate 12 months of clinical experience in an acute or skilled care setting within the last three years or successfully complete the Foundations of Nursing (NUR-10502) and/or satisfactorily complete Nursing Skills Lab (NUR-106--) and/or Nursing Seminar (NUR-255--) within the last academic year.
- Students must maintain an active e-mail account to ensure timely communication between students, faculty, and staff.
- Students requesting admission to the program must submit a Request for Admission to Nursing form available in Health Careers and Student Services and turn it into the Health Careers office between January 1 and March 1 of the calendar year in which the student is requesting admission to the nursing program.
- Successfully complete all required courses with grade of C or better, unless otherwise noted.

Prerequisites: Students must successfully complete the following courses before being admitted to the nursing program.

Course	Title	Cr	Course	Title	Cr
	Successful completion (GPA 3.0 or higher) of Level I or other Practical Nursing program with Experience	20*	CIS-10500	Introduction to Computers **OR** competency	0-3
ALH-12401 NUR-25508	Lifetime Wellness/Nutrition **OR** Nursing Wellness Seminar (if approved Nutrition course completed or KCC Level I Graduate prior to 2001)	1-2	ENG-10400 ENG-10403	English Composition II **OR** English Composition II/Computer	3
			MTH-10100	Finite Math **OR** demonstrated competency	0-4
			POL-10100	Introduction to Government	3
BIO-11500 BIO-10701 / **and** 10702	Anatomy & Physiology I **OR** Essentials of Anatomy & Physiology **AND** Lab ("B" or better)	4	PSY-10100	Introduction to Psychology	3
BIO-11600	Anatomy & Physiology II (Grade of "B" or better)	4		Professional provider CPR taken within 3 months of program	0

*Students with current LPN licenses may be granted 20 credits toward this program upon presentation of their license.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*   ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____

☐ English:_____   ☐ Reading: _____

ASSOCIATE DEGREE IN NURSING – LEVEL II
Associate in Applied Science (DADN1)   (continuation)

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules. Courses that are marked with an asterisk (*) below may be taken in any of the four semesters, as long as the student takes the prerequisite general education courses first (i.e., ENG-10303 before COM-10000).

Course	Title	Cr
	Semester I – Fall	
NUR-22001	Nursing Assessment	3
NUR-23200	Family Centered Pediatrics*	2
NUR-23300	Pediatric Nursing Clinical*	1
NUR-24200	Community Mental Health Nursing*	2.5
NUR-24301	Community Mental Health Clinical*	2
NUR-24600	Nursing Care of Women & Families*	2
NUR-24700	OB/GYN Nursing Clinical*	1
	Semester II - Winter	
BIO-21500	Pathophysiology*	4
NUR-21400	Nursing Pharmacology	2
NUR-22200	Critical Thinking in Adult Care*	4
NUR-22300	Adult Nursing Clinical*	5

Course	Title	Cr
	Semester III – Summer	
NUR-25201	Professional Practice	2
NUR-25202	Professional Leadership	2
NUR-25300	Clinical Leadership	1

PART-TIME OPTION

Students also have the option of completing this program on a part-time basis in six semesters. Information about the semester sequence for part-time students is available from the health careers advisor.

Program work must be completed within two years.

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Some general education courses have been included in this program to provide this preparation.

_____

Notes

- Conviction for some criminal offenses may render a candidate ineligible for writing the examination (NCLEX-RN) for state licensure.
- There are abilities (with or without accommodation) that a student in this program must have. A list of these abilities can be obtained from the health careers advisor. Based on history and physical examination findings, and these required abilities, a recommendation from a health care provider is required prior to beginning the program.
- Professional provider CPR certification must be obtained no earlier than three months prior to the start of the first clinical semester.
- Clinical agencies require a criminal background check before students are permitted to be placed for clinical experience. Felonies and some misdemeanors will restrict students from successfully completing required courses.

RN FROM LPN/LVN

Associate in Applied Science (DADN2)   **Minimum Credits: 75**

PARTNERSHIP PROGRAM
Michigan Community College Virtual Learning Collaborative
This program was developed by colleges participating in the Michigan Community College Virtual Learning Collaborative (MCCVLC).
Some of the courses are available only through online instruction.
Program Website: http://vcampus.mccvlc.org/

Kirtland Community College Karen Brown	989-275-5000, extension 298 brownk@kirtland.edu
Kalamazoo Valley Community College Dennis Berth	616-372-5108 dbertch@kvcc.edu
Monroe County Community College Karen Brooke	734-384-4265 kbrooke@monroeccc.edu

Introduction
This program will prepare an experienced LPN for RN licensure. Graduates of this program are qualified to enter the many B.S.N. completion programs available.

Admission Requirements
- Students must apply for regular admission to the college. Students must also apply for program admission online by June 30. An official college transcript must be submitted by that time that shows successful completion (grade C or better) of all required courses in order to be considered. Candidates must also have a license to practice as a LPN/LVN in good standing and six months of full-time experience (or equivalent) to be considered for admission. A detailed resume of LPN experience must be submitted online with the program application.
- The program will only accept students to begin each fall semester. Candidates who have completed prerequisites will be ranked in order of date of program application. If seats remain unfilled, candidates may be provisionally admitted if working on prerequisites that can be completed prior to the beginning of the program.
- Students will be notified of their admission status by e-mail by August 1. Students must maintain an active e-mail account to ensure timely communication between students, faculty, and staff.

Prerequisites
Students must successfully complete the following courses before being admitted to the program.

Course	Title	Cr	Course	Title	Cr
	Successful completion of LPN/ LVN program with experience	20*	ENG-10400 ENG-10403	English Composition II **OR** English Composition II/Computer	 3
	Successfully complete an online course to demonstrate competency	0	MTH-10100	Finite Math **OR** demonstrated competency	0-4
BIO-11500	Anatomy & Physiology I	4	NURS 180W NUR 21400	Pharmacology (Kalamazoo Valley) **OR** Pharmacology (Kirtland)	 2-3
BIO-11600	Anatomy & Physiology II	4	POL-10100	Intro to American Government	3
CIS-10500	Introduction to Computers **OR** competency	0-3	PSY-10100	Introduction to Psychology	3
ENG-10300 ENG-10303	English Composition I **OR** English Composition I/Computers	 3	--- ---	Humanities elective	3

(continued)

RN FROM LPN/LVN

Associate in Applied Science (DADN2)   **Minimum Credits: 75**

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
	Semester I			**Semester III**	
NUR-22001	Nursing Assessment	3	NUR-28000	Clinical Application of Nursing Care	8
NUR-26001	Nursing Care of Adults	8			
	Semester II				
NUR-290.L1	Nursing Leadership (Monroe)	3			
NUR-27000	Nursing Care/Special Populations	8			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Some general education courses have been included in this program to provide this preparation.

_____

Notes
- Conviction for some criminal offenses may render a candidate ineligible for writing the examination (NCLEX-RN) for state licensure.
- There are abilities (with or without accommodation) that a student in this program must have. A list of these abilities can be obtained from the health careers advisor. Based on history and physical examination findings, and these required abilities, a recommendation from a health care provider is required prior to beginning the program.
- Professional provider CPR certification must be obtained no earlier than three months prior to the start of the first clinical semester.
- Clinical agencies require a criminal background check before students are permitted to be placed for clinical experience. Felonies and some misdemeanors will restrict students from successfully completing required courses.

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For more information, please contact Honors.

Kathy Marsh   989-275-5000, extension 245
Elaine Thiboult   989-275-5000, extension 359

KIRTLAND HONORS PROGRAM

Introduction

The Kirtland Honors Program is designed to meet the needs of students of high academic standing who are seeking additional challenges and rewards in both general education and occupational programs. Honors students may earn honors credits in Kirtland "honors option" courses and in individually designed honors and service learning projects. Students who complete 12 honors credits may be awarded an honors degree, with transcript recognition for all completed honors courses, and, upon completing the honors degree program, an honors degree.

A minimum of 12 credits in honors courses is required to earn an Honors associate degree. An additional three credits in honors courses is required for each subsequent honors degree.

Honors degrees may be earned in all of the following degree areas:

Honors Associate in Arts   Honors Associate in Fine Arts
Honors Associate in Applied Science   Honors Associate in Science
Honors Associate in Business Administration

Students interested in earning an honors degree in another area should contact Elaine Thiboult, Honors Secretary at 989-275-5000, extension 359.

Honors Degree Requirements

Students admitted to the Kirtland Honors Program who complete the following requirements will be awarded an honors degree:

- The student must complete at least one 3-credit course designated as an Honors Colloquium (HON-25000).

- In addition to one Honors colloquium, the student must complete at least nine additional honors credit hours. These hours may be earned in the following ways:

    - in classes designated as honors sections (indicated by a course number with a 9 as the fourth character in
    - the course number)
    - Service Learning
    - in Honors Projects (HON 225; up to three credits) undertaken in conjunction with non-honors course

- The student must have a cumulative Kirtland grade point average of at least 3.5.

- The required 12 honors credit hours must be earned at Kirtland.

- The student must complete all other requirements established for his or her degree at Kirtland.

Every effort will be made to ensure that honors students can complete the requirements for an honors degree within two academic years. However, students must be made aware that scheduling difficulties may prevent their completion of the requirements within two years.

The honors degree will be noted on the student's degree certificate; honors courses will be noted on the student's transcript. At the graduation ceremony, academic regalia will include some feature distinguishing an honors degree recipient.

Special Certificates
- CAD Operator Level I

Certificates
- CAD Operator Level II
- CAD Operator Level III
- CAD Operator – Architectural
- Machine Tool Operation
- Welding

Associate in Applied Science
- Computer Aided Drafting & Design Technology
- Manufacturing Processes Technology
- Multi-Technology Computer Aided Drafting and Design/Manufacturing Processes
- Welding Technology

For more information, please contact Industrial Technologies.

CAD
Jason Prout   989-275-5000, extension 318/ proutj@kirtland.edu

Manufacturing Processes
Leonard Miller   989-275-5000, extension 328

Welding
Doty Latuszek   989-275-5000, extension 326

INDUSTRIAL TECHNOLOGIES

CAD OPERATOR LEVEL I
Special Certificate (SCAD3)   **Minimum Credits: 21**

Introduction
Kirtland's drafting certificate options are designed to provide specific pre-employment instruction. Level I involves the use of a computer aided drafting system (CAD) in the preparation of basic engineering drawings. Students who complete any level option are not locked in. They may advance to a higher level at any time or switch to the Associate in Applied Science in CAD/Drafting, Manufacturing Processes, or the Multi-Technology degree program. Graduates are able to obtain employment as CAD operators, drafters, or technicians in architectural/building-related industries.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐   Mathematics:_____
☐ English:_____   ☐   Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-10800	CAD Detailing III	1
CAD-10200	Engineering Graphics II	1	CAD-12000	Introduction to AutoCAD	1
CAD-10300	Engineering Graphics III	1	CAD-12100	Introduction to MasterCAM	1
CAD-10600	CAD Detailing I	1	CAD-20001	Parametric Solid Modeling	4
CAD-10700	CAD Detailing II	1	MPT-21200	Statistical Processes Control	4

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a special certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the certificate or associate degree level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	4	• MTH-10100 – Finite Math (4) **OR** MTH-12100 – College Algebra with Trigonometry (4)

CAD OPERATOR LEVEL II
Certificate of Completion (CCAD3)   **Minimum Credits: 32**

Introduction
Kirtland's drafting certificate options are designed to provide specific pre-employment instruction. Level II includes intermediate problem solving, the use of reference materials, and the preparation of assembly and detail/working drawing packages. Students who complete any level option are not locked in. They may advance to a higher level at any time or switch to the Associate in Applied Science in CAD/Drafting, Manufacturing Processes, or the Multi-Technology degree program. Graduates are able to obtain employment as CAD operators, drafters, or technicians in a variety of mechanical, product, tool or architectural/building-related industries.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-12100	Introduction to MasterCAM	1
CAD-10200	Engineering Graphics II	1	CAD-20001	Parametric Solid Modeling	4
CAD-10300	Engineering Graphics III	1	CAD-20501	Descriptive Geometry/CAD	4
CAD-10600	CAD Detailing I	1	CAD-21001	Geometric Dimensioning/Tolerancing	3
CAD-10700	CAD Detailing II	1	MPT-10000	Metal Machining I	4
CAD-10800	CAD Detailing III	1	MPT-21200	Statistical Processes Control	4
CAD-12000	Introduction to AutoCAD	1			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	4	• MTH-10100 – Finite Math (4) **OR** MTH-12100 – College Algebra with Trigonometry (4)

CAD OPERATOR LEVEL III
Certificate of Completion (CCAD2)　　　　　　　　　　　　　**Minimum Credits:　43**

Introduction

Kirtland's drafting certificate options are designed to provide specific pre-employment instruction. Level III involves advanced engineering drawing, problem solving, and introduction to design through the use of standard components. Students who complete any level option are not locked in. They may advance to a higher level at any time or switch to the Associate in Applied Science in CAD/Drafting, Manufacturing Processes, or the Multi-Technology degree program. Graduates are able to obtain employment as CAD operators, drafters, or technicians in a variety of mechanical, product, tool or architectural/building-related industries.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐　ENG-10000 Writing Lab (if required)　　　　　　☐　Mathematics:_____

☐　English:_____　　　　　　☐　Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-20001	Parametric Solid Modeling	4
CAD-10200	Engineering Graphics II	1	CAD-20501	Descriptive Geometry/CAD	4
CAD-10300	Engineering Graphics III	1	CAD-21001	Geometric Dimensioning/Tolerancing	3
CAD-10600	CAD Detailing I	1	CAD-21500	Tool & Machine Design/CAD	4
CAD-10700	CAD Detailing II	1	MPT-10000	Metal Machining I	4
CAD-10800	CAD Detailing III	1	MPT-10100	Metal Machining II	4
CAD-12000	Introduction to AutoCAD	1	MPT-21200	Statistical Processes Control	4
CAD-12100	Introduction to MasterCAM	1	--- ---	Three credits from below	

and three credit hours from the following list:

AUT-	Automotive elective	MPT-	Manufacturing Process Technology elective
CAD-	Computer Aided Drafting elective	MTH-	Mathematics elective
CIS-	Computer Information Systems elective	WLD-	Welding elective

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— <u>W</u>ell <u>R</u>ounded <u>A</u>cademic <u>P</u>rogram. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	4	• MTH-10100 – Finite Math (4) **OR** 　MTH-12100 – College Algebra with Trigonometry (4)

CAD OPERATOR - ARCHITECTURAL
Certificate of Completion (CCAD4)   **Minimum Credits: 30**

Introduction

Kirtland's drafting certificate options are designed to provide specific pre-employment instruction. Students who complete any level option are not locked in. They may advance to a higher level at any time or switch to the Associate in Applied Science in CAD/Drafting, Manufacturing Processes, or the Multi-Technology degree program. Graduates are able to obtain employment as CAD operators, drafters, or technicians in architectural/building-related industries.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____

☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ART-10000	Art History I	3	CAD-11000	Architectural Drafting/CAD	4
ART-10500	Introduction to Design	3	CAD-12000	Introduction to AutoCAD	1
CAD-10100	Engineering Graphics I	1	CAD-20501	Descriptive Geometry/CAD	4
CAD-10200	Engineering Graphics II	1	--- ---	Seven credits from below	
CAD-10300	Engineering Graphics III	1			

and seven credit hours from the following list:

ART-	Art elective	ELT-	Electrical Technology elective
CAD-	Computer Aided Drafting elective	HVC-	Heating/Ventilation/Refrigeration elective
COR-	Core elective	MTH-	Mathematics elective
CPT--	Carpentry elective		

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	4	• MTH-10100 – Finite Math (4) **OR** MTH-12100 – College Algebra with Trigonometry (4)

COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGY

Associate in Applied Science (DCAD0)   **Minimum Credits: 60**

Introduction

Kirtland's Computer Aided Drafting & Design Technology program prepares students for employment in the broad field of drafting and design. Typically, graduates are employed as CAD operators, detailers, lay-out persons, designers, checkers, or engineering technicians in either the product or tooling industry. Instruction puts emphasis on technical knowledge, creativity, and problem-solving. Students work on "real world" projects in a modern laboratory using industrial quality equipment and supplies. To meet the high-tech demands of modern industry, students are now receiving instruction and experience on computer-aided drafting (CAD) systems.

Kirtland's curriculum is certified by the A.D.D.A. at the "Design Drafter" level. Kirtland Community College has had an ongoing 2 + 2 transfer agreement with Ferris State University for students who want to pursue a bachelor's degree. Both Kirtland and Ferris are currently revising curricula. The expectation is that the agreement will remain in place. Any student planning to transfer to a four-year college or university must notify his/her advisor during the first semester.

It is recommended that students investigate the possibilities of the Drafting & Design/Manufacturing Processes Multi-technology associate degree program.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-20001	Parametric Solid Modeling	4
CAD-10200	Engineering Graphics II	1	CAD-20501	Descriptive Geometry/CAD	4
CAD-10300	Engineering Graphics III	1	CAD-21001	Geometric Dimensioning/Tolerancing	3
CAD-10600	CAD Detailing I	1	CAD-21500	Tool & Machine Design/CAD	4
CAD-10700	CAD Detailing II	1	MPT-10000	Metal Machining I	4
CAD-10800	CAD Detailing III	1	MPT-10100	Metal Machining II	4
CAD-12000	Introduction to AutoCAD	1	MPT-21200	Statistical Process Control	4
CAD-12100	Introduction to MasterCAM	1	--- ---	Seven credits from below	

and seven credit hours from the following list:

AUT-	Automotive elective	MPT-	Manufacturing Process Technology elective
CAD-	Computer Aided Drafting elective	MTH-	Mathematics elective
CIS-	Computer Information Systems elective	WLD-	Welding elective

(continued)

COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGY
Associate in Applied Science (DCAD0)   (continuation)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	8-10	• MTH-10100 – Finite Math (4) **OR** MTH-12100 – College Algebra with Trigonometry (4) • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1) **OR** PHY-20101 – General Physics I (4) and PHY-20102 - Lab (1) **OR** PHY-22101 – College Physics I (4) **AND** PHY-22102 – Lab (1)

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Note

Students with no previous drafting and computer aided drafting experience should follow the pattern below. Students with previous drafting and computer aided drafting experience should consult with the instructor. CAD-10100, 10200, 10300, 10600, 10700, 10800, 12000, and 12100 are offered every fall and winter semester. CAD-20001 and CAD-21001 are offered in the fall semester. CAD-20501 and CAD-21500 are offered in the winter semester. CAD-11000 is offered as needed.

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              │  Engineering Graphics I, II, III and │
              │     Introduction to AutoCAD          │
              │     CAD 101, 102, 103, 120           │
              └─────────────────────────────────┘
    ┌──────────────┬───────────────┬──────────────┬──────────────┐
┌───────────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
│ CAD Detailing │ │ Architectural│ │ Parametric   │ │ Descriptive  │
│ I, II, III and│ │ Drawing      │ │ Solid Modeling│ │ Geometry     │
│ Introduction  │ │ CAD-11000    │ │ CAD-20001    │ │ CAD-20501    │
│ to MasterCAM  │ └──────────────┘ └──────────────┘ └──────────────┘
│ CAD 106, 107, │
│ 108, 121      │
└───────────────┘
    ┌──────────────────────┬──────────────────────┐
┌─────────────────────────────┐   ┌─────────────────────┐
│ Geometric Dimensioning/     │   │ Tool & Machine Design│
│ Tolerancing  CAD-21001      │   │ CAD-21500           │
└─────────────────────────────┘   └─────────────────────┘
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MACHINE TOOL OPERATION

Certificate of Completion (CMTO0)   **Minimum Credits: 30.02**

Introduction

Kirtland's program in Machine Tool Operation is designed to provide instruction and marketable skills needed for employment in tool and die shops as machine operators. All courses in this program apply to the Manufacturing Processes Technology degree program. Students may transfer to the two-year program at any time during or after completion of the certificate program. Courses in the certificate program offer the same transferability as those in the associate degree program.

Prerequisites

Students are required to make an appointment with the manufacturing advisor prior to entering the program.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	MPT-10000	Metal Machining I	4
CAD-10200	Engineering Graphics II	1	MPT-10100	Metal Machining II	4
CAD-10300	Engineering Graphics III	1	MPT-10900	Metrology I	3
CAD-10600	CAD Detailing I	1	MPT-21000	Machinist Handbook	3
CAD-10700	CAD Detailing II	1	MPT-21200	Statistical Processes Control	4
CAD-10800	CAD Detailing III	1	WLD-10341-WLD-10354	Welding Modules	4.02
CAD-12000	Introduction to AutoCAD	1			
CAD-12100	Introduction to MasterCAM	1			

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

MANUFACTURING PROCESSES TECHNOLOGY
Associate in Applied Science (DMPT0)   **Minimum Credits: 60.02**

Introduction

Kirtland's program in Manufacturing Processes Technology is designed to provide instruction in the language of production, dimensioning, tolerances, and most manufacturing techniques. This program prepares students for employment as machine operators, CNC programmers, and in all other phases of machine tool operations and set-up.

Upon successful completion, students may be eligible to transfer for a bachelor's degree. Manufacturing students should take into consideration that the program must be customized for transfer in order to fulfill the requirements of a four- year institution. All students who are interested in transferring should contact their advisor during their first semester at Kirtland Community College.

Prerequisites

Students are required to make an appointment with the manufacturing advisor prior to entering the program.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	MPT-10100	Metal Machining II	4
CAD-10200	Engineering Graphics II	1	MPT-10900	Metrology I	3
CAD-10300	Engineering Graphics III	1	MPT-20300	Metal Machining III	4
CAD-10600	CAD Detailing I	1	MPT-20800	Metal Machining IV	4
CAD-10700	CAD Detailing II	1	MPT-21000	Machinist Handbook	3
CAD-10800	CAD Detailing III	1	MPT-21200	Statistical Processes Control	4
CAD-12000	Introduction to AutoCAD	1	MPT-275--	Directed Study in MPT	1
CAD-12100	Introduction to MasterCAM	1	WLD-10341-	Welding Modules	4.02
MPT-10000	Metal Machining I	4	WLD-10354		

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3)
		• ENG-10000 – Writing Lab (1) (if required)
		• ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	4	• CAR-10300 – Career Development Skills (1)
		• CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8-9	• MTH-10100 – Finite Math (4) or higher excluding MTH-20600
		• PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1) **OR** PHY-20201 – General Physics I (4) **AND** PHY-20202 – Lab (1)

MULTI-TECHNOLOGY COMPUTER AIDED DRAFTING AND DESIGN/MANUFACTURING PROCESSES

Associate in Applied Science (DMLT0)   **Minimum Credits: 68.02**

Introduction

The Multi-technology curriculum prepares students for employment in a variety of jobs in the drafting/CAD and manufacturing/CNC fields. By specializing in two areas, students will become familiar with the problems that arise in industry between engineering, tooling, and production, thus enabling the student to become a more valuable and flexible employee. Graduates of this program have been recognized in industry for their common-sense approach to problem-solving and their teamwork ability.

Kirtland Community College has had an ongoing 2 + 2 transfer agreement with Ferris State University for students who want to pursue a bachelor's degree. Both Kirtland and Ferris are currently revising curricula. The expectation is that the agreement will remain in place.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-21001	Geometric Dimensioning/Tolerancing	3
CAD-10200	Engineering Graphics II	1	CAD-21500	Tool & Machine Design/CAD	4
CAD-10300	Engineering Graphics III	1	MPT-10000	Metal Machining I	4
CAD-10600	CAD Detailing I	1	MPT-10100	Metal Machining II	4
CAD-10700	CAD Detailing II	1	MPT-20300	Metal Machining III	4
CAD-10800	CAD Detailing III	1	MPT-20800	Metal Machining IV	4
CAD-12000	Introduction to AutoCAD	1	MPT-21200	Statistical Processes Control	4
CAD-12100	Introduction to MasterCAM	1	WLD-10341	Welding Modules	4.02
CAD-20001	Parametric Solid Modeling	4	WLD-10354		
CAD-20501	Descriptive Geometry/CAD	4	--- ---	Three credits from below	

and three credit hours from the following list:

AUT-	Automotive elective		MTH-	Mathematics elective
CAD-	Computer Aided Drafting elective		WLD-	Welding elective
MPT-	Manufacturing Process Technology elective			

(continued)

MULTI-TECHNOLOGY COMPUTER AIDED DRAFTING AND DESIGN/MANUFACTURING PROCESSES

Associate in Applied Science (DMLT0)   (continuation)
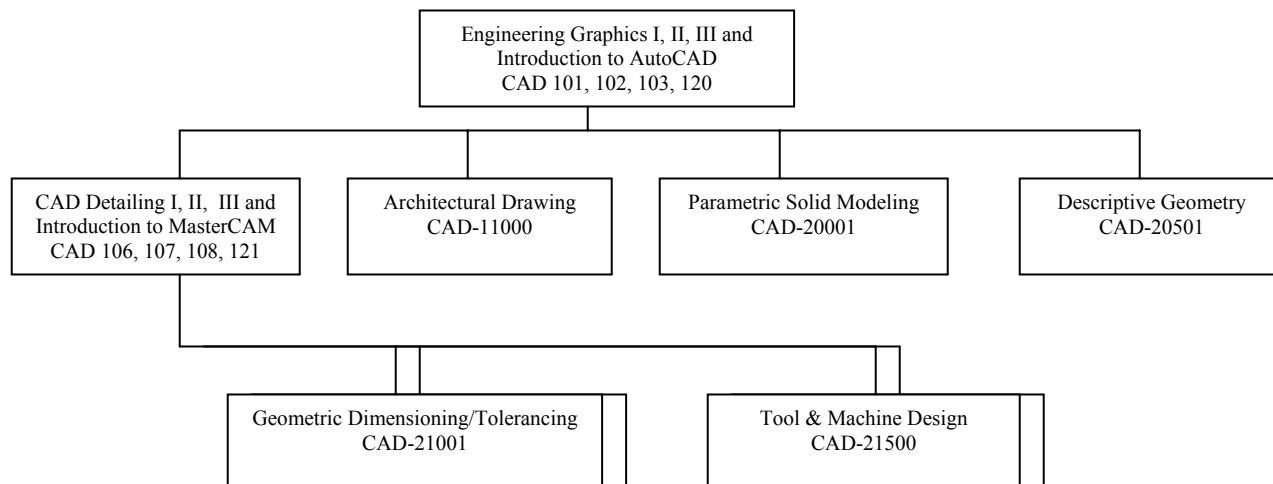
WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	1	• CAR-10300 – Career Development Skills (1)

Math/Natural Science	8-10	• MTH-10100 – Finite Math (4) **OR**
		   MTH-12100 – College Algebra with Trigonometry (4)
		• PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1) **OR**
		   PHY-20101 – General Physics I (4) and PHY-20102 - Lab (1) **OR**
		   PHY-22101 – College Physics I (4) **AND** PHY-22102 – Lab (1)

WELDING
Certificate of Completion (CWLD0)   **Minimum Credits: 31.20**

Introduction
Kirtland's program in Welding is designed to provide instruction and marketable skills needed for employment. Students may also elect to pursue an associate degree in Welding Technology at any point in the certificate program. Courses in the welding program at Kirtland can be used to satisfy the continuing education requirement for persons with the Certified Welding Inspector (CWI) credential through the American Welding Society (AWS).

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. Although there are no English, reading, or mathematic requirements for this certificate, these courses are the foundation for success in this program. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
AUT-16401	Basic Electricity	3	WLD-10341-WLD-10354	Welding Modules	4.02
CAD-10100	Engineering Graphics I	1	WLD-10355 WLD-10363	Welding Modules	4.18
CAD-10200	Engineering Graphics II	1	WLD-20400-WLD-20406	Welding Modules (+ any .11 module)	4
CAD-10300	Engineering Graphics III	1			
CAD-12000	Introduction to AutoCAD	1	WLD-275--	Directed Study/Welding Technology	4
MPT-10000	Metal Machining I	4			
MPT-20200	Metallurgy	3			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Life Skills	1	• CAR-10300 – Career Development Skills (1)

WELDING TECHNOLOGY

Associate in Applied Science (DWLD0)   **Minimum Credits: 60.20**

Introduction

Kirtland's program in Welding Technology is designed to provide instruction in the development of techniques and understanding of quality weldments. The program includes practice in metallic arc, oxy-acetylene welding and cutting, gas tungsten arc welding, and gas metal arc welding procedures. Students will have an understanding of the metallurgical aspects of the weld structure, welding equipment construction, welding codes, planning and estimating, and applying current industrial techniques. Courses in the welding program at Kirtland can be used to satisfy the continuing education requirement for persons with the Certified Welding Inspector (CWI) credential through the American Welding Society (AWS). Upon successful completion, students may be eligible to transfer for a bachelor's degree. Welding students should take into consideration that the program must be customized for transfer in order to fulfill the requirements of a four-year institution. All students who are interested in transferring should contact their advisor during the first semester at Kirtland.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
AUT-16401	Basic Electricity	3	WLD-10341-WLD-10354	Welding Modules	4.02
CAD-10100	Engineering Graphics I	1	WLD-10355-WLD-10363	Welding Modules	4.18
CAD-10200	Engineering Graphics II	1			
CAD-10300	Engineering Graphics III	1	WLD-20400-WLD-20406	Welding Modules (+ any .11 module)	4
CAD-12000	Introduction to AutoCAD	1			
MPT-10000	Metal Machining I	4	WLD-20419	Welder Qualifications	4
MPT-20200	Metallurgy	3	--- ---	At least 7 credits from below	
MPT-21200	Statistical Processes Control	4			

and at least 8 credit hours from the following list:

--- ---	Mathematics or technical electives	3-4

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher (excluding MTH-20500 or MTH-20600) • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1)

**M
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Certificates
- Carpentry
- Electrical Technology
- Heating/Ventilation/AC/Refrigeration
- Industrial Maintenance
- Machine Tool Technology
- Welding and Fabricating

Associate in Applied Science
- Carpentry
- Electrical Technology
- Heating/Ventilation/AC/Refrigeration
- Industrial Maintenance
- Machine Tool Technology
- Welding and Fabricating

For more information, please contact M-TEC.

989-705-3605
mtec.kirtland.edu

M-TEC^{SM} AT KIRTLAND GAYLORD
Michigan Technical Education Center

Introduction
The M-TEC^{SM} at Kirtland-Gaylord is a state-of-the art facility offering technical education in a unique, flexible, student-friendly manner. M-TEC^{SM} features state-of-the-art equipment, pedagogy, and curriculum taught by experienced faculty. Students can choose a course of study and build it from hundreds of skill-specific modules, resulting in a dynamic, flexible program preparing graduates to enter into high-paying jobs.

The mission of the M-TEC^{SM} is to provide educational programs and services to individuals in preparation for employment in high-skill, high-wage, high-demand occupations. In addition, through customized training and contracted education, business and industry partners in the Northern Michigan Region and their employees will be provided with educational opportunities specifically designed to upgrade and/or enhance the job skills necessary to compete in a local, state, national, and global economy.

Programs and Services
Programs and services have been developed in response to locally and regionally defined needs as determined by representatives of business and industry. Emphasis is placed on providing programs that lead to preparation for high-skill, high-wage, high-demand occupations. To ensure that graduates are well-prepared for entry into these occupations, special emphasis is placed on the ongoing assessment of student learning as each individual progresses through the various courses within each program.

Core Curricula
The M-TEC^{SM} serves postsecondary students who are interested in apprenticeship training, postsecondary degree programs, and job skills development. The specific programs at the M-TEC^{SM} include the following:

Certificate of Completion	Associate in Applied Science
Carpentry	Carpentry
Electrical Technology	Electrical Technology
Heating/Ventilation/AC/Refrigeration	Heating/Ventilation/AC/Refrigeration
Industrial Maintenance	Industrial Maintenance
Machine Tool Technology	Machine Tool Technology
Welding and Fabricating	Welding and Fabricating

Workforce Development
The Workforce Development Programs serve specific employers in the region and their current employees who are seeking job skills upgrades and/or personal growth. Areas of concentration include, but are not limited to, manufacturing technology, construction technology, information technology, human resources, MIOSHA safety, and business practices. For additional information, please call 989-705-3601.

WorkKeys^R
WorkKeys^R is used to assess the core competency levels of reading, math, locating information, and writing. Students seeking a certificate of completion or associate degree are required to take these assessment tests. For more information, please call 989-705-3600.

Career Readiness Course Offerings
Individuals with identified learning needs will enroll in custom-designed courses provided through the use of PLATO^R Software. PLATO^R Software has been designed to interface with the WorkKeys^R test and will automatically navigate a student to learning modules designed to meet their individual learning needs.

Dual Enrollment
Kirtland Community College will partner with area high schools to provide career and technical dual-enrollment opportunities to qualified high school students. For additional information, please call 989-705-3605.

M-TEC^{SM} AT KIRTLAND GAYLORD
Michigan Technical Education Center

Additional Programs

A key component of the mission of the M-TEC^{SM} is to provide educational opportunities to the Center's business and industry partners specifically designed to upgrade and/or enhance the job skills necessary to compete in a local, state, national, and global economy. Many of the training needs of industry are met through the modules developed for the manufacturing and construction technology certificate and degree programs. Employers are able to choose training topics for their employees from over 400 different modules in an effort to improve the skills of their existing workforce. Where necessary, new courses will be developed. Planning beyond manufacturing and construction technology includes the following:

*Information Technology***:** Microsoft XP, Office XP, Excel spreadsheets, Access databases, and PowerPoint.

*Business***:** Supervisory Training Series, Customer Relations, Labor Law Series (FLSA, MIOSHA, ADA, FMLA), and a Small Business Development Programming Series.

Safety Training: An ongoing series of MIOSHA training sessions required by employers from a variety of business and industries will be provided throughout the year to meet ongoing and new State requirements.

Program Delivery

The M-TEC^{SM} delivers programs and training through traditional classroom delivery and open learning, allowing the student to use printed materials, computer-aided instruction, distance education, and hands-on training activities to support self-directed, instructor-guided, student-centered learning. The emphasis on the open learning environment at the M-TEC^{SM} promotes flexible scheduling and individualized learning opportunities to better meet the needs of the student, as well as employers in the region.

The M-TEC^{SM} Facility

Construction of this state-of-the-art facility began in July 2000 and was completed in time to begin offering a full complement of programs and services beginning in January 2002. The M-TEC^{SM} facility has been designed *by* business and industry *for* business and industry. Using the expertise and input of local and regional manufacturing, building trades, and technology professionals, architects and engineers have created a 28,000 square-foot facility capable of supporting the current and future workforce development training needs of the region.

The M-TEC^{SM} facility contains both a precision tool and general manufacturing lab, a construction technology lab, a welding lab, and a computer aided drafting and manufacturing design lab, as well as classrooms that support general and computerized instruction and distance education. Meeting and videoconferencing rooms with state-of-the-art technology are available for use by business, industry, and community partners. Additionally, a Learning Resource Center is available to students enrolled at the M-TEC^{SM} as a result of the partnership with the University Center at Gaylord. For information, contact the M-TEC^{SM} at Kirtland-Gaylord at 989-705-3600 or 989-705-3605.

Residency Rules

Residents of Otsego County or the Kirtland Community College district should bring proof of residency in order to prove eligibility for in-district tuition rates.

Class Cancellations

In those instances when classes may be canceled due to inclement weather or other unusual circumstances, students should call the M-TEC^{SM} weather line at 989-705-3696. A pre-recorded message will indicate whether classes are being held that particular day.

CARPENTRY

Certificate of Completion (CCPT0)   **Minimum Credits: 31**

Introduction
After completing the requirements for the certificate, students may continue on with the Associate in Applied Science – Carpentry.

Prerequisites
WorkKeys[R] is used to assess the core competency levels of reading, mathematics, locating information, and writing. Students are required to take WorkKeys[R] assessments as they proceed to completion of requirements for a certificate and/or degree.

Focus
The following courses are the required focused courses in this program. These are the heart of the program.   Students must take these courses and any electives necessary to meet the minimum 31 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Course	Title
	Carpentry		**Carpentry Level III**
COR-10001	Basic Safety	CPT-20023	Exterior Finish
COR-10002	Introduction to Construction Math	CPT-20024	Roofing Applications
COR-10003	Introduction to Hand Tools	CPT-20025	Thermal & Moisture Protection
COR-10004	Introduction to Power Tools	CPT-20026	Stairs
COR-10005	Introduction to Blueprints	CPT-20027	Framing with Metal Studs
COR-10006	Basic Rigging	CPT-20028	Drywall One: Installation
	Carpentry Level I	CPT-20029	Drywall Two: Finishing
CPT-10007	Orientation to the Trade	CPT-20030	Interior Finish One: Doors
CPT-10008	Building Materials, Fasteners, & Adhesives	CPT-20031	Interior Finish Two: Suspended Ceilings
CPT-10009	Hand & Power Tools	CPT-20032	Interior Finish Three: Window/Door/Ceiling
CPT-10010	Floor Systems	CPT-20033	Interior Finish Four: Cabinet Installation
CPT-10011	Wall & Ceiling Framing		**Carpentry Level II**
CPT-10012	Roof Framing	CPT-20034	Site Layout II: Angular Measurement
CPT-10013	Windows & Exterior Doors	CPT-20035	Advanced Roof Systems
	Carpentry Level II	CPT-20036	Advanced Floor Systems
CPT-10014	Reading Plans & Elevations	CPT-20037	Advanced Wall Systems
CPT-10015	Site Layout I: Distance Measurements	CPT-20038	Advanced Stair Systems
CPT-10016	Concrete & Reinforcing Materials	CPT-20039	Introduction to Light Equipment
CPT-10017	Foundation & Flatwork	CPT-20040	Welding
CPT-10018	Concrete Forms	CPT-20041	Metal Buildings
CPT-10019	Reinforcing Concrete	CPT-20042	Project Management & Supervision
CPT-10020	Handling & Placing Concrete	CAP-10000	Core Capstone
CPT-10023	Manufactured Forms	--- ---	Technical Electives with advisor approval (1.1)

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

CARPENTRY
Associate in Applied Science (DCPT0)   **Minimum Credits: 60**

Introduction
Students who have completed the requirements for the certificate may continue on with the Associate in Applied Science - Carpentry by completing the requirements listed below.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus
In addition to the requirements for the certificate, students must complete the Focus and WRAP requirements and any electives necessary to meet the minimum 60 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-10700	CAD Detailing II	1
CAD-10200	Engineering Graphics II	1	CAD-10800	CAD Detailing III	1
CAD-10300	Engineering Graphics III	1	CAD-12000	Introduction to AutoCAD	1
CAD-10600	CAD Detailing I	1	CAD-12100	Introduction to MasterCAM	1

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10100 – American Government (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	4	• CAR 10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher excluding MTH-20500 or MTH-20600 • Any science elective (4) with lab

ELECTRICAL TECHNOLOGY
Certificate of Completion (CELC0)   **Minimum Credits: 31**

Introduction

After completing the requirements for the certificate, students may continue on with the Associate in Applied Science – Electrical Technology.

Prerequisites

WorkKeys[R] is used to assess the core competency levels of reading, mathematics, locating information, and writing. Students are required to take WorkKeys[R] assessments as they proceed to completion of requirements for a certificate and/or degree.

Focus

The following courses are the required focused courses in this program. These are the heart of the program.   Students must take these courses and any electives necessary to meet the minimum 31 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Course	Title
	Electrical Technology	ELT-10066	Contactors & Relays
COR-10001	Basic Safety	ELT-10067	Electrical Lighting
COR-10002	Introduction to Construction Math		**Electrical Technology Level III**
COR-10003	Introduction to Hand Tools	ELT-20068	Load Calculations – Branch Circuits
COR-10004	Introduction to Power Tools	ELT-20069	Conductor Selection & Calculations
COR-10005	Introduction to Blueprints	ELT-20070	Overcurrent Protection
COR-10006	Basic Rigging	ELT-20071	Raceway, Box & Fitting Fill Requirements
	Electrical Technology Level I	ELT-20072	Wiring Devices
ELT-10044	Electrical Safety	ELT-20073	Distribution Equipment
ELT-10045	Hand Bending	ELT-20074	Distribution System Transformers
ELT-10046	Fasteners & Anchors	ELT-20075	Basic Lighting
ELT-10047	Electrical Theory One	ELT-20076	Motor Calculations
ELT-10048	Electrical Theory Two	ELT-20077	Motor Maintenance, Part I
ELT-10049	Electrical Test Equipment	ELT-20078	Motor Controls
ELT-10050	Introduction to the NEC	ELT-20079	Electricity in HVAC Systems
ELT-10051	Raceways, Boxes, & Fittings	ELT-20080	Hazardous Locations
ELT-10052	Conductors		**Electrical Technology Level IV**
ELT-10053	Introduction to Electrical Blueprints	ELT-20081	Load Calculations – Feeder & Services
ELT-10054	Electrical Wiring: Commercial/Industrial	ELT-20082	Practical Applications of Lighting
ELT-10055	Electrical Wiring: Residential	ELT-20083	Standby & Emergency Systems
	Electrical Technology Level II	ELT-20084	Basic Electronic Theory
ELT-10056	Alternating Current	ELT-20085	Fire Alarm Systems
ELT-10057	Motors: Theory & Application	ELT-20086	Specialty Transformers
ELT-10058	Grounding	ELT-20087	Advanced Controls
ELT-10059	Conduit Bending	ELT-20088	HVAC Controls
ELT-10060	Boxes & Fittings	ELT-20089	Welding Machines
ELT-10061	Conductor Installation	ELT-20090	Heat Tracing & Freeze Protection
ELT-10062	Cable Tray	ELT-20091	Motor Maintenance, Part 2
ELT-10063	Conductor Terminations & Splices	ELT-20092	High Voltage Terminations/Splices
ELT-10064	Installation of Electrical Services	CAP-10000	Core Capstone
ELT-10065	Circuit Breakers & Fuses	--- ---	Technical Electives with advisor approval (3.2)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

ELECTRICAL TECHNOLOGY
Associate in Applied Science (DELC0)   **Minimum Credits: 60**

Introduction
Students who have completed the requirements for the certificate may continue on with the Associate in Applied Science – Electrical Technology by completing the requirements listed below.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus
In addition to the requirements for the certificate, students must complete the Focus and WRAP requirements and any electives necessary to meet the minimum 60 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-10700	CAD Detailing II	1
CAD-10200	Engineering Graphics II	1	CAD-10800	CAD Detailing III	1
CAD-10300	Engineering Graphics III	1	CAD-12000	Introduction to AutoCAD	1
CAD-10600	CAD Detailing I	1	CAD-12100	Introduction to MasterCAM	1

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10100 – American Government (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	4	• CAR 10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher excluding MTH-20500 or MTH-20600 • Any science elective (4) with lab

HEATING/VENTILATION/AC/REFRIGERATION

Certificate of Completion (CHVC0)   **Minimum Credits: 31**

Introduction

After completing the requirements for the certificate, students may continue on with the Associate in Applied Science – Heating/Ventilation/AC/Refrigeration.

Prerequisites

WorkKeys[R] is used to assess the core competency levels of reading, mathematics, locating information, and writing. Students are required to take WorkKeys[R] assessments as they proceed to completion of requirements for a certificate and/or degree.

Focus

The following courses are the required focused courses in this program. These are the heart of the program.   Students must take these courses and any electives necessary to meet the minimum 31 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Course	Title
	HVACR	HVC-10121	Maintenance Skills/Service Tech
COR-10001	Basic Safety	HVC-10122	Electric Heating
COR-10002	Introduction to Construction Math	HVC-10123	Control Circuit Troubleshooting
COR-10003	Introduction to Hand Tools		**HVAC Level III**
COR-10004	Introduction to Power Tools	HVC-20140	Planned Maintenance
COR-10005	Introduction to Blueprints	HVC-20141	Troubleshooting Gas Heating
COR-10006	Basic Rigging	HVC-20142	Troubleshooting Electric Heating
	HVAC Level I	HVC-20143	Troubleshooting Oil Heating
HVC-10093	Introduction to HVAC	HVC-20144	Troubleshooting Cooling
HVC-10094	Trade Mathematics	HVC-20145	Troubleshooting Heat Pumps
HVC-10095	Tools of the Trade	HVC-20146	Troubleshooting Accessories
HVC-10096	Copper & Plastic Piping Practices	HVC-20147	Troubleshooting Electronic Controls
HVC-10097	Soldering & Brazing	HVC-20148	Hydronic Heating & Cooling Systems
HVC-10098	Ferrous Metal Piping Practices	HVC-20149	Airside Systems
HVC-10099	Basic Electricity	HVC-20150	Air Properties/Air System Balancing
HVC-10100	Introduction to Cooling		**HVAC Level IV**
HVC-10101	Introduction to Heating	HVC-20128	Advanced Blueprint Reading
	HVAC Level II	HVC-20129	Indoor Air Quality
HVC-10103	Chimneys, Vents, & Flues	HVC-20130	Energy Conservation Equipment
HVC-10105	Alternating Current	HVC-20131	Energy Management Systems
HVC-10106	Basic Electronics	HVC-20132	Water Treatment
HVC-10109	Accessories & Optional Equipment	HVC-20133	System Start-Up & Shut-Down
HVC-10110	Metering Devices	HVC-20134	Heating & Cooling System Design
HVC-10111	Compressors	HVC-20135	Commercial & Industrial Refrigeration
HVC-10112	Heat Pumps	CAP-10000	Core Capstone
HVC-10113	Leak Detection, Evacuation, Recovery	--- ---	Technical Electives with advisor approval (4.9)
HVC-10120	Air Distribution Systems		

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

HEATING/VENTILATION/AC/REFRIGERATION
Associate in Applied Science (DHCV0)   **Minimum Credits: 60**

Introduction
Students who have completed the requirements for the certificate may continue on with the Associate in Applied Science –
Heating/Ventilation/AC/Refrigeration by completing the requirements listed below.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics
in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in
basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or
COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to
prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be
tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with
DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
In addition to the requirements for the certificate, students must complete the Focus and WRAP requirements and any electives necessary
to meet the minimum 60 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students
should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-10700	CAD Detailing II	1
CAD-10200	Engineering Graphics II	1	CAD-10800	CAD Detailing III	1
CAD-10300	Engineering Graphics III	1	CAD-12000	Introduction to AutoCAD	1
CAD-10600	CAD Detailing I	1	CAD-12100	Introduction to MasterCAM	1

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well
Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which
courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10100 – American Government (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	4	• CAR 10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher excluding MTH-20500 or MTH-20600 • Any science elective (4) with lab

INDUSTRIAL MAINTENANCE
Certificate of Completion (CIND0)   **Minimum Credits: 30.3**

Introduction
After completing the requirements for the certificate, students may continue on with the Associate in Applied Science – Industrial Maintenance.

Prerequisites
WorkKeys[R] is used to assess the core competency levels of reading, mathematics, locating information, and writing. Students are required to take WorkKeys[R] assessments as they proceed to completion of requirements for a certificate and/or degree.

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Students must take these courses and any electives necessary to meet the minimum 30.3 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Course	Title
	Industrial Maintenance		**Industrial Maintenance Level III**
COR-10001	Basic Safety	IND-20228	Overcurrent Protection
COR-10002	Introduction to Construction Math	IND-20230	Motor Controls
COR-10003	Introduction to Hand Tools	IND-20231	Motor Maintenance, Part One
COR-10004	Introduction to Power Tools	IND-20233	Installing Couplings
COR-10005	Introduction to Blueprints	IND-20234	Installing Mechanical Seals
COR-10006	Basic Rigging	IND-20235	Installing Belt & Chain Drives
	Industrial Maintenance Level I	IND-20236	Installing Bearings
IND-10202	Electrical Safety	IND-20237	Gaskets & Packing
IND-10203	Hand Bending	IND-20238	Installing Seals
IND-10204	Fasteners & Anchors	IND-20239	Pumps
IND-10205	Electrical Theory One	IND-20240	Basic Hydraulic Systems
IND-10207	Electrical Test Equipment	IND-20241	Basic Pneumatic Systems
IND-10208	Introduction to NEC		**Industrial Maintenance IV**
IND-10209	Conductors	IND-20245	Advanced Controls
IND-10210	Introduction to Electrical Blueprints	IND-20246	Commercial & Industrial Refrigeration
IND-10211	Oxyfuel Cutting	IND-20249	Conventional Alignment
	Industrial Maintenance Level II	IND-20252	Steam Traps
IND-10212	Wiring: Commercial & Industrial	IND-20253	Steam Systems
IND-10213	Alternating Current	IND-20254	Programmable Logic Controllers
IND-10214	Motors: Theory & Application		**Industrial Maintenance Level V**
IND-10215	Grounding	IND-20258	Preventive & Predictive Maintenance
IND-10216	Boxes & Fittings	IND-20259	Performing Reverse Alignment
IND-10218	Conductor Terminations & Splices	IND-20261	Troubleshooting/Repairing Pneumatic Eqpmt
IND-10220	Circuit Breakers & Fuses	IND-20262	Troubleshooting/Repairing Pumps
IND-10221	Contactors & Relays	IND-20263	Troubleshooting/Repairing Hydraulic Eqpmt
IND-10222	Lubrication	IND-20264	Troubleshooting/Repairing Gearboxes
IND-10223	Introduction to Bearings	IND-20265	Programmable Logic Controllers
IND-10224	Copper & Plastic Piping Practices	IND-20267	Flow, Pressure, Level, & Temperature
IND-10225	Ferrous Metal Piping Practices	IND-20269	Precision Measuring Tools
IND-10226	Piping Systems	CAP-10000	Core Capstone
IND-10227	SMAW Equipment & Setup		

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

INDUSTRIAL MAINTENANCE
Associate in Applied Science (DIND0)   **Minimum Credits: 60.3**

Introduction
Students who have completed the requirements for the certificate may continue on with the Associate in Applied Science – Industrial Maintenance by completing the requirements listed below.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus
In addition to the requirements for the certificate, students must complete the Focus and WRAP requirements and any electives necessary to meet the minimum 60.3 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CAD-10100	Engineering Graphics I	1	CAD-10700	CAD Detailing II	1
CAD-10200	Engineering Graphics II	1	CAD-10800	CAD Detailing III	1
CAD-10300	Engineering Graphics III	1	CAD-12000	Introduction to AutoCAD	1
CAD-10600	CAD Detailing I	1	CAD-12100	Introduction to MasterCAM	1

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)

Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR**
		  POL-10100 – American Government (3) **OR**
		  POL-10500 – American Government with Humanities (3)

Life Skills	4	• CAR 10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher excluding MTH-20500 or MTH-20600 • Any science elective (4) with lab
Elective	1	• Technical Elective as approved by advisor

MACHINE TOOL TECHNOLOGY

Certificate of Completion (CMTT0)   **Minimum Credits: 34.15**

Introduction

 After completing the requirements for the certificate, students may continue on with the Associate in Applied Science – Machine Tool Technology.

Prerequisites

WorkKeys[R] is used to assess the core competency levels of reading, mathematics, locating information, and writing. Students are required to take WorkKeys[R] assessments as they proceed to completion of requirements for a certificate and/or degree.

Focus

The following courses are the required focused courses in this program. These are the heart of the program and any electives necessary to meet the minimum 34.15 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Course	Title
	Metal Machining Level I		**Metrology**
MPT-10272	Machine Tool Safety	MPT-10308	Micrometer
MPT-10273	Identifying Surface Finishes	MPT-10309	Calipers: Digital, Vernier, Dial
MPT-10274	Shop Math – Speeds & Feeds	MPT-10310	Telescoping Gage
MPT-10275	Sharpening Drill Bits	MPT-10311	Depth Micrometer
MPT-10276	Drilling on a Press	MPT-10312	Dial Indicators
MPT-10277	Power Tap on the Drill Press	MPT-10313	Gage Blocks
MPT-10278	Drill Press Project	MPT-10314	Machine Shop Trigonometry
MPT-10279	Band Saw Blade Welding	MPT-10315	Height Gage
MPT-10280	Vertical Band Saw Project	MPT-10316	Sine Bar
MPT-10281	Maintaining the Lathe		**Metallurgy**
MPT-10282	Grinding Lathe Tools	MPT-20319	Property of Metals/Physical Metallurgy
MPT-10283	Facing on the Lathe	MPT-20320	Constitution of Alloys
MPT-10284	Aligning Lathe Centers	MPT-20321	Carbon & Alloy Steels
MPT-10285	Cutting External Threads	MPT-20322	Heat & Surface Treat for Steel
MPT-10286	Dial In Vise/Train In Head	MPT-20323	Cast Irons
MPT-10287	Fly Cutter & End Mill/Square Block	MPT-20324	Light Metals & Alloys
MPT-10288	Digital Read/Drill, Tap, & Ream	MPT-20325	Lead, Tin, & Zinc
	Metal Machining Level II	MPT-20326	Introduction to Metallurgy
MPT-10289	Parallel Turning on the Lathe	MPT-20327	Examining & Identifying Metals
MPT-10290	Groove & Part on the Lathe	MPT-20328	Fundamentals of Welding & Brazing/Casting
MPT-10291	Cutting Internal Threads	MPT-20329	Fundamentals of Welding Stainless Steel
MPT-10292	Knurling on the Lathe	MPT-20330	Testing Metals
MPT-10293	Sharpen End Mills (End)		**Welding Level I**
MPT-10294	Sharpen Various Cutters	WLD-10341	Welding Shop Safety Rules
MPT-10295	Tilt Head & Turn Vise/Cut "V"	WLD-10342	Identifying Joints, Welds & Positions
MPT-10296	Turntable/Cut Radii	WLD-10343	Measuring with Rules & Squares
MPT-10297	Sine Plate/Cut Angles	WLD-10344	Define Oxyacetylene Welding Terms
MPT-10298	Boring Head/Bore 4 Holes	WLD-10345	Setting Up Oxyacetylene Welding Station
MPT-10299	Indexing Head/Key Ways	WLD-10346	Running Beads w/ & w/o Filler
MPT-10302	Square & Block (6 Sides)	WLD-10347	Weld Basic Joints in Flat Position
MPT-10303	Grind Angles & Radii	WLD-10348	Oxyacetylene/Plasma/Carbon Arc Cutting
MPT-10304	Parallel Grind to Print	WLD-10349	Cut Ferrous Metal w/Oxyacetylene
MPT-10305	External/Internal Tapers	WLD-10350	Brazing Basic Joints in Flat Position
MPT-10306	CNC Fundamentals	WLD-10351	Braze Welding V-Groove Butt Joint
MPT-10364	Cut Radius & External Tapers	WLD-10352	Arc Welding Terms & Definitions
MPT-10408	Math for Dividing Head	WLD-10353	Identifying/Selecting Electrode/SMAW
MPT-10409	Dividing Heat/Cut Gear	WLD-10354	Striking an Arc & Running Stringer Beads

MACHINE TOOL TECHNOLOGY
Certificate of Completion (CMTT0)   (continuation)

Course	Title	Course	Title
	Welding Level II		**CAD**
WLD-10355	Analyzing Good Weld Character	CAD-10100	Engineering Graphics I
WLD-10356	Multipass Fillet Welds – Flat Position	CAD-10200	Engineering Graphics II
WLD-10357	Increasing Weld Size Using Weave Tech	CAD-10300	Engineering Graphics III
WLD-10358	V-Groove Butt Joint w/Backing Plate	CAD-10600	CAD Detailing I
WLD-10359	V-Groove Butt Joint w/o Backing Plate	CAD-10700	CAD Detailing II
WLD-10360	Butt Joints w/Backing Plate Vertical Up	CAD-10800	CAD Detailing III
WLD-10361	Butt Joints w/o Backing Plate Vertical Up	CAD-12000	Introduction to AutoCAD
WLD-10362	Welding Blueprint Reading	CAD-12100	Introduction to Master CAM
WLD-10363	Fabricating a Project	CAP-10000	Core Capstone

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

MACHINE TOOL TECHNOLOGY
Associate in Applied Science (DMTT0) **Minimum Credits: 60.19**

Introduction
Students who have completed the requirements for the certificate may continue on with the Associate in Applied Science – Machine Tool Technology by completing the requirements listed below.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required) ☐ Mathematics:_____
☐ English:_____ ☐ Reading: _____

Focus
In addition to the requirements for the certificate, students must complete the Focus and WRAP requirements and any electives necessary to meet the minimum 60.19 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title		Course	Title
	Metal Machining Level III			**Metal Machining Level IV**
MPT-20366	EDM Fundamentals		MPT-20371	Precision Vice
MPT-20367	EDM Project		MPT-20372	1-2-3
MPT-20368	Universal Indexing Head		MPT-20373	Tool Makers V-Blocks

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)

Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR**
		   POL-10100 – American Government (3) **OR**
		   POL-10500 – American Government with Humanities (3)

Life Skills	4	• CAR 10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher excluding MTH-20500 or MTH-20600 • Any science elective (4) with lab

WELDING AND FABRICATING

Certificate of Completion (CWAF0)   **Minimum Credits: 30.89**

Introduction

After completing the requirements for the certificate, students may continue on with the Associate in Applied Science – Welding and Fabricating. Courses in the welding program at Kirtland can be used to satisfy the continuing education requirement for persons with the Certified Welding Inspector (CWI) credential through the American Welding Society (AWS).

Prerequisites

WorkKeys[R] is used to assess the core competency levels of reading, mathematics, locating information, and writing. Students are required to take WorkKeys[R] assessments as they proceed to completion of requirements for a certificate and/or degree.

Focus

The following courses are the required focused courses in this program. These are the heart of the program.   Students must take these courses and any electives necessary to meet the minimum 30.89 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Course	Title
	Welding Level I	MPT-10275	Sharpening Drill Bits
WLD-10341	Welding Shop Safety Rules	MPT-10276	Drilling on a Press
WLD-10342	Identifying Joints, Welds & Positions	MPT-10277	Power Tap on the Drill Press
WLD-10343	Measuring with Rules & Squares	MPT-10278	Drill Press Project
WLD-10344	Define Oxyacetylene Welding Terms	MPT-10279	Band Saw Blade Welding
WLD-10345	Setting Up Oxyacetylene Welding Station	MPT-10280	Vertical Band Saw Project
WLD-10346	Running Beads with & without Filler	MPT-10281	Maintaining the Lathe
WLD-10347	Weld Basic Joints in Flat Position	MPT-10282	Grinding Lathe Tools
WLD-10348	Oxyacetylene/Plasma/Carbon Arc Cutting	MPT-10283	Facing on the Lathe
WLD-10349	Cut Ferrous Metal w/Oxyacetylene	MPT-10284	Aligning Lathe Centers
WLD-10350	Brazing Basic Joints in Flat Position	MPT-10285	Cutting External Threads
WLD-10351	Braze Welding V-Groove Butt Joint	MPT-10286	Dial In Vise/Train In Head
WLD-10352	Arc Welding Terms & Definitions	MPT-10287	Fly Cutter & End Mill/Square Block
WLD-10353	Identifying/Selecting Electrode/SMAW	MPT-10288	Digital Read/Drill, Tap, & Ream
WLD-10354	Striking an Arc & Running Stringer Beads		**Metallurgy**
	Welding Level II	MPT-20319	Property of Metals/Physical Metallurgy
WLD-10355	Analyzing Good Weld Character	MPT-20320	Constitution of Alloys
WLD-10356	Multipass Fillet Welds – Flat Position	MPT-20321	Carbon & Alloy Steels
WLD-10357	Increasing Weld Size Using Weave Tech	MPT-20322	Heat & Surface Treat for Steel
WLD-10358	V-Groove Butt Joint w/Backing Plate	MPT-20323	Cast Irons
WLD-10359	V-Groove Butt Joint w/o Backing Plate	MPT-20324	Light Metals & Alloys
WLD-10360	Butt Joints w/Backing Plate Vertical Up	MPT-20325	Lead, Tin, & Zinc
WLD-10361	Butt Joints w/o Backing Plate Vertical Up	MPT-20326	Introduction to Metallurgy
WLD-10362	Welding Blueprint Reading	MPT-20327	Examining & Identifying Metals
WLD-10363	Fabricating a Project	MPT-20328	Fundamentals of Welding & Brazing/Casting
	Welding Level III	MPT-20329	Fundamentals of Welding Stainless Steel
WLD-20400	Explaining Gas Metal Arc Welding	MPT-20330	Testing Metals
WLD-20401	Establishing an Arc/Making Bead/GMAW		**Electrical Technology**
WLD-20402	Welding Basic Joints in All Positions	ELT-10047	Electrical Theory One
WLD-20403	Welding Basic Joints/GMAW Aluminum	ELT-10048	Electrical Theory Two
WLD-20404	Pulse Arc Welding	ELT-10049	Electrical Test Equipment
WLD-20405	Explaining Gas Tungsten Arc Welding	ELT-10053	Introduction to Electrical Blueprints
WLD-20406	Starting an Arc & Running Stringer Beads	ELT-10056	Alternating Current
	Metal Machining Level I	ELT-10058	Grounding
MPT-10272	Machine Tool Safety	ELT-20084	Basic Electronic Theory
MPT-10273	Identifying Surface Finishes	ELT-20089	Welding Machines
MPT-10274	Shop Math – Speeds & Feeds		

WELDING AND FABRICATING

Certificate of Completion (CWAF0)   (continuation)

Course	Title
CAD-10100	Engineering Graphics I
CAD-10200	Engineering Graphics II
CAD-10300	Engineering Graphics III
CAD-10600	CAD Detailing I
CAD-10700	CAD Detailing II

Course	Title
CAD-10800	CAD Detailing III
CAD-12000	Introduction to AutoCAD
CAD-12100	Introduction to MasterCAM
CAP-10000	Core Capstone

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Students pursuing a certificate begin by focusing on courses that pertain specifically to the field of interest. General education courses will be taken as the student continues on to the associate degree level.

WELDING AND FABRICATING

Associate in Applied Science (DWAF0)   **Minimum Credits: 60.02**

Introduction

Students who have completed the requirements for the certificate may continue on with the Associate in Applied Science – Welding and Fabricating by completing the requirements listed below. Courses in the welding program at Kirtland can be used to satisfy the continuing education requirement for persons with the Certified Welding Inspector (CWI) credential through the American Welding Society (AWS).

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus

In addition to the requirements for the certificate, students must complete the Focus and WRAP requirements and any electives necessary to meet the minimum 61.02 credit hour requirement for graduation. Some of the courses listed may have prerequisites. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title		Course	Title
	Welding Level IV		WLD-20424	Making a Corner Joint-Flat Position
WLD-20419	Complete 10 Welder Qualifications		WLD-20425	Welding Tee Joints – Vertical Up
	Welding Level V		WLD-20426	Welding Tee Joints – Vertical Down
WLD-20420	Cutting Ferrous/Non-Ferrous Metals		WLD-20427	Butt Joint w/Back Plate – Vertical Down
WLD-20421	Cutting Ferrous Metals/Carbon Arc		WLD-20428	Butt Joint w/o Back Plate – Vertical Down
WLD-20422	Silver Brazing Dissimilar Metals		WLD-20429	Butt Joint w/Back Plate – Horizontal
WLD-20423	Lead Soldering Seams		WLD-20430	Butt Joint w/o Back Plate – Horizontal

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10100 – American Government (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	4	• CAR 10300 – Career Development Skills (1) • CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher excluding MTH-20500 or MTH-20600 • Any science elective (4) with lab

Certificates
- Medical Billing and Coding
- Medical Clerk
- Medical Transcription
- Office Assistant
- Word Processing Specialist

Associate in Applied Science
- Administrative Assistant
- Advanced Word Processing Specialist
- Legal Secretary
- Medical Secretary
- Medical Transcription

For more information, please contact Office Information Systems.

Kathy Taylor	989-275-5000, extension 237
FLEX Lab	989-275-5000, extension 213

O F F I C E I N F O R M A T I O N S Y S T E M S

MEDICAL BILLING AND CODING
Certificate of Completion (CMBC0)   **Minimum Credits: 35**

Introduction
The Medical Billing and Coding program provides the career training necessary to be proficient in completing insurance claims. The student learns billing and collection techniques. The student works to become proficient in assigned ICD-9-CM and CPT codes.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	OIS-10403 OIS-18203	Keyboarding I-C **OR** Word Processing I-Word-C	 1
ALH-10801	Pathology	3	OIS-10600	Intro to Health Information Systems	3
ALH-11201	Medical Ethics & Law	1	OIS-11300	Medical Coding I	3
OIS-10401 OIS-18201	Keyboarding I-A **OR** Word Processing I-Word-A	 1	OIS-11500	Medical Insurance Billing	3
OIS-10402 OIS18202	Keyboarding I-B **OR** Word Processing I-Word-B	 1	OIS-21300	Medical Coding II	3
			OIS-24109	Internship – Medical Billing/Coding	4

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)
Math/Natural Science	4	• BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1)

MEDICAL CLERK

Certificate of Completion (CMOA1)   **Minimum Credits: 34**

Introduction

The Medical Clerk program is designed to train students for employment as medical clerks. The program emphasizes development of proficiency in administrative medical office skills including preparation of correspondence, transcription of medical dictation, billing, insurance, receptionist duties, ethics and law, and medical office procedures.   Students may transfer into the Medical Secretary program at any time during or after completion of the certificate program and earn an Associate in Applied Science degree.

Prerequisites

A GED or high school diploma is required for admission to the program. Good physical and mental health is required. Students should have completed a basic typing course with a grade of C or better prior to enrollment.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	OIS-11403	Keyboarding II-C	1
ALH-11201	Medical Ethics & Law	1	OIS-18201	Word Processing I-Word-A	1
OIS-10500	Business Correspondence	3	OIS-18202	Word Processing I-Word-B	1
OIS-10701	Medical Office Transcription-A	1	OIS-18203	Word Processing I-Word-C	1
OIS-10702	Medical Office Transcription-B	1	OIS-20501	Records Management-A	1
OIS-10703	Medical Office Transcription-C	1	OIS-20502	Records Management-B	1
OIS-11201 ACC-12500	Business Calculations **OR** Computer Accounting/QuickBooks	3-4	OIS-20503	Records Management-C	1
			OIS-20901	Medical Office Administration	2
OIS-11401	Keyboarding II-A	1	OIS-20902	Intro to Medical Billing & Coding	2
OIS-11402	Keyboarding II-B	1	OIS-24108	Internship – Medical Clerk	3

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)

MEDICAL SECRETARY

Associate in Applied Science (DMES1)   **Minimum Credits: 60**

Introduction

Medical Secretary is one of the specialized secretarial programs Kirtland offers. Graduates of this program are trained in a variety of skills that will enable them to work for physicians in either a private medical office or in various hospital settings such as medical records, the business office, or the emergency room. This program places emphasis on the development of proficiency in word processing and related computerized tasks, medical office procedures, insurance billing and coding, transcription of medical dictation for medical specialties, and administrative secretarial duties.

Prerequisites

Students should have completed a basic typing course with a grade of C or better prior to enrollment.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	OIS-11403	Keyboarding II-C	1
ALH-11201	Medical Ethics & Law	1	OIS-18201	Word Processing I-Word-A	1
OIS-10500	Business Correspondence	3	OIS-18202	Word Processing I-Word-B	1
OIS-10600	Intro to Health Information Systems	3	OIS-18203	Word Processing I-Word-C	1
OIS-10701	Medical Office Transcription-A	1	OIS-20501	Records Management-A	1
OIS-10702	Medical Office Transcription-B	1	OIS-20502	Records Management-B	1
OIS-10703	Medical Office Transcription-C	1	OIS-20503	Records Management-C	1
OIS-10801	Medical Transcription I-A	1	OIS-20800	Medical Keyboarding	3
OIS-10802	Medical Transcription I-B	1	OIS-20901	Medical Office Administration	2
OIS-10803	Medical Transcription I-C	1	OIS-20902	Intro to Medical Billing & Coding	2
OIS-11201 ACC-12500	Business Calculations **OR** Computer Accounting/QuickBooks	3-4	OIS-22100	Office Pharmacology	2
			OIS-22200	Word Processing II-Word	3
OIS-11401	Keyboarding II-A	1	OIS-24103	Internship – Medical Secretary	3
OIS-11402	Keyboarding II-B	1	--- ---	Elective with advisor approval	0-1

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— <u>W</u>ell <u>R</u>ounded <u>A</u>cademic <u>P</u>rogram. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher • BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1)

MEDICAL TRANSCRIPTION
Certificate of Completion (CMET0)   **Minimum Credits: 31**

Introduction
This program provides the career training necessary to transcribe physicians' dictated reports for medical records used in medical offices, hospitals, insurance companies, courts, governmental agencies and other medical-related businesses. The student will acquire a background in general office skills as well as intensive training in transcribing actual medical dictation. Students may continue in this program by pursuing the Associate in Applied Science – Medical Transcription degree.

Prerequisites
A student must have completed the equivalent of one year of typing and be able to type a minimum of 40 words per minute in order to enter the program.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	OIS-10803	Medical Transcription I-C	1
ALH-10801	Pathology	3	OIS-18201	Word Processing I-Word-A	1
ALH-11201	Medical Ethics & Law	1	OIS-18202	Word Processing I-Word-B	1
ALH-12401	Lifetime Wellness & Nutrition	2	OIS-18203	Word Processing I-Word-C	1
OIS-10701	Medical Office Transcription-A	1	OIS-20601	Medical Transcription II-A	1
OIS-10702	Medical Office Transcription-B	1	OIS-20602	Medical Transcription II-B	1
OIS-10703	Medical Office Transcription-C	1	OIS-20603	Medical Transcription II-C	1
OIS-10801	Medical Transcription I-A	1	OIS-22100	Office Pharmacology	2
OIS-10802	Medical Transcription I-B	1	OIS-24106	Internship – Medical Transcription	4

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Math/Natural Science	4	• BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1)

MEDICAL TRANSCRIPTION
Associate in Applied Science (DMET0)   **Minimum Credits: 60**

Introduction
This program provides the career training necessary to transcribe physicians' dictated reports for medical records used in medical offices, hospitals, insurance companies, courts, governmental agencies, and other medical-related businesses. The student will acquire a background in general office skills as well as intensive training in transcribing actual medical dictation.

Prerequisites
A student must have completed the equivalent of one year of typing and be able to type a minimum of 40 words per minute in order to enter the program.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	OIS-18202	Word Processing I-Word-B	1
ALH-10801	Pathology	3	OIS-18203	Word Processing I-Word-C	1
ALH-11201	Medical Ethics & Law	1	OIS-20501	Records Management-A	1
OIS-10500	Business Correspondence	3	OIS-20502	Records Management-B	1
OIS-10600	Intro to Health Information Systems	3	OIS-20503	Records Management-C	1
OIS-10701	Medical Office Transcription-A	1	OIS-20601	Medical Transcription II-A	1
OIS-10702	Medical Office Transcription-B	1	OIS-20602	Medical Transcription II-B	1
OIS-10703	Medical Office Transcription-C	1	OIS-20603	Medical Transcription II-C	1
OIS-10801	Medical Transcription I-A	1	OIS-20701	Medical Transcription III-A	1
OIS-10802	Medical Transcription I-B	1	OIS-20702	Medical Transcription III-B	1
OIS-10803	Medical Transcription I-C	1	OIS-20703	Medical Transcription III-C	1
OIS-11401	Keyboarding II-A	1	OIS-20800	Medical Keyboarding	3
OIS-11402	Keyboarding II-B	1	OIS-22100	Office Pharmacology	2
OIS-11403	Keyboarding II-C	1	OIS-24106	Internship – Medical Transcription	4
OIS-18201	Word Processing I-Word-A	1	--- ---	Elective with advisor approval	0-1

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)
Math/Natural Science	8	• MTH-10100 – Finite Math (4) or higher • BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1)

OFFICE ASSISTANT
Certificate of Completion (COAS0)   **Minimum Credits: 30**

Introduction
Kirtland's Office Assistant program is designed to prepare the students with marketable skills needed for employment in office work situations where clerical and/or secretarial skills are required. All courses in this program may apply to the Associate in Applied Science - Administrative Assistant degree. Students may transfer to the two-year program at any time during, or after completion of, the certificate program. Courses in the certificate program offer the same transferability as those in the associate degree program.

Prerequisites
Students should have completed a basic typing course with a grade of "C" or better prior to enrollment.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr
OIS-10401	Keyboarding I-A **OR**	
OIS-11401	Keyboarding II-A	3
OIS-10402	Keyboarding I-B **OR**	
OIS-11402	Keyboarding II-B	
OIS-10403	Keyboarding I-C **OR**	
OIS-11403	Keyboarding II-C	
OIS-10500	Business Correspondence	3
OIS-11201	Business Calculations **OR**	
ACC-12500	Computer Accounting/QuickBooks	3-4

Course	Title	Cr
OIS-11401	Keyboarding II-A **AND**	1
OIS-11402	Keyboarding II-B **AND**	1
OIS-11403	Keyboarding II-C	1
OR	**OR**	3
OIS-21400	Keyboarding III	
--- ---	12 credits or more from below	

and 12 or more credit hours from the following list:

OIS-	OIS electives with advisor approval	6	--- ---	General electives with advisor approval	6

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)

_____

Note: With advisor permission, a student may substitute more advanced courses for beginning courses listed; previous education will determine which courses best satisfy the student's needs.

ADMINISTRATIVE ASSISTANT

Associate in Applied Science (DADA0)   **Minimum Credits: 60**

Introduction

The office careers program at Kirtland includes intensive training in basic and advanced secretarial and clerical courses stressing the use of current office procedures and practices assisted by modern equipment and facilities. A variety of courses are offered to meet the needs of beginning and advanced students. The program is designed to enable graduates to obtain positions of responsibility in a variety of office situations. Graduates may also be eligible to receive a CPS (Certified Professional Secretary) certification.

Prerequisite

Students should have completed a basic typing course with a grade of "C" or better prior to enrollment.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
BUS-10100	Introduction to Business	3	OIS-19001	Machine Transcription-A	1
BUS-21500	Legal Environment of Business	3	OIS-19002	Machine Transcription-B	1
CIS-17001	Microsoft Office	3	OIS-19003	Machine Transcription-C	1
OIS-10500	Business Correspondence	3	OIS-20501	Records Management-A	1
OIS-11201 ACC-12500	Business Calculations **OR** Computer Accounting/QuickBooks	3-4	OIS-20502	Records Management-B	1
			OIS-20503	Records Management-C	1
OIS-11401	Keyboarding II-A	1	OIS-21000	Office Procedures & Practices	3
OIS-11402	Keyboarding II-B	1	OIS-21400	Keyboarding III	3
OIS-11403	Keyboarding II-C	1	OIS-21500	Desktop Publishing for the Office	3
OIS-18201	Word Processing I-Word-A	1	OIS-22200	Word Processing II-Word	3
OIS-18202	Word Processing I-Word-B	1	OIS-24101	Internship – Administrative Assistant	3
OIS-18203	Word Processing I-Word-C	1	_ _ _ - _ _ _	elective with advisor approval	0-1

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— <u>W</u>ell <u>R</u>ounded <u>A</u>cademic <u>P</u>rogram. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)

(continued)

ADMINISTRATIVE ASSISTANT
Associate in Applied Science (DADA0)   (continuation)

Math/Natural Science	8-9	• MTH-10100 – Finite Math or higher (4)
		• One science with a lab selected from the following list. Students selecting those courses listed with **AND** must take both the lecture and the lab. Those courses listed without an **AND** have the lab and lecture combined into one course. BIO-10100 – General Biology (4) BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1) BIO-11500 – Anatomy & Physiology I (4) BIO-12000 – Life Science I (4) BIO-20100 – Zoology (4) BIO-20200 – Botany (4) BIO-21300 – Nature Study (4) BIO-21500 – Pathophysiology (4) CHE-10003 – Chemical Science (3) **AND** CHE-10004 – Lab (1) CHE-10101 – General Chemistry I (4) **AND** CHE-10102 – Lab (1) CHE-10201 – General Chemistry II (4) **AND** CHE-10202 – Lab (1) CHE-20101 – Organic Chemistry I (4) **AND** CHE-20102 – Lab (1) CHE-20201 – Organic Chemistry II (4) **AND** CHE-20202 – Lab (1) GEL-10500 – Physical Geology (4) PHY-10501 – Physical Science (3) **AND** PHY-10502 Lab (1) PHY-20101 – General Physics I (4) **AND** PHY-20102 – Lab (1) PHY-20201 – General Physics II (4) **AND** PHY-20202 – Lab (1) PHY-22101 – College Physics I (4) **AND** PHY-22102 – Lab (1) PHY-22201 – College Physics II (4) **AND** PHY-22202 – Lab (1)

WORD PROCESSING SPECIALIST
Certificate of Completion (CWPS0)   **Minimum Credits: 30**

Introduction

Kirtland's Word Processing Specialist program is designed to prepare students for employment in the automated office. Jobs are available in many businesses, industries, governmental agencies, and professional offices. Students may transfer into the Advanced Word Processing program at any time during or after the certificate program and receive an Associate in Applied Science degree.

Prerequisite

Students should have completed a basic typing course with a grade of C or better prior to enrollment.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus

The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CIS-17001	Microsoft Office	3	OIS-20501	Records Management-A	1
OIS-10500	Business Correspondence	3	OIS-20502	Records Management-B	1
OIS-11401	Keyboarding II-A	1	OIS-20503	Records Management-C	1
OIS-11402	Keyboarding II-B	1	OIS-21400	Keyboarding III	3
OIS-11403	Keyboarding II-C	1	OIS-21500	Desktop Publishing for the Office **OR**	
OIS-18201	Word Processing I-Word-A	1	CIS-	CIS elective with advisor approval	3
OIS-18202	Word Processing I-Word-B	1	OIS-22200	Word Processing II-Word	3
OIS-18203	Word Processing I-Word-C	1			

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. The table below indicates which WRAP courses a student in this program must complete to qualify for this certificate. Additional WRAP courses are addressed at the associate level.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/10303 – English Composition I (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)

ADVANCED WORD PROCESSING SPECIALIST
Associate in Applied Science (DWPS0)   **Minimum Credits: 60**

Introduction
This program is designed to prepare students for the changing office. Students enrolled in this program may obtain employment as advanced word processing specialists, as word processing supervisors, and as secretaries in various business, industrial, governmental, and professional firms.

Prerequisite
Students should have completed a basic typing course with a grade of C or better prior to enrollment.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
BUS-10100	Introduction to Business	3	OIS-19002	Machine Transcription-B	1
BUS-21500	Legal Environment of Business	3	OIS-19003	Machine Transcription-C	1
CIS-17001	Microsoft Office	3	OIS-20501	Records Management-A	1
OIS-10500	Business Correspondence	3	OIS-20502	Records Management-B	1
OIS-11201	Business Calculations **OR**		OIS-20503	Records Management-C	1
ACC-12500	Computer Accounting/QuickBooks	3-4	OIS-21000	Office Procedures & Practices	3
OIS-11401	Keyboarding II-A	1	OIS-21400	Keyboarding III	3
OIS-11402	Keyboarding II-B	1	OIS-21500	Desktop Publishing for the Office	3
OIS-11403	Keyboarding II-C	1	OIS-22200	Word Processing II-Word	3
OIS-18201	Word Processing I-Word-A	1	OIS-24107	Internship – Advanced Word	3
OIS-18202	Word Processing I-Word-B	1		Processing Specialist	
OIS-18203	Word Processing I-Word-C	1	CIS-_ _ _ _	CIS elective with advisor approval	0-1
OIS-19001	Machine Transcription-A	1			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)

(continued)

Math/Natural Science	8-9	• MTH-10100 – Finite Math or higher (4) • One science with a lab selected from the following list. Students selecting those courses listed with **AND** must take both the lecture and the lab. Those courses listed without an **AND** have the lab and lecture combined into one course. BIO-10100 – General Biology (4) BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1) BIO-11500 – Anatomy & Physiology I (4) BIO-12000 – Life Science I (4) BIO-20100 – Zoology (4) BIO-20200 – Botany (4) BIO-21300 – Nature Study (4) BIO-21500 – Pathophysiology (4) CHE-10003 – Chemical Science (3) **AND** CHE-10004 – Lab (1) CHE-10101 – General Chemistry I (4) **AND** CHE-10102 – Lab (1) CHE-10201 – General Chemistry II (4) **AND** CHE-10202 – Lab (1) CHE-20101 – Organic Chemistry I (4) **AND** CHE-20102 – Lab (1) CHE-20201 – Organic Chemistry II (4) **AND** CHE-20202 – Lab (1) GEL-10500 – Physical Geology (4) PHY-10501 – Physical Science (3) **AND** PHY-10502 Lab (1) PHY-20101 – General Physics I (4) **AND** PHY-20102 – Lab (1) PHY-20201 – General Physics II (4) **AND** PHY-20202 – Lab (1) PHY-22101 – College Physics I (4) **AND** PHY-22102 – Lab (1) PHY-22201 – College Physics II (4) **AND** PHY-22202 – Lab (1)

LEGAL SECRETARY
Associate in Applied Science (DLES1) **Minimum Credits: 61**

Introduction
Kirtland's Legal Secretary program is specifically designed to train students in the skills necessary to secure employment by attorneys, judges, corporate legal departments, or government offices where knowledge of legal terminology and procedures is required.

Prerequisites
Students should have completed a basic typing course with a grade of C or better prior to enrollment.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ALH-10101	Medical Terminology	2	OIS-18202	Word Processing I-Word-B	1
BUS-10100	Introduction to Business	3	OIS-18203	Word Processing I-Word-C	1
BUS-21500	Legal Environment of Business	3	OIS-19001	Machine Transcription-A	1
CIS-17001	Microsoft Office **OR**		OIS-19002	Machine Transcription-B	1
OIS-21500	Desktop Publishing for the Office	3	OIS-19003	Machine Transcription-C	1
OIS-10500	Business Correspondence	3	OIS-20501	Records Management-A	1
OIS-11201	Business Calculations **OR**		OIS-20502	Records Management-B	1
ACC-12500	Computer Accounting/QuickBooks	3-4	OIS-20503	Records Management-C	1
OIS-11401	Keyboarding II-A	1	OIS-21400	Keyboarding III	3
OIS-11402	Keyboarding II-B	1	OIS-22200	Word Processing II-Word	3
OIS-11403	Keyboarding II-C	1	OIS-22500	Legal Office Procedures	3
OIS-17000	Legal Terminology & Transcription	3	OIS-24102	Internship – Legal Secretary	3
OIS-18201	Word Processing I-Word-A	1			

WRAP
Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	3-4	• ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3)
Life Skills	3	• CIS-10500 – Introduction to Computers (3)

(continued)

LEGAL SECRETARY
Associate in Applied Science (DLES1)   **Minimum Credits: 61**

| Math/Natural Science | 8-9 | • MTH-10100 – Finite Math or higher (4)
• One science with a lab selected from the following list. Students selecting those courses listed with **AND** must take both the lecture and the lab. Those courses listed without an **AND** have the lab and lecture combined into one course.
BIO-10100 – General Biology (4)
BIO-10701 – Essentials of Anatomy/Physiology (3) **AND** BIO-10702 – Lab (1)
BIO-11500 – Anatomy & Physiology I (4)
BIO-12000 – Life Science I (4)
BIO-20100 – Zoology (4)
BIO-20200 – Botany (4)
BIO-21300 – Nature Study (4)
BIO-21500 – Pathophysiology (4)
CHE-10003 – Chemical Science (3) **AND** CHE-10004 – Lab (1)
CHE-10101 – General Chemistry I (4) **AND** CHE-10102 – Lab (1)
CHE-10201 – General Chemistry II (4) **AND** CHE-10202 – Lab (1)
CHE-20101 – Organic Chemistry I (4) **AND** CHE-20102 – Lab (1)
CHE-20201 – Organic Chemistry II (4) **AND** CHE-20202 – Lab (1)
GEL-10500 – Physical Geology (4)
PHY-10501 – Physical Science (3) **AND** PHY-10502 Lab (1)
PHY-20101 – General Physics I (4) **AND** PHY-20102 – Lab (1)
PHY-20201 – General Physics II (4) **AND** PHY-20202 – Lab (1)
PHY-22101 – College Physics I (4) **AND** PHY-22102 – Lab (1)
PHY-22201 – College Physics II (4) **AND** PHY-22202 – Lab (1) |

Associate in Applied Science
- Plant Science – Horticulture
- Plant Science – Turfgrass
- Plant Science – Landscape and Nursery

For more information, please contact Science.

Denise Kemp   989-275-5000, extension 391

PLANT SCIENCE
Associate in Applied Science
Horticulture (DPLS0), Turfgrass (DPLS1) or Landscape/Nursery (DPLS2)   **Minimum Credits: 60**

Introduction
This is a cooperative plant science program between Kirtland, Michigan State University College of Agriculture, and the NMC University Center in Traverse City leading to certification in one of the following: commercial horticulture operations, commercial turfgrass operations, or landscape and nursery operations. Students will take core curriculum courses and required and elective courses as available at Kirtland and required and elective MSU courses at the University Center in Traverse City. Students will enroll simultaneously at both Kirtland and MSU.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus
The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Students also need to complete the courses listed in the WRAP section. Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
Courses to be taken at Kirtland Community				
CIS-17001	Microsoft Office	3	ECO-20100	Principles of Economics-MACRO	3
Courses To Be Taken at Michigan State University – Traverse City				
AT 057	Industry Seminar	1	HRT 066	Landscape Maintenance	2
AT 057	Plant Diseases	2	HRT 218	Landscape Irrigation	3
AT 075	Entomology	2			
CSS 210	Basic Science **OR**				
CSS 043		3			

Select ONE of the three following options:

COMMERCIAL HORTICULTURE OPERATIONS

Course	Title	Cr	Course	Title	Cr
AT 057	Integrated Pest Management	1	RD 201	Land & Environmental Issues in Law	3
AT 099	Internship/Placement Training	1-3	--- ---	7 – 9 electives from below	
HRT 208	Pruning/Training Systems/Horticulture	3			

and seven to nine elective credits from the following list:

AT 082	Turf/Landscape Business Mgmt	2	HRT 075	Fruit School/Other TBD	1
AT 082/ HRT 291	Current Issues/Commercial Horticulture	2	HRT 211	Landscape Plants I	3
CSS 181	Fertilizer/Pesticide Application Tech	3			

(continued)

COMMERCIAL TURFGRASS OPERATIONS

Course	Title	Cr	Course	Title	Cr
AT 099	Internship/Placement Training	1-3	RD 201	Land & Environmental Issues	3
AT 082	Turf & Landscape Business Mgmt	2	--- ---	7 – 9 electives from below	
CSS 232	Introduction to Turfgrass Mgmt	3			

and seven to nine elective credits from the following list:

Course	Title	Cr	Course	Title	Cr
AT 082/ HRT 291	Current Issues in Commercial Horticulture	2	HRT 072	Landscape Planning & Design	3
CSS 181	Fertilizer/Pesticide Application Tech	3	HRT 211	Landscape Plants I	3
CSS 242	Athletic Field Maintenance	2			

LANDSCAPE AND NURSERY

Course	Title	Cr	Course	Title	Cr
AT 099	Internship/Placement Training	1-3	HRT 211	Landscape Plants I	3
CSS 232	Introduction to Turfgrass Management	3	HRT 212	Landscape Plants II	3
HRT 072	Landscape Planning & Design	3	--- ---	2 –5 electives from below	

and two to five elective credits from the following list:

Course	Title	Cr	Course	Title	Cr
AT 082	Turf & Landscape Business Management	2	HRT 208	Pruning & Training Systems in Horticulture	3
CSS 181	Fertilizer/Pesticide Application Technology	3	RD 201	Land & Environmental Issues	3

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses
Communications	6-7	• COM-10000 – Written & Oral Communication (3) • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)
Humanities/Social Science	3	• HUM-20500 – Individual & Society (3) **OR** POL-10500 – American Government with Humanities (3)
Life Skills	1	• CAR-10300 – Career Development Skills (1)
Math/Natural Science	13-16	• BIO-20200 – General Botany (4) • CHE-10003 – Chemical Science (3) **AND** CHE-10004 – Lab (1) • MTH-10100 – Finite Math (4) or higher excluding MTH-20500 or 20600 • PHY-10501 – Physical Science (3) **AND** PHY-10502 – Lab (1)

Associate in Applied Science
- Technology Management

TECHNOLOGY MANAGEMENT
ASSOCIATE IN APPLIED SCIENCE   **Minimum Credits: 62**

General Education Requirements

COURSE	TITLE	Cr
CIS-10500	Introduction to Computers	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300 **or** ENG-10303	English Composition I **or** English Composition I with Computers	3
ENG-10400 **or** ENG-10403 **or** ENG-10601 **or** ENG-10602	English Composition II **or** English Composition II with Computers **or** Technical Writing **or** Technical Writing with Computers	3
Humanities Elective	(Chosen from ART, Language, HIS, HUM, Journalism, LIT, MUS, PHL, THE)	3
MTH-10100 **or** MTH-12000 (or higher)	Finite Math **or** Intermediate Algebra (or higher)	4
Science Elective w/lab	(Chosen from BIO, CHE, GEL, PHY)	4
Social Science Elective	(Chosen from ANT, ECO, GEO, POL, PSY, SOC)	3-4
SPE-10500 **or** SPE-11400	Fundamentals of Speech **or** Intro to Interpersonal & Public Communication	3
	General Education:	**26-28**

Leadership/Management
Military credit for Supervision, Management or Leadership and/or Kirtland credit from the following course options:
(Select <u>two</u> courses:)

BUS-10100	Introduction to Business	3
BUS-21000	Principles of Management	3
BUS-24500	Personnel Management	3
	Leadership/Management:	**6**

Technical Elective Courses
College courses or military equivalent credit from the following list of career/technical programs must be taken to fulfill this requirement. Substitute courses may be taken with the approval of an advisor and academic dean.

Technical Electives: Accounting, Allied Health, Automotive Technology, Business, Carpentry, Computer Aided Drafting, Computer Information Systems, Criminal Justice, Electrical Technology, Heating/Ventilation/AC/Refrigeration, Industrial Maintenance, Machine Tool Technology, Manufacturing Processes Technology, Marketing, Nursing, Office Information Systems, and Welding. **Technical Electives:**	**15**

General Elective Courses

Any 10000-level or higher course can be used. Up to three credits in Physical Education courses can be applied toward degree requirements. **General Electives:**	**15**
Total Credit Hours:	**62-64**

Associate

- Arts
- Business Administration
- Computers – Computer Science
- Computers – Information Systems
- Criminal Justice – Generalist
- Fine Arts – Creative Writing
- Fine Arts – Studio Art
- Fine Arts – Theatre Arts
- Science – Life Science
- Science – Physical Science

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PARTNERSHIP PROGRAMS

Associate in Applied Science

- Radiography

Bachelor of Science
Computers

For an updated list of partnership schools, go to:
http://services.kirtland.edu/cis/Transfer.htm

- Computer Information Systems – Ferris or Saginaw Valley
- Computer Science – Central Michigan University, Ferris, or Saginaw Valley
- Digital Communications – Franklin
- Management Information Science – Franklin

ASSOCIATE IN ARTS
(DLIB0)   **Minimum Credits: 60**

Introduction

The Associate in Arts degree program is designed for students who plan to eventually complete a bachelor's degree in the field of education, liberal arts, humanities, or social sciences. Listed below are some of the majors pursued by students following this program:

Art	English	Psychology
Anthropology	Geography	Social Science
Archaeology	History	Social Work
Communications	Humanities	Sociology
Criminal Justice	Journalism	Speech
Education – Elementary*	Music	Theatre
Education – Secondary*	Political Science	
Education – Special*	Pre-Law	

Students planning to transfer to a four-year college or university must consult with their advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with approval of the appropriate dean or associate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e., psychology elective, biology elective, etc.) where deemed appropriate. This degree satisfies the requirements of the MACRAO Transfer Agreement as defined on page 25.

INTERESTED IN BECOMING A TEACHER?
Students interested in pursuing a Bachelor of Arts or Bachelor of Science in Education degree can usually follow an Associate in Arts or Associate in Science transfer degree offered at Kirtland. When planning pre-education course work for an Elementary, Secondary, or Special Education degree, students should meet with a Kirtland counselor or faculty advisor. Though some similarities exist in course requirements among the universities or colleges that prepare teachers, there are also differences that can complicate the advising process and the selection of appropriate courses for transfer to the student's university or college of choice. Therefore, it is very important that each student meet with a counselor or faculty advisor.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

Students pursuing a transfer degree will concentrate primarily on meeting general education requirements at Kirtland. These courses are addressed in the WRAP (Well Rounded Academic Program) section on the next page. Students must take the WRAP courses and enough electives to meet the minimum 60 credit hour requirement for graduation. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
--- ---	Electives – Select any 100-level or higher courses	8-13	(Three credits in Physical Education courses can be used to meet degree requirements.)		

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	12-13	• CIS-10500 – Introduction to Computers (3)* • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)* • ENG-10400/ENG-10403 - English Composition II (3)* • SPE-10500 – Fundamentals of Speech (3)* **OR** SPE-11400 – Interpersonal Communication (3)*

Humanities	11-12	• Select 2-3 credits from Art, Music, or Theater.*
		• Select 3 credits from Journalism, Languages, or Literature. *
		• HIS-10500 – World Societies to 1600 (3)* **OR**
		  HIS-10600 – World Societies Since 1600 (3)* **OR**
		  HIS-20100 – US History to 1865 (3)* **OR**
		  HIS-20200 – US History Since 1865 (3)* **OR**
		  HIS-20300 – Michigan History (3)*
		• PHL-20100 – Introduction to Philosophy (3)* **OR**
		  PHL-21000 – Introduction to Ethics (3)*

Social Science	12-13	(Only two courses per subject area can be used to meet degree requirements in humanities.)
		• POL-10100 – American Government (3)* **OR**
		  POL-10500 – American Government with Humanities* (3)
		• GEO-10000 – World Geography (4)* **OR**
		  POL-20000 – International Relations (3)* **OR**
		  POL-20100 – Comparative Government* (3)
		• ANT-10100 – Cultural Anthropology (3)* **OR**
		  SOC-10100 – Introduction to Sociology (3)* **OR**
		  PSY-10100 – Introduction to Psychology (3)*
		• Select an additional course from Anthropology, Economics, Geography, Political Science, Psychology, or Sociology (3)

Math/Natural Science	12-14	• MTH-12000 – Intermediate Algebra (4)* or higher • Select two science courses with a lab from BIO, CHE, GEL, or PHY (8-10)*

* Courses that meet General Education Core Competencies

ASSOCIATE IN BUSINESS ADMINISTRATION

(DABA1)   **Minimum Credits: 60**

Introduction

The Associate in Business Administration degree is designed for students who plan to eventually complete a bachelor's degree in a business-related field. Listed below are some of the majors pursued by students following this program:

Accounting	Management
Advertising	Marketing
Economics	Personnel/Industrial
Finance	Relations
General Business	Public Administration

Students planning to transfer to a four-year college or university must consult with their advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with approval of the appropriate dean or associate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e., psychology elective, biology elective, etc.) where deemed appropriate. This degree satisfies the requirements of the MACRAO Transfer Agreement as defined on page 25.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
☐ English:_____   ☐ Reading: _____

Focus

Students pursuing a transfer degree will concentrate primarily on meeting general education requirements at Kirtland. These courses are addressed in the WRAP (Well Rounded Academic Program) section that follows. Those pursuing the business degree also need to take the focus courses listed below. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
ACC-12100	Accounting Principles I[1]	4	--- ---	Elective (100-level or above)	
ACC-12200	Accounting Principles II	4	--- ---	Select 5 - 8 credits from below	

and 5 - 8 credit hours from the following list:

ACC-20500	Cost Accounting I	4	BUS-21500	Legal Environment of Business	3
ACC-20600	Cost Accounting II	4	BUS-24000	Financial Management	3
ACC-21000	Intermediate Accounting I	4	BUS-24500	Personnel Management	3
ACC-21100	Intermediate Accounting II	4	BUS-250--	Business Seminars	1-6
ACC-12500	Computer Accounting/QuickBooks	4	MKT-11000	Principles of Selling	3
BUS-10100	Introduction to Business	3	MKT-20000	Principles of Marketing	3
BUS-201--	Internship in Business & Marketing	3-9	MKT-20100	Principles of Retailing	3
BUS-20200	Grant Writing	3	MKT-20300	Internet Marketing	3
BUS-21000	Principles of Management	3	MKT-20400	Advertising	
			MKT-21000	Market Research	3

(continued)

Note

[1] Students with little or no accounting background will be required to take ACC-10600 or ACC-10601 before taking ACC-12100.)

ASSOCIATE IN BUSINESS ADMINISTRATION

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	12-13	• CIS-10500 – Introduction to Computers (3)* • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)* • ENG-10400/ENG-10403 - English Composition II (3)* • SPE-10500 – Fundamentals of Speech (3)* **OR** SPE-11400 – Interpersonal Communication (3)*

Humanities	8-9	• Select 2-3 credits from Art, Music, or Theater.*
		• Select 3 credits from Journalism, Languages, or Literature. *
		• HIS-10500 – World Societies to 1600 (3)* **OR**
		  HIS-10600 – World Societies Since 1600 (3)* **OR**
		  HIS-20100 – US History to 1865 (3)* **OR**
		  HIS-20200 – US History Since 1865 (3)* **OR**
		  HIS-20300 – Michigan History (3)* **OR**
		  PHL-20100 – Introduction to Philosophy (3)* **OR**
		  PHL-21000 – Introduction to Ethics (3)*

Social Science	12	• POL-10100 – American Government (3)* **OR**
		  POL-10500 – American Government with Humanities* (3)
		• ANT-10100 – Cultural Anthropology (3)* **OR**
		  SOC-10100 – Introduction to Sociology (3)* **OR**
		  PSY-10100 – Introduction to Psychology (3)*
		• ECO-20100 – Principles of Economics (Macroeconomics) (3)
		• ECO-20200 – Principles of Economics (Microeconomics) (3)

Math/Natural Science	12-13	• MTH-12100 – College Algebra with Trigonometry (4)* or higher • MTH-20600 – Statistics (4) • Select one science course with a lab from BIO, CHE, GEL, or PHY (4-5)*

* Courses that meet General Education Core Competencies

ASSOCIATE IN COMPUTERS
Computer Science (DACP0) or Information Systems (DACP1)   **Minimum Credits: 60**

Introduction
Students interested in pursuing a career in the computer field should plan to eventually complete a bachelor's degree at a four-year school of their choice. Computer majors are found in two separate areas. Computer Information Systems degrees are business oriented. Positions of employment would include computer programmers, application programmers, systems analysts, network administrators, database administrators, systems administrators, web developers, or microcomputer specialists. Degrees in these areas include the following:

      Management Information Systems   Computer Information Systems   Information Systems

Computer Science degrees are mathematical and engineering oriented. Positions of employment would include computer programmers, systems programmers, software engineers, systems engineers, database administrators, network administrators, systems administrators, or systems analysts. Degrees in this area include the following:

      Software Engineering   Computer Science   Computer Engineering

Students planning to transfer to a four-year college or university must consult with a Computer Information Systems (CIS) advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with approval of the appropriate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e., psychology elective, biology elective, etc.) where deemed appropriate. This degree also satisfies the requirements of the MACRAO Transfer Agreement as defined on page 25.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

      ENG-10000 Writing Lab (if required)   Mathematics:_____
      English:_____   Reading: _____

Focus
Students pursuing a transfer degree will concentrate primarily on meeting general education requirements at Kirtland. These courses are addressed in the WRAP (Well Rounded Academic Program) section on the next page. Those pursuing the computer degree also need to take the focus courses listed below. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CIS-27001	Programming I	3	CIS-27101	Programming II	4

<div align="center">Select ONE of the options listed:</div>

Computer Science (Select 8 – 12 credits.)			Information Systems (Select 8 – 12 credits.)		
CIS-17001	Microsoft Office	3	ACC-12100	Accounting Principles I	4
CIS-22400	UNIX	2	ACC-12200	Accounting Principles II	4
CIS-23501	Database Design	3	BUS-10100	Introduction to Business	3
CIS-26000	Intro to Computer Networking	3	CIS-17001	Microsoft Office	3
MTH-12100	College Algebra with Trigonometry	4	CIS-22400	UNIX	2
MTH-18001	Pre-Calculus	4	CIS-22500	Spreadsheets	3
MTH-22002	Calculus I	4	CIS-23501	Database Design	3
			CIS-26000	Computer Networking	3
			ECO-20100	Economics – Macroeconomics	3
			ECO-20200	Economics – Microeconomics	3

<div align="center">(continued)</div>

ASSOCIATE IN COMPUTERS
Computer Science (DACP0) or Information Systems (DACP1)   (continuation)

WRAP

At Kirtland Community College we strive to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses
Communications	12-13	• CIS-10500 – Introduction to Computers (3)* • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)* • ENG-10400/ENG-10403 - English Composition II (3)* • SPE-10500 – Fundamentals of Speech (3)* **OR** SPE-11400 – Interpersonal Communication (3)*

Humanities	8-9	• Select 2-3 credits from Art, Music, or Theater.*
		• Select 3 credits from Languages or Literature.*
		• HIS-10500 – World Societies to 1600 (3)* **OR**
		  HIS-10600 – World Societies Since 1600 (3)* **OR**
		  HIS-20100 – US History to 1865 (3)* **OR**
		  HIS-20200 – US History Since 1865 (3)* **OR**
		  HIS-20300 – Michigan History (3)*

Social Science	9-10	• POL-10100 – American Government (3)* **OR**
		  POL-10500 – American Government with Humanities* (3)
		• GEO-10000 – World Geography (4)* **OR**
		  POL-20000 – International Relations (3)* **OR**
		  POL-20100 – Comparative Government* (3)
		• ANT-10100 – Cultural Anthropology (3)* **OR**
		  ANT-10500 – Archaeology and Prehistory (3)* **OR**
		  SOC-10100 – Introduction to Sociology (3)* **OR**
		  PSY-10100 – Introduction to Psychology (3)*

Math/Natural Science	12-13	• MTH-12000 – Intermediate Algebra (4)* or higher excluding MTH-20500 and MTH-20600.
		• BIO-10100 – General Biology (4) **OR**
		  BIO-20100 – General Zoology (4) **OR**
		  BIO-20200 – General Botany (4) **OR**
		  BIO-21000 – Microboiology (4) **OR**
		  BIO-21300 – Nature Study (4)
		• Select one lab course from Chemistry (4-5)

* Courses that meet General Education Core Competencies

_____
Note

Schools vary in the number of credits over 60 that will transfer. Students should check with their advisors for transferability of additional courses.

COMPUTER INFORMATION SYSTEMS
Bachelor of Science

PARTNERSHIP PROGRAMS

Ferris State University	**Kirtland Community College**
(231) 591-2434	Lisa Balbach
CISD@ferris.edu	989-275-5000, extension 414
	balbachl@kirtland.edu

The Computer Information Systems (CIS) curriculum provides students with a broad understanding of core business functions, competency in computer programming, knowledge of information technology infrastructure, and a sound foundation in systems analysis and design. The CIS program has close relationships with industry through an advisory board and offers internships as a practical hands-on experience. Students should contact those listed for specific program information. Additional information is also available at
http://services.kirtland.edu/cis/Transfer/Ferris_CIS_transfer.htm

Saginaw Valley State University	**Kirtland Community College**
Randall Hock	Lisa Balbach
989-964-4343	989-275-5000, extension 414
hock@svsu.edu	balbachl@kirtland.edu

Computer Information Systems is a rapidly expanding filed that encompasses a wide spectrum of specialties and affects various aspects of life. As a CIS graduate, students are employed in many phases of the analysis, design, manufacturing, testing, research, development, and administration of computer systems. A Computer Information Systems graduate might become a programmer, applications programmer, system administrator, web developer, analyst, systems analyst, network administrator, or database administrator. Co-op opportunities are available with local industries.

Students should contact those listed for specific program information. Additional information is also available at
http://services.kirtland.edu/cis/Articulation/SVSU_CIS_Articulation.htm

Students wanting additional information on the Computer Information Systems major at Saginaw Valley State University should visit
http://www.svsu.edu/cs/cis.htm

COMPUTER SCIENCE
Bachelor of Science

PARTNERSHIP PROGRAMS

Central Michigan University	**Kirtland Community College**
Marcie Otteman	Lisa Balbach
989-774-3076	989-275-5000, extension 414
ottem1mm@cmich.edu or Marcie.M.Otteman@cmich.edu	balbachl@kirtland.edu

The study of computer science can lead to such careers as applications programmer, systems programmer/analyst, computer communications specialist, database manager, and consultant. The field serves those students desiring general instruction in computer science, those interested in teaching the subject, and those who want to undertake advanced study of computer science at the graduate level. Information technology graduates will find a variety of career opportunities, including network administration, database administration, Web master, application system designer, multimedia specialist, and customer service technologist. Students should contact those listed for specific program information. Additional information is also available at http://services.kirtland.edu/cis//Articulation/CMUarticulation.htm

Franklin University	**Kirtland Community College**
Bob Morris	Lisa Balbach
1-888-341-6237 or 614-651-4471	989-275-5000, extension 414
morrisb@franklin.edu	balbachl@kirtland.edu

The Computer Science curriculum provides all graduates with a foundation in programming, algorithm development, computer architecture, operating systems, and networks through a set of core courses. The curriculum also allows specialization through the choice of two different options: software engineering, which is more technical in nature, and an MIS option, which is business-oriented. Courses ranging from introductory programming courses to advanced courses in Artificial Intelligence, Computer Architecture, Computer Graphics, Human Computer Interaction, Web Application Development, Systems Programming, Data Communication, and Compiler Construction are available. Students wanting additional information on the Computer Science BS Degree at Franklin University should visit http://cs.franklin.edu/

To enter the Kirtland Community College/Franklin University program, students must meet one of the following admissions criteria:
- Have earned an Associate in Computers – Information Systems
- Have earned any other Associate in Arts, Associate in Science, or Associate in Applied Science degree
- Have completed 60 semester/90 quarter credit hours and earned a 2.5 GPA

Students should contact those listed for specific program information. Additional information is also available at http://services.kirtland.edu/cis/Articulation/Franklin_CS_Articulation.htm

Saginaw Valley State University	**Kirtland Community College**
Randall Hock	Lisa Balbach
989-964-4343	989-275-5000, extension 414
hock@svsu.edu	balbachl@kirtland.edu

Computer Science is a rapidly expanding field that encompasses a wide spectrum of specialties and affects various aspects of life. Computer scientists may be employed in many phases of the analysis, design, manufacturing, testing, research, development, and administration of computer systems. Students may be employed as software engineers, applications programmers, system administrators, web developers, algorithm development engineers, network administrators, or database administrators. Co-op opportunities are available with local industries. Students should contact those listed for specific program information. Additional information is also available at http://services.kirtland.edu/cis/Articulation/SVSU_CS_Articulation.htm. Students wanting additional information on the Computer Information Systems major at Saginaw Valley State University should visit http://www.svsu.edu/cs/cs.htm

DIGITAL COMMUNICATIONS
Bachelor of Science

Franklin University	**Kirtland Community College**
Bob Morris	Lisa Balbach
1-888-341-6237 or 614-651-4471	989-275-5000, extension 414
morrisb@franklin.edu	balbachl@kirtland.edu

Successful businesses are increasingly using the Internet and related electronic commerce technologies. These business initiatives require graduates who understand current and future trends in digital communication and electronic commerce and are prepared to manage the analysis, design, implementation, marketing, and operation of digital information systems. This program includes a Web Development track and an E-Commerce track. Depending on the track selected, students will acquire skills or knowledge in web development, marketing, graphics design, electronic commerce system skills, and the technology of databases, user interface design, networking, and management information systems.

To enter the Kirtland Community College/Franklin University program, students must meet one of the following admissions criteria:
- Have earned an Associate in Computers – Information Systems
- Have earned any other Associate in Arts, Associate in Science, or Associate in Applied Science degree
- Have completed 60 semester/90 quarter credit hours and earned a 2.5 GPA

Students should contact those listed at the top of the page for specific program information. Additional information is also available at http://services.kirtland.edu/cis/Articulation/Franklin_DigitalComm_Articulation.htm

Students wanting additional information on the Digital Communications BS Degree at Franklin University should visit http://www.franklin.edu/programs/dcom/

MANAGEMENT INFORMATION SCIENCE (MIS)
Bachelor of Science

Franklin University	**Kirtland Community College**
Bob Morris	Lisa Balbach
1-888-341-6237 or 614-651-4471	989-275-5000, extension 414
morrisb@franklin.edu	balbachl@kirtland.edu

The MIS program focuses on the intersection of management and technology. A distinguishing feature of this program is its integrated approach to technical, organizational, and systems elements within the curricula that will enable future managers and technical specialists to interact effectively in organizations. Franklin is building a bridge between management and technology in order to meet the growing demand of companies seeking to sustain a competitive advantage technologically. This program includes a large number of business and computer courses.

To enter the Kirtland Community College/Franklin University program, students must meet one of the following admissions criteria:
- Have earned an Associate in Computers – Information Systems
- Have earned any other Associate in Arts, Associate in Science, or Associate in Applied Science degree
- Have completed 60 semester/90 quarter credit hours and earned a 2.5 GPA

Students should contact those listed at the top of the page for specific program information. Additional information is also available at http://services.kirtland.edu/cis/Articulation/Franklin_MIS_Articulation.htm

ASSOCIATE IN CRIMINAL JUSTICE - GENERALIST
(DCJG0)   **Minimum Credits: 60**

Introduction
The Associate in Criminal Justice - Generalist degree is designed for students who plan to transfer to a four-year college or university, and to help students transferring in from other colleges to meet requirements for entry into the Kirtland Regional Police Academy.

Students planning to transfer to a four-year college or university must consult with their advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with approval of the appropriate dean or associate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e. psychology elective, biology elective, etc.) where deemed appropriate. This degree satisfies the requirements of the MACRAO Transfer Agreement as defined on page 25.

Prerequisites
Applicants admitted to the Criminal Justice - Generalist program must meet the following special entrance requirements: 1) possess a valid Michigan motor vehicle operator's or chauffeur's license; 2) have no felony convictions; 3) have a high school diploma or GED;
4) interview by appointment with a criminal justice advisor before entering the program; 5) provide personal background information and sign release form to facilitate possible background investigation (information and/or investigation may determine eligibility to enter the program); 6) sign and abide by Criminal Justice Code of Conduct, which includes a mandatory dress code; 7) pass a physical examination before enrolling in physical training class.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

    ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
    ☐ English:_____   ☐ Reading: _____

Focus
Students pursuing a transfer degree will concentrate primarily on meeting general education requirements at Kirtland. These courses are addressed in the WRAP (Well Rounded Academic Program) section on the next page. Those pursuing the criminal justice degree also need to take the focus courses listed below. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr	Course	Title	Cr
CJS-10000	Introduction to Criminal Justice	3	CJS-	Criminal Justice electives with advisor approval	0-4
CJS-24000 SOC-24000	Criminology **OR** Criminology **OR** Substitution approved by advisor	3			

<div align="center">(continued)</div>

ASSOCIATE IN CRIMINAL JUSTICE - GENERALIST

(DCJG0)   (continuation)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	12-13	• CIS-10500 – Introduction to Computers (3)* • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)* • ENG-10400/ENG-10403 - English Composition II (3)* • SPE-10500 – Fundamentals of Speech (3)* **OR** SPE-11400 – Interpersonal Communication (3)*

Humanities	11-12	• Select 2-3 credits from Art, Music, or Theater.*
		• Select 3 credits from Journalism, Languages, or Literature. *
		• HIS-10500 – World Societies to 1600 (3)* **OR**
		  HIS-10600 – World Societies Since 1600 (3)* **OR**
		  HIS-20100 – US History to 1865 (3)* **OR**
		  HIS-20200 – US History Since 1865 (3)* **OR**
		  HIS-20300 – Michigan History (3)*
		• PHL-20100 – Introduction to Philosophy (3)* **OR**
		  PHL-21000 – Introduction to Ethics (3)*

Social Science	15-16	• POL-10100 – American Government (3)* **OR**
		  POL-10500 – American Government with Humanities* (3)
		• GEO-10000 – World Geography (4)* **OR**
		  POL-20000 – International Relations (3)* **OR**
		  POL-20100 – Comparative Government* (3)
		• SOC-10100 – Introduction to Sociology (3)*
		• PSY-10100 – Introduction to Psychology (3)*
		• PSY-20200 – Abnormal Psychology (3)

Math/Natural Science	12-14	• MTH-12000 – Intermediate Algebra (4)* or higher (MTH-20500 or MTH-20600 cannot be counted for credit.) • Select two science courses with a lab from BIO, CHE, GEL, or PHY (8-10)*

* Courses that meet General Education Core Competencies

_____
Note

Students must maintain a GPA of 2.0 or better, with a "C" or better in all criminal justice courses.

ASSOCIATE IN FINE ARTS

Creative Writing (DAFA0, Studio Art (DAFA1), or Theatre Arts (DAFA2)   **Minimum Credits: 60**

Introduction

The Associate in Fine Arts degree is designed for students with an interest in studio arts (such as sculpture or painting), creative writing, or theatre arts. This degree program works to give students both practical experience in the art form of their choice and the critical and academic background necessary for further study of the fine arts while helping develop a personal sense of aesthetic and artistic criteria. Because the artist's association with the world is stressed, a strong academic schedule is affiliated with the creative discipline.

Students planning to transfer to a four-year college or university must consult with their advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with approval of the appropriate dean or associate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e., psychology elective, biology elective, etc.) where deemed appropriate. This degree satisfies the requirements of the MACRAO Transfer Agreement as defined on page 25.

Foundation

Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)
- ☐ English:_____
- ☐ Mathematics:_____
- ☐ Reading: _____

Focus

Students pursuing a transfer degree will concentrate primarily on meeting general education requirements at Kirtland. These courses are addressed in the WRAP (Well Rounded Academic Program) section on the next page. Those pursuing the fine arts degree also need to take the focus courses listed below. The following courses are the required focused courses in this program. These are the heart of the program. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Select ONE of the following options:

CREATIVE WRITING

Course	Title	Cr	Course	Title	Cr
ENG-29100	Poetry Workshop I **OR**		--- ---	Additional courses approved by advisor	5-10
ENG-29200	Fiction Workshop I	3			

STUDIO ART

Course	Title	Cr	Course	Title	Cr
ART-28000	Portfolio	3	--- ---	Additional courses approved by advisor	4-9
CIS-21900	MacIntosh O.S. X	1			

THEATRE ARTS

Course	Title	Cr	Course	Title	Cr
THE-27000	Audition/Resume Workshop	3	--- ---	Additional courses approved by advisor	5-10

(continued)

ASSOCIATE IN FINE ARTS

Creative Writing (DAFA0, Studio Art (DAFA1), or Theatre Arts (DAFA2)   (continuation)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	12-13	• CIS-10500 – Introduction to Computers (3)* • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)* • ENG-10400/ENG-10403 - English Composition II (3)* • SPE-10500 – Fundamentals of Speech (3)* **OR** SPE-11400 – Interpersonal Communication (3)*

Humanities	14-15	• Select 2-3 credits from Art, Music, or Theater.*
		• Select 3 credits from Journalism, Languages, or Literature. *
		• HIS-10500 – World Societies to 1600 (3)* **OR**
		   HIS-10600 – World Societies Since 1600 (3)* **OR**
		   HIS-20100 – US History to 1865 (3)* **OR**
		   HIS-20200 – US History Since 1865 (3)* **OR**
		   HIS-20300 – Michigan History (3)*
		• PHL-20100 – Introduction to Philosophy (3)* **OR**
		   PHL-21000 – Introduction to Ethics (3)*
		• Select a Fine Arts option:
		   Creative Writing Option: ENG 21500 – Creative Writing (3)
		   Studio Art Option: Select an art course (3)
		   Theatre Arts Option: THE-12000 – Introduction to Theatre (3)

Social Science	9-10	• POL-10100 – American Government (3)* **OR**
		   POL-10500 – American Government with Humanities* (3)
		• GEO-10000 – World Geography (4)* **OR**
		   POL-20000 – International Relations (3)* **OR**
		   POL-20100 – Comparative Government* (3)
		• ANT-10100 – Cultural Anthropology (3)* **OR**
		   SOC-10100 – Introduction to Sociology (3)* **OR**
		   PSY-10100 – Introduction to Psychology (3)*

Math/Natural Science	12-14	• MTH-12000 – Intermediate Algebra (4)* or higher (MTH-20500 or MTH-20600 cannot be counted for credit.) • Select two science courses with a lab from BIO, CHE, GEL, or PHY (8-10)*

* Courses that meet General Education Core Competencies

ASSOCIATE IN SCIENCE
Life Science (DASC1 or Physical Science (DASC2)   **Minimum Credits: 60**

Introduction
Students who plan to eventually complete a bachelor's degree in the field of mathematics, natural science, physical science, education, or engineering are encouraged to follow the Associate in Science degree program. Listed below are some of the majors pursued by students following this program:

Biology	Geology
Chemistry	Mathematics
Computer Science	Natural Science
Conservation	Physical Science
Education – Elementary *	Physics
Education - Industrial	Pre-Professional Health
Education – Secondary*	Pre-Engineering
Forestry	Zoology

Students planning to transfer to a four-year college or university must consult with their advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with approval of the appropriate dean or associate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e., psychology elective, biology elective, etc.) where deemed appropriate. This degree satisfies the requirements of the MACRAO Transfer Agreement as defined on page 25.

INTERESTED IN BECOMING A TEACHER?
Students interested in pursuing a Bachelor of Arts or Bachelor of Science in Education degree can usually follow an Associate in Arts or Associate in Science transfer degree offered at Kirtland. When planning pre-education course work for an Elementary, Secondary, or Special Education degree, students should meet with a Kirtland counselor or faculty advisor. Though some similarities exist in course requirements among the universities or colleges that prepare teachers, there are also differences that can complicate the advising process and the selection of appropriate courses for transfer to the student's university or college of choice. Therefore, it is very important that each student meet with a counselor or faculty advisor.

Foundation
Kirtland Community College recognizes the importance of students possessing basic academic skills in English, reading, and mathematics in order to successfully complete college-level courses. Therefore, all entry-level students are required to demonstrate their proficiency in basic academic skills. The student's advisor will indicate which of the following courses need to be taken based on ACT scores or COMPASS placement testing results. It is highly recommended that students take these courses during the first semester in order to prepare for the road ahead, as well as possibly satisfying prerequisites needed for more advanced courses. Specific courses needed may be tracked below. *Students must plan additional time to complete their program requirements if placement results require them to begin with DEV courses.*

- ☐ ENG-10000 Writing Lab (if required)   ☐ Mathematics:_____
- ☐ English:_____   ☐ Reading: _____

Focus
Students pursuing a transfer degree will concentrate primarily on meeting general education requirements at Kirtland. These courses are addressed in the WRAP (Well Rounded Academic Program) section on the next page. Students must take the WRAP courses and enough electives to meet the minimum 61 credit hour requirement for graduation. Some of the courses listed may have prerequisites (which are listed in the course description section of the catalog). Therefore, students should consult advisors for assistance in planning course schedules.

Course	Title	Cr
--- ---	Electives – Select an 100-level or higher courses	

(continued)

ASSOCIATE IN SCIENCE
Life Science (DASC1 or Physical Science (DASC2)   (continuation)

WRAP

Kirtland Community College strives to prepare students with a solid general education background, which is called WRAP— Well Rounded Academic Program. Each program of study has been carefully examined for its WRAP content. The table below indicates which courses a student in this program must complete to qualify for this degree.

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Communications	12-13	• CIS-10500 – Introduction to Computers (3)* • ENG-10000 – Writing Lab (1) (if required) • ENG-10300/ENG-10303 – English Composition I (3)* • ENG-10400/ENG-10403 - English Composition II (3)* • SPE-10500 – Fundamentals of Speech (3)* **OR** SPE-11400 – Interpersonal Communication (3)*

Humanities	11-12	• Select 2-3 credits from Art, Music, or Theater.*
		 • Select 3 credits from Journalism, Languages, or Literature. *
		 • HIS-10500 – World Societies to 1600 (3)* **OR**
		   HIS-10600 – World Societies Since 1600 (3)* **OR**
		   HIS-20100 – US History to 1865 (3)* **OR**
		   HIS-20200 – US History Since 1865 (3)* **OR**
		   HIS-20300 – Michigan History (3)*
		 • PHL-20100 – Introduction to Philosophy (3)* **OR**
		   PHL-21000 – Introduction to Ethics (3)*

Social Science	9-10	• POL-10100 – American Government (3)* **OR**
		   POL-10500 – American Government with Humanities* (3)
		 • GEO-10000 – World Geography (4)* **OR**
		   POL-20000 – International Relations (3)* **OR**
		   POL-20100 – Comparative Government* (3)
		 • ANT-10100 – Cultural Anthropology (3)* **OR**
		   SOC-10100 – Introduction to Sociology (3)* **OR**
		   PSY-10100 – Introduction to Psychology (3)*

Math/Natural Science	21-26	**Select ONE of the following options:**
		 Life Science Option
		 • Select two of the following mathematics courses:
		   MTH-18001 – Pre-Calculus (4) **OR**
		   MTH-20600 – Application in Statistics (4) **OR**
		   MTH 22002 – Calculus I (4) **OR**
		   MTH 22102 – Calculus II (4) **OR**
		   MTH-22202 – Calculus III (4)
		 • BIO-10100 – General Biology (4)
		 • BIO-20100 – General Zoology (4) **OR**
		   BIO-20200 – General Botany (4) **OR**
		   BIO-21000 – Microbiology (4) **OR**
		   BIO-21300 – Nature Study (4)
		 • Select either a Chemistry or Physics sequence:
		   CHE-10101/02 – General Chemistry I (4) & Lab (1) **AND**
		   CHE-10201/02 – General Chemistry II (4) & Lab (1) **OR**
		   PHY-20101/02 – General Physics I (4) & Lab (1) **AND**
		   PHY-20201/02 – General Physics II (4) & Lab (1) **OR**
		   PHY-22101/02 – College Physics I (4) & Lab (1) **AND**
		   PHY-22201/02 – College Physics II (4) and Lab (1)

(continued)

ASSOCIATE IN SCIENCE
Life Science (DASC1 or Physical Science (DASC2)   (continuation)

Subject Area	Credits Needed	Courses (Credit hours are listed after each course.)
Math/Natural Science		**Physical Science Option**

		• Select two of the following mathematics courses:
		  MTH-18001 – Pre-Calculus (4) **OR**
		  MTH 22002 – Calculus I (4) **OR**
		  MTH 22102 – Calculus II (4) **OR**
		  MTH-22202 – Calculus III (4)
		  (MTH-20500 or MTH-20600 cannot be counted for credit.)
		• Select either a Chemistry or Physics sequence:
		  CHE-10101/02 – General Chemistry I (4) & Lab (1) **AND**
		  CHE-10201/02 – General Chemistry II (4) & Lab (1) **OR**
		  PHY-20101/02 – General Physics I (4) & Lab (1) **AND**
		  PHY-20201/02 – General Physics II (4) & Lab (1) **OR**
		  PHY-22101/02 – College Physics I (4) & Lab (1) **AND**
		  PHY-22201/02 – College Physics II (4) and Lab (1)
		• Select any two of the following courses:
		  BIO-10100 – General Biology (4)
		  BIO-20100 – General Zoology (4)
		  BIO-21000 – Microbiology (4)
		  BIO-21300 – Nature Study (4)
		  CHE-10101/02 – General Chemistry I (4) & Lab (1)
		  CHE-10201/02 – General Chemistry II (4) & Lab (1)
		  GEL-10500 – Physical Geology (4)
		  MTH 22102 – Calculus II (4)
		  MTH-22202 – Calculus III (4)
		  PHY-20101/02 – General Physics I (4) & Lab (1)
		  PHY-20201/02 – General Physics II (4) & Lab (1)
		  PHY-22101/02 – College Physics I (4) & Lab (1)
		  PHY-22201/02 – College Physics II (4) and Lab (1)

* Courses that meet General Education Core Competencies

COURSE DESCRIPTIONS

This portion of the 2004-2005 College Catalog lists all courses offered by Kirtland Community College. Courses are separated into their respective subject areas. The following example displays how to properly interpret a course description:

EXAMPLE:
CHE-10003   **Chemical Science (F,W)**   **4(3-2)**
                   Prerequisite: DEV-07300 **or**
                   Corequisite: DEV-07300
                   (Credit Type)

Chemical Science presents the elementary principles of inorganic, physical, and organic chemistry. It is intended to introduce college chemistry, or to satisfy course requirements in technical fields such as nursing. **Prerequisite or corequisite**: DEV-07300.

1. **Course Number**: Composed of three letters and a number. The letters identify a course by subject area. In this case, CHE is for Chemistry.

2. **Course Title**: Identifies a course by name.

3. **Course Availability**: The letter code designates the semester in which the course is usually offered: **S** = Summer; **W** = Winter; **F** = Fall; and **V** = Variable (occasionally or on demand if sufficient enrollment develops).

4. **Credit Hours**: The number of credits a course is assigned toward graduation.

5. **Lecture-Laboratory Hours**: During a 15-week semester, the first number refers to the hours the student will spend per week in a classroom lecture. The second number refers to the instructional hours that a student will spend in a laboratory per week. Some clinical nursing classes list a third number that specifies the number of hours spent in a clinical setting each week. The addition of these figures will produce the total number of contact hours the student will spend per week in the class over a 15-week semester.

6. **Course Description**: An explanation of the knowledge and skills gained by successful completion of the course.

7. **Prerequisite**: Requirement(s) that must be met or course(s) that must be taken before enrolling in a specific course.

8. **Corequisite**: Course that must be taken at the same time as the desired course.

9. **Distribution**: Some programs require courses of a specific distribution type. The category in which a course may be used is listed in italics.

ACCOUNTING (ACC)

ACC-10600   Fundamentals of Accounting (F,W,S)   4(4-0)
This course is a study of the fundamental principles of accounting. Emphasis is placed on the accounting cycle from journal entries to the preparation of financial statements for both the service and merchandising firm, including payroll and accounting for cash.

ACC-12100   Accounting Principles I (F,W)   4(4-0)
This course provides development of an understanding of accounting topics that include assets, liabilities, and both partnership and corporate equity. This course will develop the student's ability to use accounting information.

ACC-12200   Accounting Principles II (F,W)   4(4-0)
A study of managerial accounting statements, including financial statement analysis, budgeting, and decision making, becomes the major emphasis of this course. Also included is financial statement preparation, with the statement of cash flow. **Prerequisite**: ACC-12100.

ACC-12500   Computer Accounting with QuickBooks (F)   4(4-0)
This course is organized into three sections. The first section introduces students to the computer, Windows, and QuickBooks accounting for a service business. The second section focuses on merchandising businesses. The third section concentrates on payroll and creating a company using QuickBooks. Accounting concepts and their relationship to QuickBooks Pro 2000 are presented in each chapter. In addition to accounting concepts, students use a fictitious company and receive hands-on training in the use of QuickBooks Pro within each chapter.

ACC-20500   Cost Accounting I (V)   3(3-0)
This course is designed to provide a practical knowledge of cost accounting systems and procedures. The emphasis of the course is on the study of managerial planning, control, and analysis of the costing information system. **Prerequisite**: ACC-12200.

ACC-20600   Cost Accounting II (V)   3(3-0)
This course is a continuation of the study of cost accounting systems and procedures. The emphasis of the course is on the study of budgeting, performance evaluation, variance analysis, and decision making under uncertainty. **Prerequisite**: ACC-20500.

ACC-21000   Intermediate Accounting I (V)   4(4-0)
The course builds on previously learned accounting principles and stresses more complex applications of these principles. This study of current assets and current liabilities includes at least one outside project. **Prerequisite**: ACC-12200.

ACC-21100   Intermediate Accounting II (V)   4(4-0)
This course provides an in-depth study of long-term assets and liabilities, as well as equities. Preparation and analysis of all financial statements is included, and at least one outside project is required. **Prerequisite**: ACC-21000.

ALLIED HEALTH (ALH)

ALH-10101   Medical Terminology (F,W,S)   2(2-0)
This course is a survey study in the word-building system for medical terms. It covers word roots, combining forms, prefixes, suffixes, and medical word-building and decoding. Emphasis is placed on the correct spelling of terms, as well as definition and usage according to medical specialties. This course can be utilized by students who are planning a health career.

ALH-10801   Pathology (W)   3(3-0)
This survey course focuses on basic diseases, components of diagnosis, etiology, common manifestations, and treatment. This course is utilized by students who are planning a health career. **Prerequisite**: ALH-10101 or permission of instructor, BIO-10701, and BIO- 10702.

ALH-11201   Medical Ethics & Law (F,W)   1(1-0)
This course provides an introduction to the health care professional's role, ethical dilemmas faced in the field, and legal responsibilities in individuals' roles and in society.

ALH-11400   Math for Medication Administration (F, W)   1(1-0)
This course reviews Roman numerals, fractions, decimals, percentages, and ratios. It includes a study of the metric system and the Apothecaries' system, with applications in converting from one system to another. The course emphasizes calculations involved in preparing solutions and giving medications. **Prerequisite**: DEV-06300 or indicated tested competency.

ALH-12300   Medical Assistant Administrative Procedures (W)   3(2-2)
This course is provided in a competency-based format for medical assistant students. It focuses on basic medical office functions, bookkeeping and basic accounting, insurance and coding, facility management, and transcription. **Prerequisite**: OIS-18203.

ALH-12401   Lifetime Wellness & Nutrition (F,W,S)   2(2-0)
This course focuses on recommended screening to maintain health, appropriate nutrition, concepts of fitness, and stress management. It will help the student understand how an individual can plan a healthier lifestyle.

ALH-12600   Medical Assistant Clinical Procedures (W)   3(2-2)
This course is provided in a competency-based format for medical assistant students. It focuses on asepsis and infection control, specimen collection and processing, diagnostic testing, patient care, medication administration, and principles of radiology in the ambulatory clinical setting. **Prerequisites**: ALH-10101, ALH-11400, BIO-10701, and BIO-10702. **Corequisite**: ALH-15000.

ALH-15000   Basic Pharmacology (F)   3(3-0)
This course is designed to introduce the student to basic concepts of drug therapy, principles and methods of drug administration, and related health care activities and responsibilities. The course is based on the pharmaco/physiological concept. Continual association to clinical experience and physiology principles serve as a foundation of the course. **Prerequisite:** BIO-10701, BIO-10702, and ALH-10101. **Corequisite**: ALH-11400.

ALH-20201   Standard First Aid (V)   1(0.5-0.5)
This course provides information and practice for appropriate response in the event of an emergency. Students will gain knowledge and practice in professional CPR (one-man, two- man, infant, child, and choking victim) and basic first aid.

ALH-20600   Advanced First Aid (V)   3(2-1)
The student will identify and explain the A.R.C. advanced procedures for giving first aid and pass a written and practical examination for Red Cross Certification. The student shall spend part of the sessions practicing skills requisite to first aid instruction or working on a special project related to his/her area of specialization. This course includes training in professional rescuer CPR.

ALH-21701   Basic Emergency Medical Technician (F)   10(7-4-3)
This course prepares students to function in emergency medical services within the scope and responsibilities of a Basic EMT. Hands-on skills lab practice and structured clinical experiences at hospital emergency rooms and on ambulances is provided. **Prerequisites**: Valid driver's license, no felony convictions, completed health form, and immunizations prior to clinical.

ALH-21500   Paramedic I (W)   13(11-2)
This course provides the foundation for the paramedic program and begins to prepare students to function in emergency medical care within the scope and responsibilities of the paramedic. Hands-on practical skills training is included. **Prerequisite or corequisite**: Licensed EMT or completion of EMT program and eligible for licensure.

ALH-22500   Paramedic II (S)   13(9-8)
This course is the second part of the paramedic program. Hands-on practical skills training is included. **Prerequisite**: ALH-21500.

ALH-23500   Paramedic III (F)   **16(11-11)**
This course is the third part of the paramedic program. It provides structured clinical experience in pre-hospital and hospital settings. **Prerequisite**: ALH-22500.

ALH-24500   Paramedic IV (W)   **7(0-7)**
This course is the fourth part of the paramedic program. Further theory, hands-on training, and structured clinical experiences are included. **Prerequisite**: ALH-23500.

ALH-25500   Medical Assistant Professional Issues & Externship (S)   4(1-4)
This course provides concepts dealing with professional issues related to the role of the medical assistant. In addition, it will enable students to apply knowledge, develop professional attitudes, interact with other health care professionals and patients, perform administrative procedures, and perform clinical procedures in the clinical setting. **Prerequisites**: ALH-10801, ALH-11201, ALH-12300, ALH-12600, COM-10000, and PSY-10100. **Corequisite**: ALH-20201.

ANTHROPOLOGY (ANT)

ANT-10100   Cultural Anthropology (V)   **3(3-0)**
This course studies different social institutions in different tribal cultures of the world. Topics include marriage, religion, economics, and other aspects of social organizations. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(Social Science Credit)*

ANT-10500   Introduction to Archaeology & Prehistory (V)   3(3-0)
This course introduces the theories and techniques used to reconstruct past cultures. The archaeological record will serve as the basis for tracing the development of ancient civilizations in the Old and New Worlds. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(Social Science Credit)*

ANT-275--   Directed Study-Anthropology (V)   **1-6(Variable)**
This course is designed to meet special occupational needs for individual students. **Prerequisite**: recommendation of an advisor. *(Social Science Credit)*

ART (ART)

ART-10000   Art History I (F)   **3(3-0)**
This course surveys the major developments, movements, and philosophies of the visual arts from the Prehistoric to the Renaissance period by means of lecture, slides, and videos. *(Humanities Credit)*

ART-10103   Art History II (W,S)   **3(3-0)**
This course provides a survey of the major developments, movements, and philosophies of the visual arts from the Renaissance period to the present, by means of lecture, slides, and videos. *(Humanities Credit)*

ART-10500   Introduction to Design (F)   **3(0-4)**
In this course, students will gain an understanding of the relationships between shape, form, pattern, texture, and color. By using computers, the student will create compositions dealing with biomorphic and rectilinear shapes. This course is intended to give the student a basic knowledge of the principles of composition and the elements of design and the role they play in the creative process. *(Humanities Credit)*

ART-10600   Fundamentals of Drawing I (F)   **3(0-4)**
This course will stress the process of drawing as an imitation of nature through eye-hand coordination. Drawings are generated exclusively from still lifes as subject matter. Emphasis is on linear construction with a concern for accurate proportion and simple positive-negative/figure-ground relationships. Value structure is introduced after an initial but solid understanding of sighting and measuring, composition, and spatial relationships has been developed. Media is limited to achromatic/monochromatic dry drawing materials. *(Humanities Credit)*

ART-10700   Painting I (V)   3(0-4)
This course will stress the process of painting as an imitation of nature through eye-hand coordination. Paintings are generated from photographs and still lifes (observed objects) as subject matter. Emphasis is on the exploration of techniques with a concern for accurate proportion, simple positive-negative/figure-ground relationships, and color dynamics. Technical realism is introduced after an initial but solid understanding of color theory, compositions, and spatial relations has been developed. Media is limited to full-spectral wet oil materials. *(Humanities Credit)*

ART-10800   Ceramics I (V)   3(0-4)
This course provides an introduction to clay and its characteristics as a creative medium in utilitarian and non-utilitarian forms through hand-built and wheel-thrown objects. *(Humanities Credit)*

ART-11000   Watercolors (V)   3(0-4)
This course will stress the process of painting as an imitation of nature through eye-hand coordination. Paintings are generated from photographs and still lifes (observed objects) as subject matter. Emphasis is on the exploration of techniques with a concern for accurate proportion, simple positive-negative/figure-ground relationships, and color dynamics. Technical realism is introduced after an initial but solid understanding of color theory, compositions, and spatial relations has been developed. Media is limited to full-spectral wet watercolor materials. *(Humanities Credit)*

ART-11200   Printmaking (F,W)   3(0-4)
This course introduces the basic techniques of etching, calligraphy, embossing, block printing, and woodcuts. Students are able to explore a variety of image transfer processes. *(Humanities Credit)*

ART-11400   Sculpture I (V)   3(0-4)
Students will explore the processes and materials of sculpture (clay, stone, wood, plaster, metals, and other media) with an emphasis on the concepts of three-dimensional form and space. *(Humanities Credit)*

ART-11500   Photography I (V)   3(2-2)
This course offers an introduction to the basic technical skills of photography as a creative medium for personal expression. Students must provide a 35mm camera. *(Humanities Credit)*

ART-14000   Digital Video I (V)   3(2-3)
This hands-on course will teach students how to create various video projects, edit, and enhance them on a computer, and present/distribute them on videotape, CD, and the World Wide Web. *(Humanities Credit)*

ART-19000   Digital Communications I   3(1-3)
This course is designed to offer a thorough grounding in the language and process of graphic design, from comps to finished mechanicals, with an emphasis on fine typography and an understanding of Photoshop imaging techniques. *(Humanities Credit)*

ART-20500   Design II (W)   3(0-4)
This course concentrates on three-dimensional form and spatial relationships. Students will gain the ability to manipulate objects in three-dimensional space. Course assignments will focus on processes of construction and quality of craftsmanship. **Prerequisite**: ART-10500. *(Humanities Credit)*

ART-20600   Drawing II (W)   3(0-4)
This course stresses the process of drawing as an imitation of nature through eye-hand coordination. Drawings are generated from still lifes and photographs as subject matter. In Drawing I, emphasis is on linear construction with a concern for accurate proportion and simple positive-negative/figure-ground relationships. Emphasis in Drawing II is on value structure and the development of the realistic rendering techniques. Students should show a concentration in experimental media, techniques, spatial relationships, and conceptual processes of drawing. **Prerequisite**: ART-10600. *(Humanities Credit)*

ART-20700   Painting II (F)   3(0-4)
Painting II will continue to stress the process of painting as an imitation of nature through eye-hand coordination. Paintings are generated from photographs and still lifes as subject matter. Students embark on a wider exploration of techniques with a concern for accurate proportion, simple positive-negative/figure-ground relationships, and color dynamics. Technical realism is one approach used to develop a continuing understanding of color theory, composition, and spatial relationships. Emphasis is on the student's personal development and refinement of personal expression. Media is limited to full-spectral wet oil materials. **Prerequisite**: ART-10700. *(Humanities Credit)*

ART-20800   Ceramics II (V)   3(0-4)
This course offers advanced study of forms in clay with emphasis on wheel-thrown objects, glaze calculations, and kiln procedures. **Prerequisite**: ART-10800. *(Humanities Credit)*

ART-21400   Sculpture II (V)   3(0-4)
Students will be exposed to a broad variety of materials and techniques. Greater emphasis will be placed on scale and style. **Prerequisite**: ART-11400. *(Humanities Credit)*

ART-21500   Photography II (V)   3(2-2)
This course provides creative work for the advanced student in developing a photography portfolio. This course will expand upon the techniques and skills learned in Photography I. Students will explore a variety of films and specialized processing techniques, as well as creative darkroom printing procedures. Students must provide a 35mm camera. **Prerequisite**: ART-11500. *(Humanities Credit)*

ART-21600   Painting III (V)   3(1-3)
This course will explore varying degrees of painterly expression. Non-objective/formalist painting issues will be investigated in conjunction with experimentation in painting techniques. Emphasis will be on individual development and refinement of personal expression. **Prerequisite**: ART-20700. *(Humanities Credit)*

ART-21800   Ceramics (Studio Problems) (V)   3(0-4)
Students will be expected to begin developing a style, concentrating their studies on specific forming techniques. A greater emphasis will be put on formulation of glazes and operating of kilns. **Prerequisite**: ART-20800. *(Humanities Credit)*

ART-22400   Advanced Sculpture I (V)   3(0-4)
This course will allow students to intensify their studies of techniques briefly touched on in Sculpture I and II. Each student will be encouraged to explore how personal issues influence the development of his/her own style. **Prerequisite**: ART-21400. *(Humanities Credit)*

ART-22500   Introduction to Color Photography (V)   3(0-4)
By using color transparency film, computers, and/or color negative film, students will explore the use of color as a compositional element in photography. **Prerequisite**: ART-11500. *(Humanities Credit)*

ART-22800   Ceramics (Studio Operations) (V)   3(0-4)
This course will be devoted to polishing the students' skills in all areas. Great attention will be given to kiln operation, glazing techniques, mould making, and kiln and studio equipment fabrication. **Prerequisite**: ART-21800. *(Humanities Credit)*

ART-23100   Advanced Black & White Photography (W)   3(0-4)
Students will be encouraged to use a variety of films and processes. Students will use both medium and large format cameras, as well as gain a greater understanding of 35mm photography. The use of special lighting techniques will also be explored. **Prerequisite**: ART-21500. *(Humanities Credit)*

ART-23400   Advanced Sculpture II (V)   3(0-4)
During this course, students will pursue their own particular interests. Students will be encouraged to experiment with different media and ideas. **Prerequisite**: ART-22400. *(Humanities Credit)*

ART-23500   Digital Communications II (V)   3(1-3)
Digital Communications II teaches advanced page layout using the industry standard software QuarkXPress. Specifically, XPress Tag (which allows the student to use a favorite word processor to completely format a QuarkXPress document), books and synchronization (which allows the student to split large Quark files into several smaller files), and indexing with an indexing Xtension. **Prerequisite**: ART-19000. *(Humanities Credit)*

ART-24000   Digital Video II (V)   3(2-3)
This course is a continuation of Digital Video I. Special emphasis will be placed on learning how to utilize software packages commonly used in the digital video industry. **Prerequisite**: ART-14000. **Corequisite**: ART-27545. *(Humanities Credit)*

ART-25000   Illustration I (V)   3(1-3)
This is an introductory course in the basic black, white, and color media illustration techniques with exploration in figurative drawing, media techniques, color and composition, spatial relationships, and conceptual progress of page layout. Illustration I will utilize the knowledge gained in Fundamentals of Drawing I to produce artwork that tells a story or expresses an idea. Artwork is generated by the media available to the student that best fits the idea, such as graphite, charcoal, ink, digital, photography, paint, colored pencil, etc. The ultimate goal in illustration is to create work that can be used for publication, whether magazine, book, brochure, etc. **Prerequisite**: ART-10600. *(Humanities Credit)*

ART-26000   Illustration II (V)   3(1-3)
Emphasis will be placed on the exploration of color media and processes within specific illustration assignments. Problem-solving is encouraged through creative investigation. **Prerequisite**: ART-25000. *(Humanities Credit)*

ART-275--   Directed Study-Art (V)   1-6(Variable)
This course is designed to meet the interests and needs of individual students who are at an advanced level in one of the art disciplines. **Prerequisite**: recommendation of an advisor. *(Humanities Credit)*

ART-27533   Directed Study-Watercolors II (V)   3(1-3)
An advanced course in the basic painting sequence, Watercolors II will continue to stress the process of painting as an imitation of nature through eye-hand coordination. Students embark on a wider exploration of techniques with a concern for accurate proportions, simple positive-negative/figure-ground relationships, and color dynamics. Technical realism is one approach to create with a continuing understanding of color theory, composition, and spatial relationships. Emphasis is on the student's personal development and refinement of personal expression. Media is limited to full-spectral watercolor materials. **Prerequisite**: ART-11000 *(Humanities Credit)*

ART-27545   Directed Study-Computer Generated Images I (V) 3(1-3)
In this course, students will learn the fundamental concepts and features of Adobe Photoshop. These concepts include photo editing and retouching, color correction, layer basics, and special effects. *(Humanities Credit)*

ART-27546   Directed Study-Computer Generated Images II (V) 3(1-3)
Building on the techniques learned in ART-27545, this course teaches advanced techniques used by professional graphic artists and photographers. **Prerequisite**: ART-27545. *(Humanities Credit)*

ART-27550   Directed Study-Digital Darkroom (V)   3(1-3)
Through the use of conventional cameras/processes and their digital counterparts, students will learn to scan, edit, manipulate, and print photographic images. **Prerequisites**: ART-11500 and ART-27545 or permission of instructor. *(Humanities Credit)*

ART-27553   Directed Study-Advanced Black & White Photography   3(1-3)
Students will draw on skills acquired in Photography I and II to develop and polish a personal style. Assignments will be developed to aid the student in pursuing their own unique goals. **Prerequisite**: ART-21500. *(Humanities Credit)*

ART-27565   Comic Book Illustration   3(1-3)
This course provides a basic introduction to comic book illustration, with exploration in figure drawing, media, techniques, spatial relationships, and the conceptual progress of page layout. *(Humanities Credit)*

ART-27566   Directed Study-Computer Generated Images III (V)   3(1-3)
Building on the fundamentals learned in ART-27545 and ART-27546, this course explores the advanced type techniques and effects, layout, and design. **Prerequisite**: ART-27546. *(Humanities Credit)*

ART-27571   Directed Study-Computer Animation I   3(1-3)
Computer Animation I is an introductory study of the three-dimensional computer images and animation. The class will use 3D Studio to create three-dimensional imagery, apply texture maps, and lighting effects. Several animation techniques will also be studied. Students will meet in small groups to discuss lessons and activities. *(Humanities Credit)*

ART-27578   Directed Study-Computer Generated Images IV (V)   3(1-3)
This course continues the exploration of advanced type techniques and effects, layout, and design. **Prerequisite**: ART-27566. *(Humanities Credit)*

ART-27581   Directed Study-Children's Book Illustration (V)   3(1-3)
This course provides a basic introduction to aesthetic principles, including color and composition, through a variety of materials, with emphasis on media and techniques for children's storybooks. *(Humanities Credit)*

ART-27587   Directed Study-Painting IV (V)   3 (1-3)
Emphasis will be placed on the student's ability to develop ideas, themes, and motifs of personal significance and the formal, technical skills to successfully execute his/her work**.** The course will also examine important theoretical and aesthetic issues related to art and will review major figures in contemporary painting. **Prerequisite**: ART-21600. *(Humanities Credit*)

ART-27590   Directed Study-Watercolors III (V)   3(1-3)
An advanced course in the painting sequence, Watercolors III will emphasize individual development and refinement of personal expression in various approaches to painting. Students embark on a wider exploration of techniques with concern for accurate proportions, positive-negative/figure-ground relationships, and color dynamics while finding the artist within. Realism is only one approach to creating with a continuing understanding of color theory, composition, and spatial relationships. **Prerequisite**: ART-27533. *(Humanities Credit)*

ART-28000   Portfolio (F,W)   3(3-1)
This is an advanced course in portfolio preparation. It will stress the process of preparing an intensive portfolio for the artist's market. Résumés and artist's statements are written to develop an initial but solid understanding of the artist's work.

AUTOMOTIVE TECHNOLOGY (AUT)

AUT-16100   Engine Fundamentals & Overhaul (W)   4(3-3)
This course provides an introduction to design, operation, troubleshooting, and service procedures of modern gasoline engines. The student will participate in disassembly, measurement, inspection, and reassembly of engine components. Use of technical data and service procedures will be stressed. **Recommended prerequisite**: AUT-16302 or instructor's permission.

AUT-16201   Fuel Systems & Emission Control (W)   4(3-3)
This lecture/lab course is designed to provide instruction in fundamentals, construction, operation, troubleshooting, and servicing of the components of the fuel and emission control systems. Students will participate in disassembly and re-assembly of components and fuel systems and in emission control testing. **Recommended prerequisite**: AUT-16401 or instructor's permission.

AUT-16302   Automotive Fundamentals (F)   4(2-3)
This is a lecture/lab course designed to familiarize the student with the automotive unit, design, production, operating, testing, servicing, and job opportunities. Technician certification will be covered on the state and national levels. General ethics at school, on and off the job, along with sexual harassment education, will also be addressed.

AUT-16401   Basic Electricity (F)   3(2-2)
This electrical course is designed as a prerequisite for automotive electrical classes. Areas of instruction will cover basic electricity, magnetism, fundamentals of batteries, starting motors, charging systems, ignition systems, electrical accessories, and basic wiring.

AUT-16500   Steering, Suspension & Alignment (W)   4(3-3)
This is a lecture/lab course covering nomenclature and operating principles of steering and suspension systems. Emphasis is on skill development in servicing power steering systems, replacement of suspension components, and four-wheel alignment. **Recommended prerequisite**: AUT-16302 or instructor's permission. AUT-17702 is also recommended.

AUT-16801   Automotive Electrical Systems (W)   4(3-3)
In this course, students will develop technical knowledge and skills necessary to service and diagnose modern electrical systems. Emphasis will be placed on electrical testing techniques and use of electrical testing equipment. Instruction and lab work will cover chassis wiring, electrical accessories, batteries, starters, charging systems, and ignition system service. **Recommended prerequisite**: AUT-16401 or instructor's permission.

AUT-17001   Heating & Air Conditioning (F)   3(2-2)
In this basic refrigeration and air conditioning course, students will gain skills in refrigeration tools and materials, basic refrigeration systems, compressors, refrigerant controls, electric circuit controls, refrigerants testing, and repair of air conditioning units. **Recommended prerequisite**: AUT-16302 or instructor's permission.

AUT-17702   Automotive Braking Systems (F)   5(3-3)
This course is designed to provide instruction and skill development in automotive brake system theory and service. Students will develop skills and technical knowledge in the evolution of operation, theory, diagnosis, and repair of conventional and modern computer-controlled anti-lock braking systems. **Corequisite**: AUT-16302 or instructor's permission.

AUT-17901   Manual Transmission, Drivelines & Rear Axles (F)   4(3-3)
This is a lecture/lab course in the function, construction, operation, servicing, and troubleshooting of conventional power transmission components used in passenger cars and light trucks: clutch, manual transmission/transaxle, propeller shafts, universal joints, and rear axles. The student is given experience in disassembly and reassembly of component parts. **Recommended prerequisite**: AUT-16302 or instructor's permission.

AUT-18001   Engine Tune-Up & Performance Recertification (V)   1(.5-.5)
This course is designed for Michigan-certified automotive technicians who are required to fulfill Michigan Bureau of Automotive Regulation recertification requirements. This course satisfies the objectives for Engine Tune-Up and Performance as outlined by the State of Michigan. **Prerequisite**: current Michigan Bureau of Automotive Regulation certification in the area of Engine Tune-Up and Performance.

AUT-18002   Automotive Electrical Systems Recertification (V)   1(.5-.5)
This course is designed for Michigan-certified automotive technicians who are required to fulfill Michigan Bureau of Automotive Regulation recertification requirements. This course satisfies the objectives for Automotive Electrical Systems as outlined by the State of Michigan. **Prerequisite**: current Michigan Bureau of Automotive Regulation certification in the area of Automotive Electrical Systems.

AUT-18003   Automotive Brakes Systems Recertification (V)   1(.5-.5)
This course is designed for Michigan-certified automotive technicians who are required to fulfill Michigan Bureau of Automotive Regulation recertification requirements. This course satisfies the objectives for Automotive Brakes Systems as outlined by the State of Michigan. **Prerequisite:** current Michigan Bureau of Automotive Regulation certification in the area of Automotive Brakes Systems.

AUT-20402   Introduction to Automotive Service Management (W)   2(2-0)
This course is a study of facility licensing and management, with coverage of customer relations, promotional techniques, ethics, sexual harassment issues, job-seeking skills, and the laws of the State of Michigan as they apply to the automotive repair industry. The subjects of warranty processing, expense control, productivity, and time labor standards are defined and studied. Employee compensation and incentives, along with job opportunities and classifications, are also discussed and identified. **Recommended prerequisite**: AUT-16302 or instructor's permission.

AUT-20403   Advanced Automotive Service Management (W)   1(1-0)
This course is a study of management techniques which are less tangible than previously covered in AUT-20402. It includes administrative leadership functions, stress management, the employee acquisition and dismissal process, and motivational techniques. **Prerequisites**: AUT-20402, COM-10000, and ENG-10300/10303.

AUT-21800   Automatic Transmissions (F)   4(2-4)
In this lecture/lab course, students are prepared to service, diagnose, and overhaul commonly used automatic transmissions and transaxles. Emphasis will be placed on principles of operation, model variations, servicing techniques, and troubleshooting procedures. **Recommended prerequisite**: AUT-16302 or instructor's permission.

AUT-23101   Auto Service Area - Chassis (W)   4(0-6)
This is a specialty service lab for students pursuing the Chassis Specialist certificate. **Prerequisites**: AUT-16201, AUT-16302, and AUT-17702. **Corequisite**: AUT-16500.

AUT-23102   Auto Service Area - Powertrain (W)   4(0-6)
This is a specialty service lab for students pursuing the Powertrain Specialist certificate. **Prerequisites**: AUT-17702 and 17901. **Corequisite**: AUT-16100.

AUT-23103   Auto Service Area - Electrical (W)   4(0-6)
This is a specialty service lab for students pursuing the Electrical Specialist certificate. **Prerequisites**: AUT-16201, AUT-16302, AUT-16401, AUT-16801, and AUT-26601.

AUT-23104   Automotive Internship (W)   8(1-11)
This internship offers supervised automotive repair experience at a selected automotive repair facility. Students accomplish the course objectives while employed in the automotive industry. This course is required for completion of the associate in applied science, and the master certificate program. **Prerequisites**: successful completion of automotive program curriculum. **Corequisite**: AUT-17901, or instructors permission.

AUT-26601   Engine Performance & Diagnostics (F)   4(3-3)
Through the study of theory and use of testing and diagnosis procedures for computerized engine controls, the student will develop the skills required of a diagnostic tune-up technician. **Prerequisites**: successful completion of first and second semester of automotive curriculum or instructor's permission and AUT-16201, AUT-16302, AUT-16401, and AUT-16801.

AUT-275--   Directed Study-Automotive Technology (V)   1-6(Variable)
This is a course designed to meet special occupational needs for individual students. **Prerequisite**: recommendation of an advisor.

AVIATION (AIR)

AIR-25000   Private Pilot Ground School (W)   3(3-0)
This is a beginning course for students engaged in primary flight instruction or interested in such instruction. Topics include introduction to airplanes, airplane systems, theory of flight, airports, communications, air traffic control, weight and balance, meteorology, Federal Aviation Regulations, Airmen's Information Manual, flight computer, basic navigation, performance factor, radio navigation, and medical factors of flight. Upon successful completion, the student will be qualified to take the Federal Aviation Administration written examination for private pilots.

BIOLOGY (BIO)

BIO-10100   General Biology (F,W)   4(3-2)
This is a lecture and laboratory course in the basic principles of life science; genetics, origin, and evolution of life, structure, function, and classification of organisms and interactions in the ecosystem are stressed. *(Science Credit)*

BIO-10701   Essentials of Anatomy & Physiology (F,W,S)   3(3-0)
This course provides an abbreviated study of the gross and microscopic structures and functions of the systems, organs, and tissues of the human body. Terminology and common pathologies of each system will be introduced. **Corequisite**: BIO-10702. *(Science Credit, except for Associate in Science)*

BIO-10702   Essentials of Anatomy & Physiology Lab (F,W,S)   1(0-2)
This is a laboratory course to accompany BIO-10701. **Corequisite**: BIO-10701. *(Science Credit, exceptAssociate in Science)*

BIO-11500   Anatomy & Physiology I (F,W)   4(3-2)
The first of a two-semester sequence, the first semester covers the nature of life science, organization of the human body, cell chemistry and metabolism, the integumentary system, histology, the skeletal and muscular systems, and the nervous system. **Prerequisite**: high school chemistry or equivalent, or permission of instructor. *(Science Credit, except for Associate in Science)*

BIO-11600   Anatomy & Physiology II (W,S)   4(3-2)
This is a continuation of BIO-11500 with emphasis on the sensory system, endocrine system, cardiovascular system, respiratory system, digestive system, urinary system, and reproductive system with an introduction to genetics. The course will conclude with a study of pregnancy and human growth and development. **Prerequisite**: BIO-11500, BIO-10701 and BIO-10702 and High School Chemistry or equivalent, or permission of instructor. *(Science Credit, except Associate in Science)*

BIO-12000   Life Science I (F,W)   4(3-2)
This is an introductory course for pre-education majors. Content will be at the college level and consistent with the life science content strands established in "Michigan Essential Goals and Objectives for Science Education K-12" including cells, organization of living things, heredity, evolution, ecosystems, constructing new scientific knowledge, and reflecting on scientific knowledge. Instructional methods will reflect active learning styles appropriate for K-8 classrooms. *(Science Credit)*

BIO-200--   Life Science Workshop (V)   1-4(Variable)
This is a lecture and hands-on activity course in life science. Teachers will receive materials suitable for use in their classrooms. *(Science Credit, except for Associate in Science)*

BIO-20100   General Zoology (V)   4(3-2)
This course provides a lecture/laboratory survey of the major animal groups including internal and external structure; reproductive processes; behavior patterns; life history; and special features peculiar to each group. Some field work in identification of local animals is included. **Prerequisite**: BIO-10100 or permission of instructor. *(Science Credit)*

BIO-20200   General Botany (V)   4(3-2)
This is a survey course in plant morphology. The structure, classification, and natural history of major plant groups is stressed, as well as extensive field work in the collection and identification of local plant species. *(Science Credit)*

BIO-21000   Microbiology (F,W)   4(3-2)
This course provides a lecture/laboratory study of the major groups of microbes. The structure of the unicellular organism will be compared to the structure of multicellular organisms. Applications to medicine and ecology will be discussed. The course is designed for the liberal arts student as well as the health sciences student. **Prerequisites**: CHE-10003, CHE-10004, and BIO-10100, or permission of instructor. *(Science Credit)*

BIO-21300   Nature Study (S)   **4(3-2)**
A lecture/laboratory and field course in the behavior, ecology, and classification of plants and animals, including recognition of local flora and fauna, the course is designed to give natural history background material to the liberal arts non-science major, to the non-specialists interested in outdoor life, to those interested in nature interpretation, and to elementary school teachers. *(Science Credit)*

BIO-21500   Pathophysiology (F,W)   **4(4-0)**
Content of this course will examine the mechanism underlying disease processes and the subsequent adaptation and alterations in body function. Selective health problems will be emphasized throughout the course. Clinical application will be made in concurrent and subsequent nursing courses. **Prerequisites**: ALH-10101 and BIO-11600. *(Science Credit, except for Associate in Science)*

BUSINESS (BUS)

BUS-10100   Introduction to Business (F,W)   **3(3-0)**
This course provides an orientation to characteristics and functions of business, business environment, opportunities, ownership, management, organization, marketing, physical plant, personnel, finance, ethics, law, and controls for decision making.

BUS-201--   Internship in Business & Marketing (V)   **3-9(variable)**
This course is designed to provide students with an opportunity to earn credit while obtaining meaningful discipline-related work experience outside the classroom setting. Students are expected to spend a minimum of 128 hours (3 credits) in an appropriate work setting. The course may be repeated for a maximum of nine credits. **Prerequisite**: 2.5 GPA, sophomore standing, employer and instructor approval, and submission to, and approval by, business department.

BUS-20200   Grant Writing (S)   **3(3-0)**
This course is designed to give students experience in the research, writing, and planning skills involved in preparing grants. Emphasis is placed on writing grants for nonprofits.

BUS-21000   Principles of Management (W)   **3(3-0)**
This course examines management as a basic process of organizing, directing, actualizing, and controlling the operation of a business enterprise. **Prerequisite**: BUS-10100 or permission of instructor.

BUS-21500   Legal Environment of Business (F)   **3(3-0)**
This course provides an introduction to the legal environment as it relates to business and society, to provide the student with a basic understanding of law as it pertains to business operations and their relationships with society.

BUS-24000   Financial Management (W)   **3(3-0)**
This course is designed to provide a basic foundation in the major areas of finance, providing the necessary background for courses in business finance, financial management, monetary theory, banking problems, public finance, agricultural finance, security markets, and related courses. **Prerequisite**: ACC-12200 or permission of instructor.

BUS-24500   Personnel Management (F)   **3(3-0)**
The object of this course is to acquaint students with the problems of personnel management. Personnel problems that deal directly with departmental organization, employment procedures, methods of testing, occupational descriptions, job evaluations, merit rating, wage plans, wage and salary control, aids to employees, safety, health and recreation, and employer-employee relations are covered. **Prerequisite**: sophomore standing (30 credit hours or more) or permission of instructor.

BUS-250--   Business Seminar (F,W,S)   **1-6(Variable)**
These courses or seminars are designed to provide basic concepts and skills relative to starting and managing a small business.

BUS-275--   Directed Study-Business (V)   **1-6(Variable)**
This course is designed to meet special occupational needs for individual students. **Prerequisite**: recommendation of advisor.

CAREER ABILITY PREPARATION (CAP)

Courses beginning with the three-letter CAP designation are the Career Ability Preparation courses offered at M-TEC^{SM} at Kirtland-Gaylord. These courses include topics in reading, writing, math, and locating information. For more information, call 989-705-3600 or go to mtec.kirtland.edu.

CAREER AND PERSONAL DEVELOPMENT (CAR)

CAR-10300   Career Development Skills (V)   1(1-0)
Career development skills are those abilities that allow students to be successful in all aspects of their careers. This course teaches career exploration, job search, employment correspondence, and interview and employability skills. Life skills such as time management, communications, and working cooperatively are emphasized. Students will engage in written, oral, and interpersonal activities to learn and demonstrate workplace skills.

CAR-10900   Efficient Reading (F,W)   1(0-2)
This course in reading for speed and efficiency is for the average or better reader who has no reading difficulties but wishes to increase reading speed and comprehension. **Prerequisite**: DEV-09601 or equivalent.

CAR-12600   Service Learning Lab (V)   1(Variable)
A service-learning project designed by an instructor to supplement course learning, this may be offered either as a required or optional lab.

CAR-200--   Service Learning Project (V)   1-5(Variable)
An individual service-learning project will be designed under the supervision of the coordinator of service learning and appropriate faculty members. The student will design a community placement as the basis for academic learning. **Prerequisite**: permission of the service learning advisory committee.

CARPENTRY (CPT)

Courses beginning with the three-letter CPT designation are the carpentry courses offered at M-TEC^{SM} at Kirtland-Gaylord. For more information, call 989-705-3600 or go to mtec.kirtland.edu.

CHEMISTRY (CHE)

CHE-10003   Chemical Science (F,W,S)   3(3-0)
Chemical Science presents the elementary principles of inorganic, physical, and organic chemistry. It is intended to introduce college chemistry, or to satisfy course requirements in technical fields such as nursing. **Prerequisite**: DEV-07300 or high school algebra. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. **Corequisite**: CHE-10004. *(Science Credit)*

CHE-10004   Chemical Science Lab (F,W,S)   1(0-2)
This is a laboratory course to accompany CHE-10003. **Corequisite**: CHE-10003. *(Science Credit)*

CHE-10101 General Chemistry I (F)   **4(4-0)**
General Chemistry I provides a thorough discussion of the topics of atomic structure, stoichiometry, solutions and pH, gas laws, electronic configuration and bonding theories, the periodic tables, and liquids and solids. **Prerequisites**: high school chemistry or CHE-10003 and CHE-10004 and one year of high school algebra. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. **Corequisite**: CHE- 10102. *(Science Credit)*

CHE-10102 General Chemistry I Lab (F)   **1(0-3)**
This is a laboratory course to accompany CHE-10101. **Corequisite**: CHE-10101. *(Science Credit)*

CHE-10201 General Chemistry II (W)   **4(4-0)**
This is a continuation of General Chemistry I, concerned broadly with thermodynamics and kinetics. Topics discussed include kinetics data analysis and reaction mechanisms, chemical equilibrium, electrochemistry, chemical thermodynamics, nuclear chemistry, and some descriptive chemistry of the elements. **Prerequisite**: CHE-10101. **Corequisite**: CHE-10202. *(Science Credit)*

CHE-10202 General Chemistry II Lab (W)   **1(0-3)**
This is a laboratory course to accompany CHE-10201. **Corequisite**: CHE-10201. *(Science Credit)*

CHE-10503 Organic & Biological Chemistry (V)   **3(3-3)**
This course will first provide a brief outline of the functional groups, nomenclature, and reactions of organic chemistry, then examine the fundamentals of biochemistry, including structure and reactivity of proteins and nucleic acids, and the basic process of metabolism. Methods of analysis of important bio-molecules and clinical tests of body processes and molecular diseases will be presented. **Prerequisite**: CHE-10003 or CHE-10101. **Corequisite**: CHE-10504. *(Science Credit)*

CHE-10504 Organic & Biological Chemistry Lab (V)   **1(1-3)**
This is a laboratory course to accompany CHE-10503. **Corequisite**: CHE-10503. *(Science Credit)*

CHE-20101 Organic Chemistry I (V)   **4(4-0)**
This course will cover modern bonding theory in organic molecules, theory of reactions, stereochemical principles, chemistry of alkanes, cycloalkanes, alkenes, dienes, alkynes, aromatics, and alcohols, with special emphasis on reaction mechanisms. **Prerequisite**: CHE-10201. **Corequisite**: CHE-20102. *(Science Credit)*

CHE-20102 Organic Chemistry I Lab (V)   **1(0-3)**
This is a laboratory course to accompany CHE-20101. **Corequisite**: CHE-20101. *(Science Credit)*

CHE-20201 Organic Chemistry II (V)   **4(4-0)**
This course is a study of ethers and epoxides, carbonyl-containing compounds, aldehydes, ketones, carboxylic acids and their derivatives, carbanion chemistry, aliphatic and aromatic nitrogen-containing compounds, with special emphasis on bioorganic compounds, amino acids and polypeptides, carbohydrates, and lipids. **Prerequisite**: CHE-20101. **Corequisite**: CHE-20202. *(Science Credit)*

CHE-20202 Organic Chemistry II Lab (V)   **1(0-3)**
This is a laboratory course to accompany CHE-20201. **Corequisite**: CHE-20201. *(Science Credit)*

COMMUNICATION (COM)

COM-10000 Written & Oral Communication (V)   **3(3-0)**
This course combines group, public, and written communication skills. Students will be exposed to these aspects of communication through reading and research and will demonstrate these skills through group activities, classroom discussion, presentations, and written assignments. **Prerequisite**: ENG-10300/10303.

COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGY (CAD)

Students with no previous drafting or CAD experience should take CAD-10100, 10200, 10300, and 12000 combined. Students with recent documented industrial experience or recent diplomas from high schools or skill centers that have an articulation agreement in place with Kirtland may gain **advanced placement** in one or more course(s).

CAD-10002   Engineering Graphics & CAD
NOTE: This course has been divided into modules CAD 10100, 10200, 10300, and 12000.

CAD-10100   Engineering Graphics I (F,W)   1(1-.5)
This course will introduce students to the manufacturing design language of the industrial world. Topics will include lettering, sketching fundamentals, and orthographic projection technique. Students will also complete a deeper study of sketching objects with normal surfaces. **Corequisites**: CAD- 10200, CAD-10300, and CAD-12000.

CAD-10200   Engineering Graphics II (F,W)   1(1-.5)
This course will introduce students to the manufacturing design language of the industrial world. Students will complete a study of sketching objects with inclined, oblique, and cylindrical surfaces. Students will also complete sketches of auxiliary and sectional views. **Corequisites**: CAD-10100, CAD-10300, and CAD-12000.

CAD-10300   Engineering Graphics III (F,W)   1(1-.5)
This course will introduce the students to the manufacturing design language of the industrial world. Students will complete a study of threads and fasteners, dimensioning, and tolerancing. Students will also learn basic instrumentation technique and scale reading. **Corequisites**: CAD-10100, CAD-10200, and CAD-12000.

CAD-10500   Detail Drafting w/CAD
NOTE: This course has been divided into modules CAD 106, 107, 108, and 121.

CAD-10600   CAD Detailing I (F,W)   1(1-.5)
CAD Detailing I is the first in a series of three classes that will emphasize skills and techniques needed by mechanical and product detail CAD operators. Topics will include dimension styles, layering, blocks, and starter files. Assignments will be completed on the AutoCAD computer-drafting program. **Prerequisite**: CAD-10002 or CAD-12000. **Corequisites**: CAD-10700, CAD-10800, and CAD-12100.

CAD-10700   CAD Detailing II (F,W)   1(1-.5)
CAD Detailing II is the second in a series of three classes that will emphasize skills and techniques needed by mechanical and product detail CAD operators. Topics will include dimension notes, tolerances, GD&T symbols, welding symbols, revision notes, auxiliary views, and section views. Assignments will be completed on the AutoCAD computer-drafting program. **Prerequisite**: CAD-10002 or CAD-12000. **Corequisites**: CAD-10600, CAD-10800, and CAD-12100.

CAD-10800   CAD Detailing III (F,W)   1(1-.5)
CAD Detailing III is the third in a series of three classes that will emphasize skills and techniques needed by mechanical and product detail CAD operators. Topics will include drive mechanisms, cams, and gear calculations. Assignments will be completed on the AutoCAD computer-drafting program. **Prerequisite**: CAD-10002 or CAD-12000. **Corequisites**: CAD-10600, CAD-10700, and CAD-12100.

CAD-11000   Architectural Drawing/CAD (V)   4(3-3)
In Architectural Drawing, students will prepare complete sets of residential and/or light commercial working drawings. Students will complete assignments with a computer-aided drafting system. **Prerequisite**: CAD-10002 or CAD-12000.

CAD-12000   Introduction to AutoCAD (F,W)   1(1-.5)
This course will introduce students to the manufacturing design language of the industrial world. Students will learn introductory, two-dimensional, computer-aided drafting. Assignments will be completed on a computer using AutoCAD software. **Corequisites**: CAD-10100, CAD-10200, and CAD-10300.

CAD-12100   Introduction to Mastercam (F,W)   1(1-.5)
This course is designed to give students a beginning knowledge of the Mastercam software. Topics will include two-dimensional and three-dimensional line drawing, solids, and tool path geometry. Assignments will be completed on the Mastercam computer-drafting program. **Prerequisite**: CAD-10002 or CAD-12000. **Corequisites**: CAD-10600, CAD-10700, and CAD-10800.

CAD-20001   Parametric Solid Modeling (F)   4(3-1)   (Formerly CAD-20000)
Parametric solid modeling is the creation of virtual parts within a three-dimensional computer drafting program. Instructional emphasis will be placed on parametric model creation. Other topics will include associative assemblies and drawing layout. Class instruction will be followed up by multiple individual and team projects culminating in parametric assemblies and related detail drawings. **Prerequisite**: CAD-10002 or CAD-12000.

CAD-20100   Parametric Solids II (F)   3(3-1)
Parametric Solids II will focus on the process of reverse engineering. Students will break down existing components, model all parts, re-assemble them, and create working and internet drawings. Time will also be spent determining how designs can be improved. This class is in part designed to give the students a large amount of experience creating models and related drawings. Teamwork and leadership skills will also be emphasized through a class wide project. **Prerequisite**: CAD-20001.

CAD-20501   Descriptive Geometry/CAD (W)   4(3-1)
Descriptive Geometry is the study of graphic methods for solving mathematically-based problems. Emphasis will be placed on fundamental views of true length and point view of a line; edge view and true size/shape of a plane; and measurement of slope (dip) and bearing (strike). Additional topics will include skewed lines; pierce points and plane intersections; perpendicular relationships; dihedral angles; revolution; intersection and developments; and topographic and civil drawings. **Prerequisite**: CAD-10002 or CAD-10300 and CAD-12000.

CAD-21001   Geometric Dimensioning & Tolerancing (F)   3(3-1)
Geometric Dimensioning and Tolerancing (GD&T) is a study of the concepts adopted by the American National Standards Institute (ANSI) and published by The American Society of Mechanical Engineers (ASME) for engineering and related documentation practices. The standard is titled ASME Y14.5M-1994 Dimensioning and Tolerancing, and this course can be considered as a source of formal training in the above standard. **Prerequisites**: CAD-10800 and MTH-10100 or CAD-10500.

CAD-21500   Tool & Machine Design/CAD (W)   4(3-1)
Tool and Machine Design is the study of the equipment and processes that make our industrial system of mass production and interchangeability possible. The principles learned here can be applied to transfer, assembly, testing and special machine tools in industry. **Prerequisite**: CAD-10800.

CAD-22000   Architectural Drawing/CAD II (F)   4(3-3)
This course will require each student to develop CAD drawings for residential construction of a multi-story dwelling. The student will explain the calculations for beams, trusses, floors, walls, and ceilings. The dwelling will have complex roof pitches. A presentation of the final project will be made to the other students in the course. **Prerequisite**: CAD-11000.

CAD-275--   Directed Study-Computer Aided Drafting and Design Techniques (V) 1-6(Variable)
This course is designed to meet special occupational needs for individual students. **Prerequisite**: advisor recommendation.

COMPUTER INFORMATION SYSTEMS (CIS)

Competency Tests
Students who do not have a prerequisite CIS course but desire entry into an upper-level CIS course may bypass the prerequisite if they complete a short competency test (20-30 true/false or multiple choice questions).

Competency tests focus on general concepts rather than specific features. (Students will not be given study guides.) A competency test for CIS-10500 is currently available in the testing center. Tests will be scored immediately after the student has completed them. Students will need 75% or more correct to bypass a CIS prerequisite. Students who do pass the test will be given a form allowing them entry into classes with the designated prerequisite.

Competency tests DO NOT transfer to other schools, and students will not be given college credit for taking them. They ensure that students registered for upper-level courses have the necessary prerequisite skills.

CIS-01000   Basic Computing (F,W)   2(2-0)
This course is designed to help students learn about the fundamental aspects of using a computer. It is designed for beginners who have never used a computer or are afraid to use one. This course is slower paced and does not have the rigor of a transferable computer course. Students will learn about hardware components, Windows, word processing software, the Internet, and e-mail. This course does not transfer to other colleges or universities. **No prerequisite.**

CIS-10500   Introduction to Computers (F,W,S)   3(3-0)
Students will become familiar with hardware and software terminology/concepts, Windows operating system, word processing, spreadsheet, database management, presentation software, data communications, the Internet, and ethical/moral issues related to computing. Application software used is Office 2003 (Word 2003, Excel 2002, Access 2003, and PowerPoint 2003), and the Internet Explorer. Keyboarding skills are required and necessary for successful completion of this course. **Prerequisite: Keyboarding skills**.

CIS-17001   Microsoft Office (F,W)   3(3-0)
This course covers how to utilize and integrate all the applications contained within Microsoft Office 2003. Exercises will involve business applications using the word processing, spreadsheet, database management, and presentation software components of Microsoft Office. Application software used is Word 2003, Excel 2003, Access 2003, and PowerPoint 2003. **Prerequisite**: CIS-10500 or demonstrated competency.

CIS-17102   PowerPoint (V)   1(1-0)
Students will create and modify slide show presentations using Microsoft PowerPoint. Emphasis will be placed on customizing slide shows by: a) changing colors, fonts, and styles; b) adding clip art or WordArt objects; c) embedding spreadsheets; and d) adding animation and transition effects. Students will learn how to present the show on a computer monitor and on the World Wide Web. Application software used is PowerPoint 2003. **Prerequisite**: CIS-10500, or CIS-22302, or demonstrated competency.

CIS-17200   Publisher (S)   2(2-0)
The student will learn desktop publishing concepts by working through hands-on projects that produce newsletters, brochures, web sites, business cards, letterheads, business forms, and specialty documents. Students will also learn how to customize publications and how to integrate other office objects (i.e., spreadsheets, charts, etc.) into a publication. Application software used is Publisher 2003. **No prerequisite.**

CIS-19600   Hardware Certification (F)   3(3-0)
This course will attempt to prepare students for the industry standard hardware certification exam. Topics will include major hardware components such as motherboards, processors, memory, storage, and peripheral devices. Operating System software from DOS up to the current Windows version will be covered. Techniques for troubleshooting problems and hands-on applications will be presented. **Prerequisite**: CIS-10500.

CIS-21900   MacIntosh OS X (V)   1(1-0)
The student will learn functions and commands in the MacIntosh operating system. Specific topics to be covered in this course include working with windows and menus, customizing the desktop, managing files and folders, and running application programs that come with the operating system. This course will offer a brief exposure to internet and multi-media applications, and how they operate in the Mac OS environment.

CIS-22302   Windows XP (V)   1(1-0)
The student will learn functions and commands in the Windows operating system. Specific topics to be covered in this course include working with windows and menus, customizing the windows environment, managing files and folders, running application programs that come with Windows, multitasking, exploring multimedia features, and investigating data communication features.

CIS-22400   UNIX (F)   **2(2-0)**
Students will learn about the UNIX operating system environment. They will learn about the different UNIX shells and how to issue basic system commands. Students will explore the UNIX file system (partitions, directories, navigation, etc.). Other topics covered include the following: 1) using common editors; 2) basic and advanced file management commands; 3) creating simple and complex shell scripts; 4) using pine for e-mail; 5) using UNIX utilities; and 6) programming in a UNIX environment. System administration will also be covered. **Prerequisite**: CIS-10500 or demonstrated competency.

CIS 22500 - Spreadsheets (F)   **3(3-0)**
Students will learn how to build, save, format, print, and modify spreadsheets. Students will also learn how to develop formulas/functions, charts, link worksheets, link workbooks, utilize auditing features, use database features, and develop macros. Application software used is Microsoft Excel 2003. **Prerequisite**: CIS-10500 or demonstrated competency.

CIS-22702   Microsoft Excel (V)   **1(1-0)**
This course explores the use of Microsoft Excel in business-related applications. Students will learn how to build, save, print and modify spreadsheets as well as how to create formulas/functions and charts. Application software used is Excel 2003. (This software is packaged with Microsoft Office Standard, Microsoft Office Professional, and it can be purchased as a standalone product). **Prerequisite**: CIS-10500, or CIS-22302, or demonstrated competency.

CIS-23501   Database Design (W)   **3(2-2)**
Students will learn the theoretical knowledge necessary to design and implement effective information databases. Areas such as file layout, data structures, implementation methods, security, and web interfacing will be addressed. Students will work with a currently popular commercially available database management system. Application software used is Access 2003. **Prerequisite:** CIS-10500 or demonstrated competency.

CIS-26000   Introduction to Computer Networking (W)   **3(3-0)**
This course serves as an overview of digital data communications. The course addresses the following: data communications, digital and analog signals, communications media, multiplexers, data transmission, protocols, network concepts, WANs, MANs, LANs, communication services, the Internet, eBusiness, network security, and network management. The computer laboratory sessions will emphasize skills required to establish a working network. **Prerequisite**: CIS-10500 or demonstrated competency.

CIS-26100   Internet (W)   **1(1-0)**
This course will investigate the resources of the Internet. Areas of exploration will be the World Wide Web, e-mail, Usenet newsgroups, FTP's and Telnet. This course will offer the students the ability to become comfortable finding and retrieving information from this network of networks. **Prerequisite**: CIS-10500 or demonstrated competency.

CIS-26200   Web Pages (W,S)   **1(1-0)**
Students will design and create web pages using HTML. Once a page has been created, students will edit pages to include text formatting, hyperlinks, images, and tables. Pages will be uploaded to the Internet and debugged. **Prerequisite**: CIS-10500 or demonstrated competency.

CIS-26300   Advanced Web Pages (W, S)   **1(1-0)**
Students will create a wide variety of web pages including forms, newsletters, and framed pages. They will also learn how to create and add multimedia files to web pages and how to add code for Java applets**. Corequisite:** CIS-26200 or demonstrated competency.

CIS-26400   JavaScript (V)   **2(2-0)**
JavaScript is a programming language that resides inside HTML documents. It is used to create interactive web pages that incorporate banners, pop-up windows, calculations, interactive forms, dynamic images, etc., into web pages. Topics such as conditionals, functions, objects, properties, methods, event handlers, forms, and frames will be covered in this course. **Prerequisite**: CIS-26300 or demonstrated competency.

CIS-27001   Programming I (F)   3(3-0)
This course investigates general methods of problem-solving, principles of structured programming, and algorithmic design. This includes data types and variable declarations, I/O (input and output), arithmetic operators, assignment and expressional operators, static and automatic variables, external declaration, functions and modular programming, array processing, pointers, record data structures, and file I/O. Programming language used is C. **Prerequisite**: CIS-10500 or demonstrated competency. **Corequisite:** MTH-12000 or demonstrated competency.

CIS-27101   Programming II (W)   4(4-0)
General methods of problem-solving, principles of algorithmic design, and object-oriented design are discussed. This includes data types, functions, arrays, pointers, objects, classes, class inheritance, polymorphism, exceptions, input, output, and file-handling techniques. Other topics introduced include linked lists, stacks, queues, recursion, and dynamic allocation. Programming language used is C++. **Prerequisite**: Grade of "C" or better in CIS-27001 or demonstrated competency.

CIS-27201   Web Programming (V)   3(3-0)
Students will produce interactive, dynamic, web-based applications using popular, marketable, web programming languages and tools. Specific languages/tools used include XML, PHP, ASP, JavaServer Pages, Access and SQL, Visual Basic.NET, C#.NET and ASP.NET. **Prerequisite**: CIS-22400, CIS 27001, CIS 26300, or demonstrated competency.

CIS-275--   Directed Study-Computer Information Systems (V)1-6(Variable)
This is a course designed to meet special occupational needs for individual students. **Prerequisite**: advisor recommendation

CONTRACTING WITH BUSINESS & INDUSTRY - (CBI)

CBI-101--   Contracting with Business and Industry I (F,W,S)   8(0-12)
This is the first in a sequence of two courses required for completion of the CWB&I program. The student is trained at an appropriate work site in the community for a specific occupation not offered as part of the college's regular programs. A tailored training plan for the student is designed by the program coordinator and is administered at the work site. Monitoring and evaluation of the student's progress is performed on a regular basis by the supervisor at the work site and the program coordinator. **Prerequisite**: admission to CWB&I program. **Corequisite**: 8-9 credits of appropriate electives.

CBI-102--   Contracting with Business and Industry II (F,W,S) 8(0-12)
This is the second in a sequence of two courses required for completion of the CWB&I program. The student receives advanced training at an appropriate work site in the community in accordance with the same requirements as CBI-10100. **Prerequisite**: CBI-101--. **Corequisites**: 7-8 credits of appropriate electives.

CORE (COR)

Courses beginning with the three-letter COR designation are the construction safety courses offered at M-TEC^{SM} at Kirtland-Gaylord. They include Basic Safety, Introduction to Hand Tools, Introduction to Power Tools, Introduction to Construction Math, Introduction to Blueprint Reading, and Basic Rigging. For more information, call 989-705-3600 or go to mtec.kirtland.edu.

COSMETOLOGY (COS)

COS-11200   Manicuring I (F,W,S)   2.5(1-4)
This course covers orientation and theory. Instruction and application include water manicure, hot oil manicure, and pedicure, along with sanitation of equipment and implements.

COS-11300   Manicuring II (F,W,S)   2.5(1-4)
This course covers theory and laboratory work on the public. Instruction and application include sculptured acrylic nails, overlays, and fill-ins. **Prerequisite**: COS-11200.

COS-11400   Manicuring III (F,W,S)   2.5(1-4)
This course covers theory and laboratory work on the public. Instruction and application include nail tips (blended) and nail wraps. **Prerequisite**: COS-11300.

COS-11500   Manicuring IV (F,W,S)   2.5(1-4)
This course covers theory and laboratory work on the public. Instruction and application include spa manicures, gel nails, and hand and feet paraffin. **Prerequisite**: COS-11400.

COS-11600   Manicuring V (F,W,S)   2.5(1-4)
This course covers theory and laboratory work on the public. Instruction and application include nail art, air brushing, and Michigan state laws. **Prerequisite**: COS-11500.

COS-11700   Manicuring VI (F,W,S)   2.5(1-4)
This course covers theory review, preparation for the final test, and practice of all curriculum in clinic or on a manikin hand. Students complete a final exam and a simulated state board exam. **Prerequisite**: COS-11600.

COS-12100   Cosmetology I (F,W,S)   2.5(1-4)
This course covers orientation, career information, state laws and regulations, professional image, first aid, chemistry, electricity, job-seeking, and professional ethics.

COS-12200   Cosmetology II (F,W,S)   2.5(1-4)
This course covers health, public sanitation methods, chemical agents, types, classifications of bacterial growth, biology, infections, infection control, products, tools, equipment use and safety, bacteriology, and decontamination. **Prerequisite**: COS-12100.

COS-12300   Cosmetology III (F,W,S)   2.5(1-4)
This course covers principles and techniques of treatment and disorders of the hair and scalp and related chemistry, shampoos, rinses, and scalp treatments. **Prerequisite**: COS-12200.

COS-12400   Cosmetology IV (F,W,S)   2.5(1-4)
This course covers the principles and techniques of wet styling, blow dry and waving, finger waving, and hairdressing. **Prerequisite**: COS-12300.

COS-12500   Cosmetology V (F,W,S)   2.5(1-4)
This course covers the principles and techniques of sectioning, removing length or bulk with a razor, scissors, clippers, or shears in haircutting. **Prerequisite**: COS-12400.

COS-12600   Cosmetology VI (F,W,S)   2.5(1-4)
This course covers the principles and techniques of temporary, semi-permanent, deposit-only, and permanent colors, bleaching, tinting, toning, frosting, special effects, and problems in haircoloring. **Prerequisite**: COS-12500.

COS-12700   Cosmetology VII (F,W,S)   2.5(1-4)
This course covers the principles and techniques of sectioning, wrapping, processing of chemicals, and rearranging the hair. **Prerequisite**: COS-12600.

COS-12800   Cosmetology VIII (F,W,S)   2.5(1-4)
This course covers the principles and techniques of sectioning, curling, and relaxing hair as a texture service. **Prerequisite**: COS-12700.

COS-12900   Cosmetology IX (F,W,S)   2.5(1-4)
This course covers the principles and techniques of advanced nails with nail art. **Prerequisite**: COS-12800.

COS-13000   Cosmetology X (F,W,S)   2.5(1-4)
This course covers the principles and techniques of massage, manicuring, and pedicuring. **Prerequisite**: COS-12900.

COS-13100   Cosmetology XI (F,W,S)   **2.5(1-4)**
This course covers the principles and techniques of skin chemical procedures, massage, and facial treatments. **Prerequisite**: COS-13000.

COS-13200   Cosmetology XII (F,W,S)   **2.5(1-4)**
This course covers the principles and techniques of cosmetic application, artificial eyelashes, removal of unwanted hair, and lash and brow tinting. **Prerequisite**: COS-13100.

COS-13300   Cosmetology XIII (F,W,S)   **2.5(1-4)**
This course covers the principles and techniques of light therapy. **Prerequisite**: COS-13200.

COS-13400   Cosmetology XIV (F,W,S)   **2.5(1-4)**
This course covers the fundamentals of business management, opening a salon, and business plans. **Prerequisite**: COS-13300.

COS-13500   Cosmetology XV (F,W,S)   **2.5(1-4)**
This course covers the principles and techniques of written agreements, licensing requirements and regulations, laws, salon operations, policies, practices, compensation packages, payroll deductions, telephone use, advertising, sales, communication, public/human relations, insurance, and salon safety. **Prerequisite**: COS-13400.

COS-13600   Cosmetology XVI (F,W,S)   **2.5(1-4)**
This course covers theory review, preparation for the final test and practice of all curriculum, and a simulated state board exam. **Prerequisite**: COS-13500.

COS-14100   Skin Care I (F,W,S)   **2.5(1-4)**
In this course, the student will learn how to have a professional image, the history of skin and its cells, and anatomy and physiology. Students will also learn bacteria classifications and safety procedures for a salon.

COS-14200   Skin Care II (F,W,S)   **2.5(1-4)**
In this course, the student will learn skin disorders, nutrition and health of the skin, chemistry and product ingredients, skin analysis and client consultation, and the proper draping of the client. **Prerequisite**: COS-14100.

COS-14300   Skin Care III (F,W,S)   **2.5(1-4)**
In this course, the student will learn proper cleansing, massage and mask therapy, and how to do facials with and without the aid of machines. **Prerequisite**: COS-14200.

COS-14400   Skin Care IV (F,W,S)   **2.5(1-4)**
In this course, the student will learn about removing unwanted hair, aging factors and cosmetic surgery effects, male skin care, aromatherapy, advanced topics, and working with a physician. **Prerequisite**: COS-14300.

COS-14500   Skin Care V (F,W,S)   **2.5(1-4)**
In this course, the student will learn color therapy and professional makeup application techniques. **Prerequisite**: COS-14400.

COS-14600   Skin Care VI (F,W,S)   **2.5(1-4)**
The student will learn the business part of managing a salon and the selling of products and services. **Prerequisite**: COS-14500.

COS-17500   Salon Management (F,W,S)   **1(1-0)**
In this course, the student will study all aspects of salon business operations including physical plan, furnishings and supplies, systems, personnel, and the overall function in the business community.

COS-21100   Cosmetology Seminar (V)   **1(Variable)**
This seminar provides brush-up for licensed cosmetologists.

COS-21300   Cosmetology Seminar (V)   **4(Variable)**
This seminar provides brush-up for licensed cosmetologists.

COS-22100 Cosmetology Instructor I (F,W,S)   2.5(1-4)
This course offers orientation and review of all subjects in the cosmetology curriculum. **Prerequisite**: license in cosmetology from the State of Michigan.

COS-22200 Cosmetology Instructor II (F,W,S)   2.5(1-4)
This course provides demonstration and theory in lesson plans. Students are required to do ten lesson plans. **Prerequisite**: COS-22100.

COS-22300 Cosmetology Instructor III (F,W,S)   2.5(1-4)
This course provides demonstration and theory in course outlines. Students are required to do five course outlines. **Prerequisite**: COS-22200.

COS-22400 Cosmetology Instructor IV (F,W,S)   2.5(1-4)
This course provides demonstration and theory in syllabi and exam questions. The student is required to do a cosmetology syllabus and a 500-question, multiple-choice exam for graduate testing. **Prerequisite**: COS-22300.

COS-22500 Cosmetology Instructor V (F,W,S)   2.5(1-4)
This course provides demonstration and theory in teaching in a dynamic clinic, teaching to diverse learning styles. **Prerequisite**: COS-22400.

COS-22600 Cosmetology Instructor VI (F,W,S)   2.5(1-4)
This course covers theory review, preparation for the final test and practice of all curriculum, and a simulated state board exam. **Prerequisite**: COS-22500.

COS-255-- Cosmetology Seminar (V)   (Variable)
This course is designed to meet deficiency in laboratory hours.

COS-275-- Directed Study-Cosmetology (V)   1-6(Variable)
This course is designed to meet special occupational needs for individual students. **Prerequisite**: recommendation of his/her advisor.

CRIMINAL JUSTICE (CJS)

CJS-10000 Introduction to Criminal Justice (F)   3(3-0)
This course covers the history and developing philosophy of law enforcement, including the police, courts, and corrections; present organization and jurisdiction of local, state, and federal agencies; and an introduction to the problems facing the criminal justice system today. **Prerequisite**: permission of criminal justice advisor.

CJS-10200 Physical Training I (F,W,S)   3(4-0)
This course is designed for the criminal justice student to participate in the state's Physical Agility Test. The student will work at developing upper-body strength, stamina, and legwork as needed to pass the different stages of the examination. **Prerequisite**: permission from a criminal justice advisor.

CJS-10201 Physical Training II (F,W,S)   3(4-0)
This course is a continuation of CJS-10200. It is designed to continue the preparation of the criminal justice student planning to participate in the state's Physical Agility Test. The student will continue working on developing upper-body strength, stamina, and legwork as needed to pass the different stages of the examination. **Prerequisite**: CJS-10200.

CJS-10202 Physical Training III (F,W,S)   3(4-0)
This course is a continuation of CJS-10201. It is designed to continue the preparation of the criminal justice student planning to participate in the state's Physical Agility Test. The student will continue working on developing upper-body strength, stamina, and legwork as needed to pass the different stages of the examination. **Prerequisite**: CJS-10201.

CJS-10800   Firearms (F)   **3(1-2)**
This is an eight-week course that covers orientation to firearms; policies, procedures, and liability of firearms; and use and hands-on firearms range techniques using targets approved by the Michigan Commission on Law Enforcement Standards (MCOLES). **Prerequisite**: employment as a peace officer or status as a criminal justice student.

CJS-10900   Introduction to Corrections (F,W,S)   **3(3-0)**
This course introduces the agencies and processes within the correctional system, beginning with ancient history through the modern era. Correctional legislation and the courts are examined, along with the integral parts they play in sentencing, parole, probation, community corrections, and the correctional officer's professional work ethics. **Prerequisite**: permission of criminal justice advisor.

CJS-11000   Careers in Criminal Justice (F)   **1(1-0)**
The course is designed to acquaint the student with a variety of criminal justice occupations. **Prerequisite**: enrollment as a criminal justice student.

CJS-11100   Legal Issues in Corrections (F,W,S)   **3(3-0)**
This course is a study of up-to-date constitutional law and its impact on correctional institutions, the correctional officer, and the inmate. The student will gain a basic understanding of how state and federal court decisions pertaining to inmate rights have affected the writing of policy and procedure within the correctional system. **Prerequisite**: permission of criminal justice advisor.

CJS-11200   Client Growth & Development (F,W,S)   **3(3-0)**
This course is designed to assist the student in identifying behaviors and motivations of the inmate. Emphasis will be placed on the needs of the inmate and intervention strategies. **Prerequisite**: permission of criminal justice advisor.

CJS-12100   Photography for Police / Firefighters (V)   **3(2-1)**
Emphasis will be given to the collection, preservation, and presentation of photographic evidence and will include hands-on camera technique, film selection, preservation of photographic evidence, painting with light, arson photography, portrait, close-up and copy work, surveillance, filters, lighting, crime scene photography, ultraviolet and infrared, traffic, civil disorders, mug shots, administration of a photographic unit, and courtroom testimony. **Prerequisite**: permission of the head of criminal justice.

CJS-12300   Firearms - Concealed Weapon Program (V)   **2(1-1)**
This program is developed for the individual who is currently required by local gun boards to have training prior to the issuance of a concealed weapons permit. This course covers the dangers of owning and carrying a handgun, the laws of carrying, and use of the handgun (both civilly and criminally). The individual must demonstrate total understanding of the handgun owned and demonstrate proficient marksmanship qualities. **Prerequisite**: permission of criminal justice advisor.

CJS-12400   Firearms - Instructor Program (V)   **3(1-2)**
This course is designed to instruct the student on how to become an effective firearms instructor. Topics such as the use of deadly force and the liabilities are covered, along with the five shooting fundamentals, multiple target shooting, training aids, building a proper shooting program, developing a departmental policy, positive teaching methods, use of tear gases and the dangers, as well as several other topics. **Prerequisite**: permission of criminal justice advisor.

CJS-17000   Correctional Institutions & Facilities (F,W,S)   **3(3-0)**
Included in this course will be an overview of the different levels of security and their historical development within the correctional system. Facility design, organizational structure, custody, security, and inmate due process rights will be reviewed, as well as future projections for correctional facilities and personnel. **Prerequisite**: permission of criminal justice advisor.

CJS-17103   Correctional Officer's Report Writing with Computers (W) 1(1-0)
The course is designed to develop and improve the student's report-writing skills that are needed in correctional institutions. The student will demonstrate the ability to communicate effectively in written form. This is an eight-week course that meets two hours per week. Students prepare their writing using microcomputers. **Prerequisite**: ENG-10300/10303 or permission of the head of criminal justice.

CJS-17200   Client Relations in Corrections (F,W,S)   3(3-0)
This course is designed to give the student an understanding of culture and discrimination. Ethics, morals, and professionalism will be examined closely. Affirmative action, social attitudes, and how they affect the correctional systems will also be carefully scrutinized. **Prerequisite**: permission of criminal justice advisor.

CJS-20100   Basic Investigative Techniques (F,W)   3(2-1)
This course covers the basic skills necessary for modern criminal investigation, including the discovery, development, and lifting of latent fingerprints; the making of crime scene sketches; the use of plaster and silicone rubber for reproducing evidence at crime scenes; the use of modern investigative aids; and a grounding in the modern techniques of criminal interrogation. **Prerequisite**: permission of the head of criminal justice.

CJS-208--   Criminal Justice Internship (F,W,S)   3-9(Variable)
After successful completion of basic criminal justice courses, students may elect criminal justice internship. Students are placed in an approved training station, earn credits for satisfactory work performance, and may earn remuneration. Participation requires approval from the director of criminal justice. Students' occupational interests are considered with their background and related classes to determine employment arrangements. Flexibility of individual programs in any of the law enforcement occupations is accomplished through a practical training program developed in agreement with the training station supervisors and college coordinator. The director shall arrange objectives and assignments that are in accord with purposes of vocational education and maintain constant evaluation through coordination visits to training stations and weekly meetings with the students. **Prerequisite**: first year of program completed or permission of the head of criminal justice.

CJS-21100   Narcotics Investigation (F)   3(3-0)
This course will familiarize students with investigations involving dangerous drugs and will include history, sources, recognition, laws, and courtroom presentations. **Prerequisite**: permission of criminal justice advisor.

CJS-22400   Advanced Firearms Training (W)   3(1-2)
The course presents the concepts and techniques related to safely using a semiautomatic pistol. The policies, procedures, and liabilities concerning the use and care of the weapon will be demonstrated by each student. The student will also demonstrate his or her proficiency with weapons using a course and targets approved by MCOLES. This is an eight-week course of which 16 hours are lecture and 32 hours are range time. **Prerequisite**: CJS-10800 or permission of the head of criminal justice.

CJS-24000   Criminology (F,W)   3(3-0)   (Also listed as SOC-24000)
This course provides an analysis of crime, criminal behavior, and punishment through a variety of historical and contemporary theoretical perspectives. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor.

CJS-24500   Social Deviant Behavior (F)   3(3-0)   (Also listed as SOC-24500)
This course studies social deviant behavior, including social and ethnic bias, sociopaths, cult behavior, and ethical behaviors within the criminal justice process. **Prerequisite**: PSY-10100 or SOC-10100 and permission of criminal justice advisor.

CJS-250--   In-Service Courses (V)   1-8(Variable)
In-service training courses are designed to update full-time law enforcement officers on new and current trends in police services. The general purpose of the update is to improve the knowledge and intellectual functioning of the police officer. Departments have the need for in-service training as a means of dealing with the threat of vicarious liability.

CJS-26007   Corrections Academy (F)   10(0-160)
This course is a 160-hour Local Corrections Academy approved by the Michigan Correctional Officer's Training Council. The course will cover booking, intake and release, suicide awareness, report writing, prison behavior, correctional law, custody and security, PPCT defensive tactics, interpersonal communication, fire and safety, cultural diversity, sexual harassment, ethics, and stress management. **Prerequisites**: employment or sponsorship by a sheriff's department and approval of the head of criminal justice.

CJS-26600   Police Academy (F)   21(0-42)
This is a 17-week, Michigan Commission on Law Enforcement Standards (MCOLES)-approved, regional police academy. It will cover investigation, patrol procedures, detention and prosecution, police skills, traffic, and special operations. **Prerequisite**: degree in hand, enrollment in Kirtland's pre-service program, or sponsorship by a police organization, upon approval of the director of the academy.

CJS-27000   Community Based Corrections (W)   3(3-0)
This course surveys the history, development, techniques, and fundamentals of non-institutional correctional programs and services. Emphasis will be placed on the necessity of correctional programs to interact with other human services agencies within the community. **Prerequisite**: permission of criminal justice advisor.

CJS-275--   Directed Study-Criminal Justice Administration (V)   1-6(Variable)
This course is designed to meet special occupational needs for individual students. **Prerequisite**: permission of the head of criminal justice.

CJS-28001   Institutional Jail & Prison Administration (W)   3(3-0)
This course provides a study of the total confinement process from arrest through administration of justice, probation, prison, and correctional institutions. Particular emphasis will be placed on coping with problems of custodial personnel in city and county jails. **Prerequisite**: permission of criminal justice advisor.

DEVELOPMENTAL (DEV) Below 100 level

DEV-06300   Basic Mathematics (F,W,S)   4(4-0)
Mathematical concepts involving whole numbers, fractions, decimals, percents, proportions, measurement, geometry, and elementary algebraic operations will be taught.

DEV-07300   Basic Algebra (F,W,S)   4(4-0)
The fundamental operation of algebra using integers and rational numbers, exponents, linear equations, word problems, special products, factoring, and graphing of straight lines will be taught. **Prerequisite**: DEV-06300 or required COMPASS test scores.

DEV-08601   Basic Reading Skills (F,W,S)   3(3-0)
This course offers instruction in basic reading techniques to improve comprehension, vocabulary, and critical thinking skills.

DEV-088--   Writing Mechanics (F,W,S)   1-3(variable)
This course provides individualized and/or small group instruction in basic writing skills. **Prerequisite**: permission of the instructor.

DEV-09000   Fundamentals of English (F,W,S)   3(3-0)
This course provides instruction for freshmen who have demonstrated limited ability in communication skills. Content includes emphasis on grammar, word usage, mechanics, and basic expository writing. **NOTE**: Successful completion of this course is a prerequisite for ENG-10300/10303 for students who have not demonstrated proficiency on the English placement test.

DEV-09200   Mechanics of Spelling (F,W,S)   1(0-2)
This course is a study of basic spelling patterns, sounds, functions, and their application to whole families of words.

DEV-09301   Study Skills (F,W)   1(1.5-0)
This course will assess students' study habits. Students will learn note-taking, test-taking, memory improvement, time management, and how to reduce anxiety. Students will explore college life and methods to cope with it through group counseling activities.

DEV-09601   College Reading Skills (F,W,S)   **3(3-0)**

This course focuses on identifying each student's strengths and problems as a learner and using that information to improve reading and study skills. It also emphasizes goal setting, time management, critical reading/thinking, vocabulary building, and reading faster while understanding more.

ECONOMICS (ECO)

ECO-20100   Principles of Economics - MACRO (F)   **3(3-0)**

This is a one-semester basic economics course emphasizing national income determination, monetary and fiscal policy, and international trade. (This course may be taken before or after ECO-20200.) **Prerequisite**: completion of 30 credit hours of college-level courses, ENG-10300/10303, or permission of instructor. *(Social Science Credit)*

ECO-20200   Principles of Economics - MICRO (W)   **3(3-0)**

This is a one-semester course that concentrates on supply and demand analysis, theory of the firm, and the pricing of factors of production. (This course may be taken before or after ECO-20100.) **Prerequisite**: completion of 30 credit hours of college-level courses, ENG-10300/10303, or permission of instructor. *(Social Science Credit)*

ECO-24500   International Economics (V)   **3(3-0)**   (Also listed as POL-24500)

This course provides an introduction to the international economics for the understanding of the post-Cold War world with the new international system that has succeeded it--globalization. The course examines how globalization now shapes virtually all domestic policies and international relations. It offers a provocative look at the positive and negative impacts of globalization, including the historical, theoretical, and political blend of relationships between nations, corporations, and individuals. **Prerequisite**: ECO-20100. *(Social Science Credit)*

EDUCATION (EDU)

EDU-10000   Introduction to Teaching (V)   **3(3-2)**

This course explores teaching as a career. Along with understanding the requirements of obtaining a degree and a job in teaching, students will develop a knowledge of current issues and problems in education. Observation techniques will be presented that the student will apply to guided classroom observation and participation for each student in accordance with the student's schedule. **Prerequisite or corequisite**: ENG-10300/10303.

EDU-10300   Strategies for Paraprofessionals (V)   **3(3-2)**

This course is designed to help adults assist teachers in a K-12 classroom and provide techniques to tutor students at all levels. Students will explore the job descriptions of a paraprofessional in the public school and the roles he/she plays in increasing students' success and achievement, and techniques to use for maintaining classroom discipline. Students will also look at different strategies and develop learning materials to meet the students' instructional and independent level.

EDU-10400   Instructional Strategies (V)   **1(24-0)**

Participants taking this course will discuss research on the factors that influence learning, ideas, and strategies for communicating, and helpful hints for increasing the effectiveness of teaching strategies. Details concerning classroom management that might create more positive and successful teaching and learning experiences will be discussed, as well as guidelines for conducting written and performance evaluations.

EDU-10500   Lesson Design & Classroom Management (V)   **3(2-3)**

Students will learn the elements of lesson design, classroom management, and student learning styles. Students will complete 45 hours of field experience to apply their teaching strategies with students in an area school. **Prerequisite**: EDU-10000.

EDU-11100   Math Support in K-6 Classrooms (V)   3(3-0)
Participants in this course will deepen previous understandings and knowledge of mathematical concepts and skills at the pre K-8 levels through a variety of experiences with standards-based elementary math programs. The course will address each of the National Council of Teachers of Mathematics (NCTM) Standards: Number and Operation, Algebra, Geometry, Measurement, Data Analysis and Probability, Problem Solving, Reasoning and Proof, Communication, and Connections, along with the NCTM Principles of Equity, Curriculum, Teaching, Learning, and Assessment. Participants will learn practical strategies and techniques to practice the skills that students should acquire.

EDU-11200   Literacy Support in K-6 Classrooms (V)   3(3-0)
This course will focus on preparing the student to support literacy instruction within the K-6 classroom. Components of the course will include the 1) examination of the developmental levels of reading, writing, speaking, listening, and viewing; 2) the assessment tools used by classroom teachers to inform their instruction; and 3) instructional strategies used to enhance literacy development. Students will have hands-on experience using strategies to support literacy development. The modules of the course will be based on research-based best practices in literacy, including "Michigan Literacy Progress Profile" (MLPP) and "Put Reading First."
Prerequisite: EDU-10000.

EDU-11500   Caring for Children I (V)   3(3-0)
This course focuses on child growth and development from birth to age 12 with emphasis on establishing a safe, healthy learning environment for children. Ways to support positive social development, teaching strategies for positive guidance, and establishing/maintaining a safe, healthy, appropriate learning environment will be provided.

EDU-12000   Caring for Children II (V)   3(3-0)
This course will provide materials, knowledge, and hands-on experience in ways to nurture cognitive, motor, language, and creative process skills in children. Emphasis will be placed on advancing physical and intellectual development in young children. **Prerequisite or corequisite**: EDU-11500.

EDU-12500   Learning Theory & Techniques for Tutors/Prospective Teachers (F)   1(1-0)
This one-credit-hour class will familiarize students with learning strategies and teaching techniques, particularly as they relate to tutoring. Students will have the opportunity to apply the theory they learn in class to tutorial sessions. Students enrolled should be tutoring concurrently, planning to tutor, or planning to enter the field of education. **Prerequisite**: completion of one semester (minimum of six credits) with a minimum overall grade point average of 2.5.

EDU-13000   CDA Credential Practicum (V)   3(3-0)
This course is designed to provide students with a vehicle for attainment of the Child Development Associate Credential. Students will by the end of the course have demonstrated through practical application and written work, competencies in thirteen functional areas of Child Development. In addition they will have completed the observations, training, and professional documentation necessary for attainment of the Child Development Associate Credential.

EDU-21500   Caring for Children III (V)   3(3-0)
This course addresses program management, parent partnerships, and professionalism. Emphasis will be placed on positive and productive relations with families, ensuring a well-run and purposeful program responsive to needs and understanding professional commitment. **Prerequisite**: EDU-12000.

EDU-275--   Directed Study-Education (V)   1-6(Variable)
This course is designed to meet special occupational needs for individual students. **Prerequisite**: permission of the head of criminal justice.

ELECTRICAL TECHNOLOGY (ELT)

Courses beginning with the three-letter ELT designation are the electrical technology courses offered at M-TEC[SM] at Kirtland-Gaylord. For more information, call 989-705-3600 or go to mtec.kirtland.edu.

ENGLISH and LITERATURE (ENG)

ENG-10000   Writing Lab (F,W,S)   **1(1-1)**
This course provides personalized, competency-paced instruction in writing skills. Because this is part of the English composition requirement, most students will take this course while enrolled in ENG-10300/10303. *(Communication)*

ENG-10303   English Composition I with Computers (F,W,S)   3(3-0)
This course is a study, through extensive practice, of various modes of expression, organization, and development in expository essays, designed to develop the student's ability to think critically and write effectively. Students prepare their writing using microcomputers. **Prerequisite**: DEV-09000 or a satisfactory writing sample, and DEV-09601 or a satisfactory reading placement. *(Communication)*

ENG-10403   English Composition II with Computers (F,W,S)   3(3-0)
A continuation of English Composition I, this course emphasizes writing analytical, critical, and argumentative essays and developing effective thinking skills. The course provides practice in library methods, research techniques, and the documented research essay. Students prepare their writing using microcomputers. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303. *(Communication)*

ENG-10601   Technical Writing (V)   **3(3-0)**
Students will learn techniques for collecting and presenting technical data through preparation of informal and formal reports and technical papers and through the study of forms and procedures to establish a general pattern for all technical reports. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303.

ENG-10602   Technical Writing with Computers (V)   **3(3-0)**
Students will learn techniques for collecting and presenting technical data through preparation of informal and formal reports and technical papers and through the study of forms and procedures to establish a general pattern for all technical reports. Students prepare their writing using microcomputers. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303.

ENG-12000   Journalism I (V)   **3(3-0)**
This introduction to journalism includes techniques of news gathering and news writing as well as issues such as accuracy, fairness, laws, and ethics. Current newspaper, radio, television, and Internet news sources are also examined. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Journalism)*

ENG-12100   Journalism II (V)   **3(3-0)**
This course provides an in-depth look at journalistic news gathering and news writing. Special areas studied include police and courtroom news, sports reporting, environmental news, and opinion columns. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Journalism)*

ENG-125--   Journalism Practicum (V)   **1-4(Variable)**
Students work with the advisor as staff members of the college news magazine in one area of reporting, editing, photography, desktop publishing, advertising sales, or a combination of these areas. The course may be repeated up to a maximum of four credit hours. **Prerequisites**: ENG-12000 and ENG-12100 or permission of instructor. *(Humanities Credit - Journalism)*

ENG-20300   Writing the Screenplay (V)   **3(3-0)**
This course addresses writing a screenplay. Fifty percent of the course will be spent writing and workshopping screenplays. The remaining 50% will be spent in lecture and evaluating films. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Creative Writing)*

ENG-21200   Children's Literature (V)   **3(3-0)**
This course provides a critical consideration of the major forms of literature for children of elementary school age through discussion and analysis of representative folk and fairy tales, myths, fables, poetry, works of fantasy, and realistic fiction. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-21400   Introduction to Literature (V)   3(3-0)
This course considers the expression in literature of such universal themes in human experience as the loss of innocence, the search for identity, the desire for happiness, and the confrontation with death through the study of selected essays, fiction, poetry, and drama. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-21500   Creative Writing (V)   3(3-0)
This course provides study and practice of imaginative writing in poetry, fiction, and personal essay. Half the class time will be used in workshop format, sharing work for group comment and critique. The other half of class time will be used to discuss contemporary creative works and essays by writers. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(Humanities Credit - Creative Writing)*

ENG-22200   Introduction to Fiction (V)   3(3-0)
This course provides discussion, analysis, and critical evaluation of selected works by various authors. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-22300   Introduction to Poetry (V)   3(3-0)
This course provides discussion, analysis, and critical evaluation of selected works by various poets. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-22500   Contemporary Literature (V)   3(3-0)
Students will study works of selected authors of the 20th century. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-22700   Introduction to Film (V)   3(3-0)
Film has become one of the most important media forms today, and despite its relative youth as a means of relaying a story, a number of fine artist/filmmakers have already created works. The purpose of a film class is to examine the techniques directors use in order to show us a story. It will also examine how a director manipulates the medium to help the audience experience on-screen events and to sway the audience's judgements about those events. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-22800   Mythology (V)   3(3-0)
A cross-cultural and historical survey of the world's myths, the class will also consider such questions as the meaning of myth, the purposes and functions of myth, theories of how myths originate, and ways that myths have been analyzed and interpreted. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303. *(Humanities Credit - Literature)*

ENG-23000   American Literature Before 1865 (V)   3(3-0)
This course surveys the growth and development of America's literature from its beginnings to the Civil War. Representative authors may include Bradstreet, Franklin, Irving, Cooper, Poe, Hawthorne, Thoreau, Melville, Whitman, and others. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-23100   American Literature After 1865 (V)   3(3-0)
This course is a survey of the growth and development of America's literature from the Civil War to the present day. Representative authors may include Twain, James, Frost, Eliot, O'Neill, Hemingway, Faulkner, Welty, Bellow, and others. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-23200   English Literature (V)   3(3-0)
This course will cover the major periods in English literature: Old English, Middle English, Sixteenth Century, Seventeenth Century, Restoration and Eighteenth Century, the Romantic Period, the Victorian Age, and the Modern Age. This course is designed for non-English majors, relying on class discussion with instructor lectures. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-251--   **Topics in Literature (V)**   3(3-0)
This course is a study of a significant literary topic and may cover genres, literary figures, subjects, or themes. The class may be repeated for credit if the topics are different. **Prerequisite**: Satisfactory (C- or above) completion of ENG-10300/10303 or permission of instructor. *(Humanities Credit - Literature)*

ENG-29100   **Poetry Workshop I (V)**   3(3-0)
This course is a workshop-oriented class for advanced poetry writing. Students will be expected to write poems in a variety of forms, discuss each other's work intelligently, and read contemporary poetry. Students are also expected to develop a manuscript of finished poems and work on *Controlled Burn.* **Prerequisite**: ENG-21500. *(Humanities Credit - Creative Writing)*

ENG-29200   **Fiction Workshop I (V)**   3(3-0)
This course is a workshop-oriented class for advanced fiction writing. Students will be expected to write three to five stories in various voices or work on a novel, discuss each other's work intelligently, and read contemporary fiction. Students are also expected to develop a manuscript of fiction and work on *Controlled Burn.* **Prerequisite**: ENG-21500. *(Humanities Credit - Creative Writing)*

ENG-29300   **Poetry Workshop II (V)**   3(3-0)
This course furthers students' pursuits in the study of poetry through workshop and in individual conferences with the instructor. **Prerequisite**: ENG-29100. *(Humanities Credit - Creative Writing)*

ENG-29400   **Fiction Workshop II (V)**   3(3-0)
This course is designed to allow students to develop their craft in fiction writing through workshop and individual conferences. **Prerequisite**: ENG-29200. *(Humanities Credit - Creative Writing)*

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL-01000   **English as a Second Language/Beginning (F,W)**   3(3-0)
This self-instructional course addresses the needs of an international student who is minimally conversant in English. The course concentrates mainly on oral communication. The class involves independent listening to audiotapes and language practice with a native-speaking tutor/trainer for three hours per week. A minimal amount of grammar and textbook reading may also be introduced. **Prerequisite**: approval of instructor, based on a personal interview and/or writing sample.

ESL-05000   **English as a Second Language/Intermediate (F,W)**   3(3-0)
This course addresses the needs of an international student who can converse and read in English. The class combines two-page readings, discussion, vocabulary and grammar practice, as well as sentence and paragraph writing. **Prerequisite**: approval of instructor, based on a personal interview and/or writing sample.

ESL-06000   **English as a Second Language/High Intermediate (F,W)**   3(3-0)
This course addresses the needs of an international student who can converse, read, and write short paragraphs in English. The class focuses mainly on the writing of 200-400 word essays. This course prepares the student to take ENG-10300/ ENG-10303. **Prerequisite**: ESL-05000 or permission of instructor, based on a personal interview and a writing sample (placement test).

GEOGRAPHY (GEO)

GEO-10000   **World Geography (W)**   4(4-0)
This course provides description and analysis of basic geographic concepts as they relate to the major world regions, and the distribution patterns of various social, economic, and cultural activities of man. **Prerequisite or corequisite**: ENG-10300/10303. *(Social Science Credit)*

GEOLOGY (GEL)

GEL-10500   Physical Geology (V)   **4(3-2)**
This lecture and laboratory course examines earth materials and the internal and external processes acting on them. Among the topics to be discussed are rocks and minerals, vulcanism, accretion, and the agents of erosion. Laboratory studies include rock and mineral identification and interpretation of topographic maps, geologic maps, and aerial photographs. *(Science Credit)*

HEATING/VENTILATION/AC/REFRIGERATION (HVC)

Courses beginning with the three-letter HVC designation are the heating/ventilation/AC/refrigeration courses offered at M-TEC^{SM} at Kirtland-Gaylord. For more information, call 989-705-3600 or go to mtec.kirtland.edu.

HISTORY (HIS)

HIS-10500   History of World Societies to 1500 (F)   **3(3-0)**
This course provides a historical survey of the origins and development of human communities from their prehistoric origins to the 16th century. Emphasis is given to similarities, differences, and interrelationships among selected societies, cultures, and civilizations. **Prerequisite or corequisite**: ENG-10300/10303. *(History Credit)*

HIS-10600   History of World Societies Since 1500 (W)   **3(3-0)**
This course is a historical survey of the human community from approximately 1500 to the present. Emphasis is given to the nature, cause, and consequences of the current phase of global integration. **Prerequisite or corequisite**: ENG-10300/10303. *(History Credit)*

HIS-20100   United States History to 1865 (F)   **3(3-0)**
This course is a survey of the history of the United States from its European background through the Civil War, with special emphasis on the colonial period and the Revolution, the rise of the federal system of government, the growth of democracy, territorial expansion, sectionalism and the Civil War. **Prerequisite**: sophomore standing. **Prerequisite or corequisite**: ENG-10300/10303. *(History Credit)*

HIS-20200   United States History Since 1865 (W)   **3(3-0)**
A continuation of HIS-20100, this is a survey of United States history from 1865 to the present, starting with the aftermath of the Civil War, emphasizing industrial growth, social changes, and reforms, 20th-century political trends, international commitments, and leadership. **Recommended prerequisite**: HIS-20100. **Prerequisite or corequisite**: ENG-10300/10303. *(History Credit)*

HIS-20300   Michigan History (V)   **3(3-0)**
This course provides a survey of the history of Michigan from the coming of the white man. The history of the state is placed in its regional and national setting. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(History Credit)*

HIS-20400   The American Civil War (W)   **3(3-0)**
This course examines the origins and outcomes of the sectional conflict that split the United States in two from 1861 to 1865. Emphasis is given to social, political, and military events from the 1840s to the end of Reconstruction. **Prerequisite or corequisite**: ENG-10300/10303. *(History Credit)*

HONORS (HON)

HON-225-- Honors Project (V)   **1-3(Variable)**
A significant project over and above the typical course requirements which may be undertaken in connection with any regular Kirtland course, the Honors project may involve the student in primary or secondary research, writing, internship, service-learning opportunities, or other possible activities. All proposed honors projects must be approved by the Honors Program committee. Projects may earn from one to three credits. Students may achieve more than three credits in honors projects, but no more than three credits may be applied toward the honors degree. **Prerequisites**: admission to the Honors Program; permission of the instructor and the Honors Program committee.

HON-250-- Honors Colloquium (W)   **3(3-0)**
This is an interdisciplinary course that examines a significant topic or theme. Through such activities as reading, discussion, research, writing, and speaking, students will explore this topic from a variety of academic perspectives. **Prerequisites**: admission to the Honors Program and sophomore standing, or permission of instructor and the Honors Program committee.

HUMANITIES (HUM)

HUM-20500 The Individual and Society (V)   **3 (3-0)**
This course examines the perspectives of many social sciences and cultures in order to appreciate the mosaic of American and other societies from a variety of points of view. As several key current social issues and controversies are studied, students will work to illuminate an understanding of their own place in their communities, the larger society, and the modern world. **Prerequisite or corequisite**: ENG-10300/10303. *(Humanities Credit)*

INDUSTRIAL MAINTENANCE (IND)

Courses beginning with the three-letter IND designation are the industrial maintenance courses offered at M-TEC^{SM} at Kirtland-Gaylord. For more information, call 989-705-3600 or go to mtec.kirtland.edu

WORLD LANGUAGES

FRE-11000 French I (V)   **4(4-0)**
This course concentrates on functional communication. Communication is a primary goal with grammar to support this goal. This course will also introduce the student to the cultures associated with the language. *(Humanities Credit)*

FRE-12000 French II (V)   **4(4-0)**
A continuation of Language I with further development of oral and written skills. The goal is to increase confidence and comfort with the cultures and language. **Prerequisite**: FRE-11000 or permission of the Self- Instructional Language Program (SILP) coordinator. *(Humanities Credit)*

FRE-21000 French III (V)   **4(4-0)**
Students will further develop their oral and written skills through conversation, composition, and formal presentation. This course will make students more proficient in the language and cultures. **Prerequisite**: FRE-12000 or permission of the SILP coordinator. *(Humanities Credit)*

GER-11000 German I (V)   **4(4-0)**
This course concentrates on functional communication. Communication is a primary goal with grammar to support this goal. This course will also introduce the student to the cultures associated with the language. *(Humanities Credit)*

GER-12000   German II (V)   **4(4-0)**
A continuation of Language I with further development of oral and written skills. The goal is to increase confidence and comfort with the cultures and language. **Prerequisite**: GER-11000 or permission of the Self- Instructional Language Program (SILP) coordinator. *(Humanities Credit)*

GER-21000   German III (V)   **4(4-0)**
Students will further develop their oral and written skills through conversation, composition, and formal presentation. This course will make students more proficient in the language and cultures. **Prerequisite**: GER-12000 or permission of the SILP coordinator. *(Humanities Credit)*

SGN-10000   American Sign Language I (F,W)   **3(0-4)**
This course covers the beginning level of the native language of the deaf. Students will develop receptive and expressive skills in fingerspelling, vocabulary, and short sentences. Objectives are met through use of drills, videos, and occasional guests who are deaf. **NOTE**: There is no prerequisite, but prior knowledge of ASL is helpful. *(Humanities Credit)*

SGN-10100   American Sign Language II (F,W)   **3(0-4)**
This course is a continuation of American Sign Language I. **Prerequisite**: SGN-10000 or permission of instructor. *(Humanities Credit)*

SGN-10200   Fingerspelling (V)   **2(0-2)**
Students will learn the use of hand shapes to represent letters of the alphabet used in American Sign Language. The course will focus on reading "words" and not letters. *(Humanities Credit)*

SGN-10300   American Sign Language III (V)   **3(0-4)**
This course is a continuation of American Sign Language II. **Prerequisite**: SGN-10100. *(Humanities Credit)*

SPN-11000   Spanish I (V)   **4(4-0)**
This course concentrates on functional communication. Communication is a primary goal with grammar to support this goal. This course will also introduce the student to the cultures associated with the language. *(Humanities Credit)*

SPN-12000   Spanish II (V)   **4(4-0)**
A continuation of Language I with further development of oral and written skills. The goal is to increase confidence and comfort with the cultures and language. **Prerequisite**: SPN-11000 or permission of the Self- Instructional Language Program (SILP) coordinator. *(Humanities Credit)*

SPN-21000   Spanish III (V)   **4(4-0)**
Students will further develop their oral and written skills through conversation, composition, and formal presentation. This course will make students more proficient in the language and cultures. **Prerequisite**: SPN-12000 or permission of the SILP coordinator. *(Humanities Credit)*

LITERATURE refer to English and Literature

MANUFACTURING PROCESSES TECHNOLOGY (MPT)

Additional manufacturing processes technology courses are available at M-TEC[SM] at Kirtland-Gaylord. For a complete listing, call 989-705-3600 or go to mtec.kirtland.edu.

MPT-10000   Metal Machining I (V)   **4(2-4)**
This course covers modern metal-making techniques involving theory and practice in the application of machine tool principles.

MPT-10100   Metal Machining II (W)   **4(2-4)**
This course covers advanced theory and practices in the application of machine tool metal working processes and procedures. Special problems involving advanced setups and tooling are included, as well as an introduction to C.N.C. and E.D.M. **Prerequisite**: MPT-10000.

MPT-10900   Metrology I (F)   **3(2-1)**
This course covers fundamentals of dimensional metrology, including systems of measurements, vernier and micrometer instruments, standards, gauge blocks, and pneumatic measuring devices. Emphasis is placed on achievement of accuracy through proper care and use of instruments and knowledge of industrial quality control and S.P.C. overview. Hands-on training on C.M.M. is also covered.

MPT-11900   Quality & Team Building (V)   **2(2.5-0)**
This course is used to look at and practice quality and team building systems used in past and present manufacturing companies. Continuing improvement is the goal within a team setting.

MPT-20200   Metallurgy (W)   **3(2-1)**
This course covers fundamental physical properties of metals and their effects upon industrial uses. It includes basic strengths of metals, heat treatment, and forming metals and alloys. **Prerequisite**: DEV-09601 or demonstrated competency.

MPT-20300   Metal Machining III (F)   **4(2-4)**
Emphasis will be on the intricate programming methods used in the aerospace industry and tool and die manufacturing, as well as geometric development procedures utilizing C.A.D., C.A.M., and C.N.C. The technique and methods used in electrical discharge and C.N.C. control machining will be learned while operating modern equipment of that design. **Prerequisite**: MPT-10100.

MPT-20800   Metal Machining IV (W)   **4(2-4)**
This course is designed to go beyond the basic steps learned in Metal Machining I-III. It will provide the student a chance to solve problems in advance machining techniques and will give students more C.A.D./C.A.M., and C.N.C. time. **Prerequisite**: MPT-20300.

MPT-21000   Understanding and Application of Machinist Handbook (F)   3(2-1)
This covers the use of the Machinist's Handbook and the pocket calculator in the solution of manufacturing and design problems. **Prerequisite**: CAD-10500, MPT-10000, MPT-10100, or permission of instructor.

MPT-21200   Statistical Processes Control (V)   **4(4-2)**
An introduction to the variety of uses of S.P.C., T.Q.M., and ISO-9000. Students will develop an understanding of the principles of S.P.C. and the ability to use S.P.C. through study materials, demonstrations, preparation of control charts, team assignments, and problem-solving exercises. **Prerequisite**: DEV-07300 or equivalent.

MPT-275--   Directed Study-Manufacturing Processes Technology (V)   1-6(Variable)
This course is designed to meet special occupational needs for individual students. **Prerequisite**: advisor recommendation.

MARKETING AND RETAILING (MKT)

MKT-11000   Principles of Selling (W)   **3(3-0)**
This course covers principles and techniques employed by successful salesmen, with emphasis on how to sell rather than how to manage.

MKT-11500   Customer Relations (W)   3(3-0)
This course examines the role of Customer Relations in the economy with emphasis on customer relations in business and organizations that have considerable dealings with the public. The class addresses the four C's of excellent customer service, dealing with difficult people, handling angry customers, developing service strategies, customer service habits to develop, do's and don'ts of customer service, customer service on the web, and culminates with the student's development of a customer relations policy and program for their 'chosen' organization.

MKT-20000   Principles of Marketing (W)   3(3-0)
This course covers the managerial approach to the marketing process. This includes marketing and business management, the role of the consumer, marketing structure, merchandising, support functions, and product flow. **Prerequisite**: sophomore standing or permission of instructor.

MKT-20100   Principles of Retailing (W)   3(3-0)
This course emphasizes the theory of retailing and its application to business problems. The course covers retail structure, consumer analysis, store operation (organization, management, and control), personnel, merchandising, and sales promotion. Students are required to complete a retail store plan.

MKT-20200   Internet Marketing (W)   3(3-0)
This course focuses on marketing in electronic environments primarily on the Internet, on one or more of its services (WWW, email), or offline by enterprises that produce and sell Internet-related products. The focus is on the synergy created when traditional marketing is performed in electronic environments that greatly reduce or eliminate time and space constraints, facilitate personalization and customization and allow the interoperability of computers and other devices. **Prerequisite:** CIS-10500, or equivalent, or permission of instructor; and MKT-20000, or equivalent, or permission of instructor.

MKT-20400   Advertising (W)   3(3-0)
This course addresses the social value of advertising and its role in marketing. Analysis of behavioral scientists' findings in regard to customer appeals and motivations, window display techniques, and principles of advertising copy and layout are conducted.

MKT-21000   Market Research (V)   3(3-0)
This course is designed to introduce the student to the problem-oriented nature of marketing research. Emphasis is given to how marketing research activities are actually implemented by professional marketing researchers. Students will be encouraged to involve themselves in a research project. **Prerequisite**: sophomore status or permission of advisor.

MASSAGE THERAPY (MAS)

MAS-10000   Introduction to Massage Therapy (F,W)   1(1-0)
This introductory course provides the student with a basic overview of massage therapy. Through lecture, discussion, demonstration, and hands-on practice, the student will learn the benefits of massage, basic massage strokes, contraindications, and an overview of different bodywork systems. Time will also be devoted to the history and trends of massage therapy.

MAS-10200   Introduction to Clinic Operations (W)   1(1-0)
This course will prepare the student to practice in the KCC Clinic. Upon completion of the course, students will understand the physical, financial, health, and business requirements of clinic operation. **Prerequisite**: MAS-10300. **Corequisites**: MAS-10400 .

MAS-10300   Swedish Massage I (W)   2(1.5-1.5)
Swedish massage is considered to be the foundation of most modern massage techniques. This course focuses on applying the anatomy and physiology knowledge gained in BIO-10701 and BIO-10702, as well as building skills in manipulations and the necessary support skills. These include body mechanics; positioning and draping; communication; hygiene, safety, and sanitation; sequence and flow; range of motion; and preparation for the Kirtland clinic experience. **Prerequisite**: BIO-10701 and BIO-17002**. Corequisites**: MAS-10400.

MAS-10400   Swedish Massage II (W)   **2(1.5-1.5)**
Swedish Massage II is a continuation of Swedish Massage I. This course is designed to build skills in manipulation and necessary support skills as described in Swedish I. This course focuses on applying the anatomy and physiology knowledge gained in ALH-12401, BIO-10701, BIO-10702, and MAS-10300 in building skills in manipulations and the necessary support skills, including body mechanics; positioning and draping; communication; hygiene, safety, and sanitation; sequence and flow; range of motion; and preparation for the KCC clinic experience. **Prerequisite**: MAS-10300.

MAS-11000   Massage Skills Lab (W)   **1(0-1)**
This is a massage laboratory course designed to enable the student to practice massage skills and meet the requirements for graduation. The modular approach allows for individualized self-paced instruction. **Corequisite:** MAS-10300.

MAS-12200   Clinic I (S)   **2(0-2)**
This laboratory experience enables the student to practice Swedish and structural-based techniques in a supervised setting. **Prerequisite**: MAS-10200. **Corequisites**: MAS-12300, MAS-12401, and MAS-13005.

MAS-12300   Structural Based Bodywork I (W)   **1(1-0)**
This course will introduce the massage therapist to one of the most popular and versatile techniques—on-site, or chair, massage. Topics will include benefits of this type of massage, common conditions, special equipment and its use, techniques, managing the on-site environment, and business development. This course is recommended to professional massage therapists and individuals who have completed at least 100 hours of training. **Corequisite**: MAS-10200.

MAS-12401   Structural Based Bodywork II (S)   **3(3-0)**
This course will introduce students to the specialty of sports/performance massage. Topics will include the benefits of sports massage, basic applications, specific techniques, and common conditions and injuries. Participation includes providing massage at the AuSable Canoe marathon. This course is recommended to professional massage therapists and individuals who have completed at least 100 hours of training. **Prerequisite**: MAS-12300.

MAS-12500   Structural Based Bodywork III (F)   **1(1-0)**
Participants will learn patterns of body movement that promote grace and ease of movement, as well as the reduction of body stress. **Prerequisite**: MAS-12401.

MAS-12600   Energy Based Bodywork I (F)   **2(1-1)**
This course introduces the student to energy-based bodywork techniques and their applications. Students will have an opportunity to explore systems such as reflexology, shiatsu, acupressure, therapeutic touch, and healing touch. **Prerequisite**: MAS-10200.

MAS-12700   Energy Based Bodywork II (F)   **2(1-1)**
This course further develops the student's skill in using and integrating energy-based systems. The course includes an introduction to cranio-sacral techniques, as well as lecture, demonstration, and hands-on practice. The student will be assigned a client for a case study. **Corequisite**: MAS-12600.

MAS-12801   Integrated Structural Dynamics (W)   **2(1-1)**
This course is designed to assist the student in gaining greater knowledge of the human musculoskeletal systems via muscle identification, palpation, and assessment of movement. The material will be integrated into the coursework throughout the program. **Prerequisites**: ALH-10101, BIO-10701, and BIO-10702. **Corequisite:** MAS-10000.

MAS-13004   Topics I (S)   **1(1-0)**
This course examines the issues of special populations served by the massage therapist (the elderly, the pregnant, infants, children, the disabled, survivors of abuse). Topics include appropriate techniques, common conditions, contraindications, marketing and professional development, identifying the special needs of the various populations, and practical experience under supervision. **Prerequisite**: MAS-10400.

MAS-13005   Topics II (S)   **1(1-0)**
This course will familiarize the student with modalities that can be integrated into the massage treatment. Students will explore the use of aromatherapy, hot and cold treatments, hydrotherapy, and specific techniques for specific conditions. **Prerequisite:** MAS-10400.

MAS-13100 Clinic II (F)   **2(0-2)**
This advanced laboratory experience provides an opportunity for the student to practice Swedish, structural, and energy-based massage techniques in a supervised environment. **Prerequisite**: MAS-12200.

MAS-13200 Internship (F)   **1.5(0-1.5)**
This course enables the student to gain a working knowledge by practicing with an approved professional in the community. Practice sites may include hospitals, resorts, private clinics, and salons. **Corequisite**: MAS-13100.

MAS-27500 Directed Study-Massage Therapy I (S)   **2(2-0)**
This course enables the student to focus on his or her individual area of interest. Specialized areas of study and methods of study must be approved by the instructor. **Prerequisite**: MAS-10400 or permission of instructor.

MATHEMATICS (MTH)

For Basic Mathematics, DEV-06300, & Basic Algebra, DEV-07300, see DEVELOPMENTAL course descriptions.

MATH SEQUENCE
NOTE: Students may advance from DEV-07300 directly to MTH-12000 with a grade of SB or better or successful completion of placement test.

Basic Math, DEV-06300	
Basic Algebra, DEV-07300	
Finite Math, MTH-10100	Math for Elementary Teachers, MTH-11600
Intermediate Algebra, MTH-12000	Statistics, MTH-20600
College Algebra with Trigonometry MTH-12100	
Precalculus, MTH-18001	
Calculus I, MTH-22002	
Calculus II, MTH-22102	
Calculus III, MTH-22202	
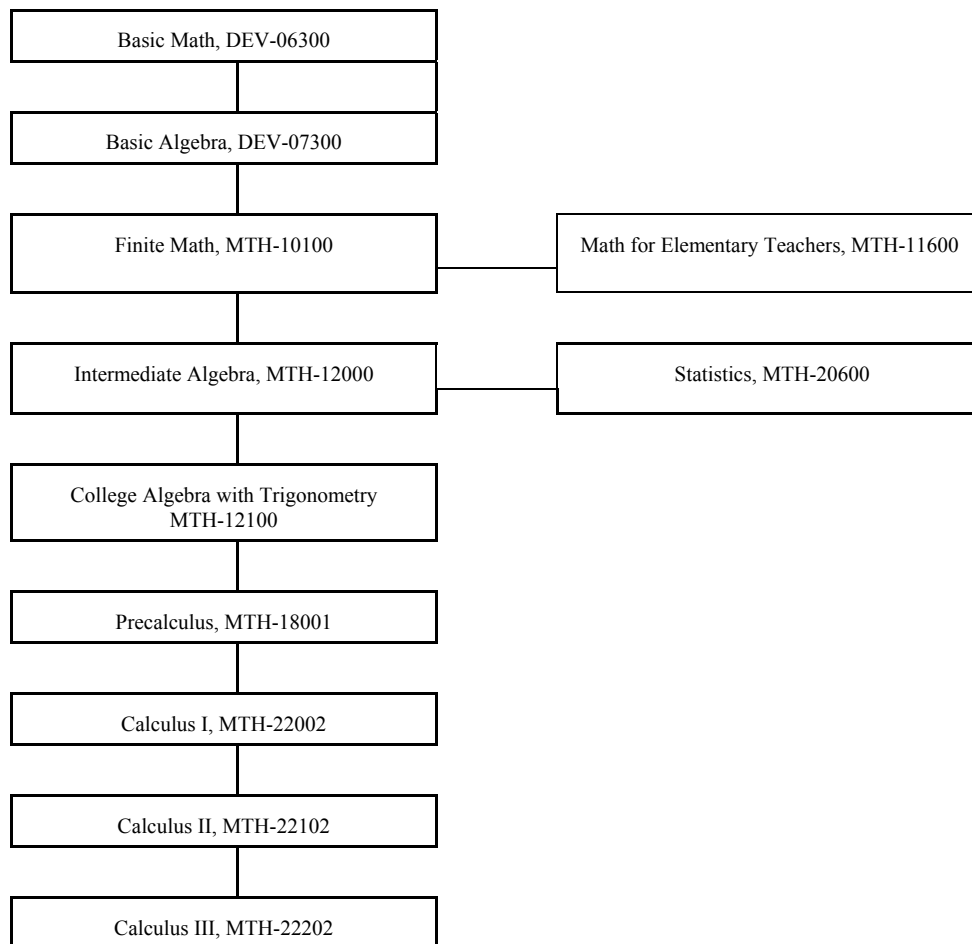
MTH-10100   Finite Mathematics (F,W,S)   **4(3-1)**
This course will cover fundamental algebraic operations and geometric concepts with some numerical and data analysis. Laboratory activities, explorations, and applications of these concepts will be conducted using graphing calculators/computers. A graphing calculator is required. **Prerequisite**: DEV-07300 or required COMPASS test scores.

MTH-11600   Mathematics for Elementary Teachers (W)   **4(4-0)**
This course is designed for prospective elementary teachers and for non-mathematics majors in the liberal arts curriculum. The course covers the modern concepts of mathematics taught in grades K-8. It places emphasis on set theory, problem-solving, numeration systems, operations on whole numbers and rational numbers, percentages, proportions and ratios, measurement, geometry, statistics, probability, and exercises using manipulatives. A service-learning project in an elementary school will also be part of this course. A scientific calculator is required. **Prerequisite**: MTH-10100 or COMPASS placement of Intermediate Algebra. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(Math Credit)*

MTH-12000   Intermediate Algebra (F,W,S)   **4(4-0)**
This course includes the study of the properties of real numbers, basic concepts of algebraic operations, solving and graphing linear and nonlinear functions, systems of equations, complex numbers, quadratic functions, factoring, rational expressions, and basic interpretations of tables and graphs of data. A graphing calculator is required. **Prerequisite**: requisite COMPASS test scores or MTH-10100. *(Math Credit)*

MTH-12100   College Algebra with Trigonometry (F,W,S)   **4(4-0)**
This course includes the study of trigonometry, vectors, exponents, radicals, complex numbers, exponential functions, logarithmic functions, systems of equations, determinants, and matrices. A graphing calculator is required. **Prerequisite**: MTH-12000 or requisite COMPASS test scores. *(Math Credit)*

MTH-18001   Precalculus (F,W)   **4(4-0)**
This course includes the study of functions, algebraic operations, trigonometry, vectors, conics, parametric equations, polar equations, combinations, permutations, sequences and series, and mathematical induction. A graphing calculator is required. **Prerequisite**: MTH-12100 or requisite COMPASS test scores. *(Math Credit)*

MTH-20600   Application in Statistics (W)   **4(4-0)**
This is an introductory course in statistics for any field in which the collection, analysis, interpretation, and presentation of numerical data are important. Topics include organization of data, types of distributions (binomial, normal, student t, chi-square), sampling, testing of hypotheses, confidence intervals, correlation, and regression. Additionally, the students will choose a project that will allow them to gain experience and demonstrate understanding of some of the statistical techniques or methods. A calculator is required. Computer software will be utilized. **Prerequisite**: MTH-12000 or higher. *(Math Credit)*

MTH-22002   Calculus I (F)   **4(4-0)**
This is the first of a three-semester sequential course in analytic geometry and calculus. Topics include functions, limits, continuity, derivatives, integrals, and their applications. A graphing calculator is required. **Prerequisite**: MTH-18001 or requisite COMPASS test scores. *(Math Credit)*

MTH-22102   Calculus II (W)   **4(4-0)**
This course is a continuation of MTH-22002. Topics include applications of integration, techniques of integration, L'Hopital's Rule, improper integrals, infinite series, conic section, plane curves, parametric equations, and polar coordinates. A graphing calculator is required. **Prerequisite**: MTH- 22002. *(Math Credit)*

MTH-22202   Calculus III (F)   **4(4-0)**
This course is a continuation of MTH-22102. Topics include vector-valued functions, functions of several variables, multiple integration, and vector analysis. A graphing calculator is required. **Prerequisite**: MTH-22102. *(Math Credit)*

MTH-23000   Differential Equations (W)   **4(4-0)**
This course includes the study of exact solutions of common types of first-order ordinary differential equations, linear equations of higher order, power series solutions, Laplace transforms, linear systems including matrix methods, graphical and numerical techniques, and applications of differential equations. **Prerequisite**; MTH-22102. *(Math Credit)*

MUSIC (MUS)

MUS-10100   Music History & Appreciation (F)   **3(3-0)**
This course is a guide to listening, with emphasis on understanding and experiencing the fundamentals of music to increase the enjoyment and knowledge of music and to cultivate the art of intelligent and perceptive listening. **Prerequisite or co-requisite**: ENG-10300/10303. *(Humanities Credit)*

MUS-10400   Piano I (F,W,S)   **3(1.5-1.5)**
This course is designed for group instruction on electronic piano. It will develop proficiency in piano playing in students who have had no experience at the keyboard. Other musical experience such as MUS-10100 is helpful but not essential. *(Humanities Credit)*

MUS-10500   Piano II (F,W,S)   **3(1.5-1.5)**
This course is a continuation of Piano I. **Prerequisite**: MUS-10400 or permission of instructor. *(Humanities Credit)*

MUS-10600   Piano III (F,W,S)   **3(1.5-1.5)**
This course is a continuation of Piano II. **Prerequisite**: MUS-10500 or permission of instructor. *(Humanities Credit)*

MUS-10700   Piano IV (F,W,S)   **3(1.5-1.5)**
This course is a continuation of Piano III. **Prerequisite**: MUS-10600 or permission of instructor. *(Humanities Credit)*

MUS-10802   Contemporary Guitar Styles I (F,W)   **2(1-1)**
This class will teach beginners in an ensemble setting the basics of guitar styles used by today's musicians. Students will learn strumming and picking techniques along with simple major, minor and 7th chords that will allow them to accompany themselves and/or others. *(Humanities Credit)*

MUS-10901   Contemporary Guitar Styles II (F,W,S)   **2(1-1)**
This class is a continuation of MUS-10802 and will teach more advanced chords, strumming and picking techniques, along with more complex chord progressions. Both rhythm and lead techniques are taught in an ensemble setting. **Prerequisite**: MUS-10802 or permission of instructor. *(Humanities Credit)*

MUS-11000   Instrumental Ensemble I (F)   **3(3-0)**
This course develops general musicianship and provides training in instrumental ensemble playing. Participation in rehearsals for performances presented on campus is required. *(Humanities Credit)*

MUS-11500   Beginning Voice (W)   **3(3-0)**
This course provides classroom instruction in singing and vocal technique, including posture breathing, tone, song preparation, and performance. Some individual instruction, choral training, and general musicianship are also provided. The course is required of all students seeking a concentration in acting. *(Humanities Credit)*

MUS-12702   Mikenauk Chorale (V)   **2(2-0)**
This course is devoted to the study of various styles of choral literature with emphasis on seasonal music. It will range from polyphonic to the modern period. Emphasis will be placed upon the technique of singing, posture, and breathing.

MUS-27503   Directed Study-Intermediate Voice (V)   **3(3-0)**
This course is a continuation of MUS-11500. It provides classroom instruction in singing and vocal technique, including articulation, resonance, vocal health, vocal problem-solving, and performance. Some individual instruction, choral training, and general musicianship are also provided. **Prerequisite**: MUS-11500 or permission of instructor. *(Humanities Credit)*

MUS-27505   Directed Study-Applied Voice I (V)   **3(3-0)**
Private instruction in vocal technique is provided in lessons that meet 30 minutes per week. Repertoire is at the discretion of the instructor, including Italian and English literature, and styles of interest to the student. **Prerequisite**: MUS-27503 or permission of instructor. *(Humanities Credit)*

MUS-27506   Directed Study-Applied Voice II (V)   3(3-0)
This course is a continuation of Applied Voice I. **Prerequisite**: MUS-27505. *(Humanities Credit)*

MUS-27507   Directed Study-Applied Voice III (V)   3(3-0)
This course is a continuation of the techniques learned in Applied Voice II. Emphasis is on solo work and includes private lessons with the instructor. Classes involve ensemble warm-ups and mixed chorale harmonizing. **Prerequisite**: successful completion of MUS-27506 or permission of instructor. *(Humanities Credit)*

MUS-27511   Kirtland Vocal Ensemble (V)   1(1-0)
A performing choir ensemble which will provide training in basic choral techniques, and develop general musicianship. Repertoire accommodates the capabilities and interests of the students. Membership is open by audition to readers and non-readers of music from the community and the college. The class meets one night per week and may be elected in sequence four times. *(Humanities Credit)*

NURSING (NUR)

NUR-10502   Foundations of Nursing (F, W)   3(3-0)
This is the basic course in the nursing curriculum, which provides the foundation upon which other courses will build and expand. It is designed to introduce the beginning nursing student to the philosophy and objectives of practical nursing. Content includes the scientific principles and skills concerned with basic nursing practice, with emphasis on areas of nursing skills in respect to safety, comfort, coping, and adaptation. The student is introduced to the nursing process, basic communication skills, general assessment, death and dying, and spiritual and transcultural issues. **Prerequisite**: admission into the Level I nursing program.

NUR-106--   Nursing Skills Lab (F)   1-3(variable)
This is a nursing laboratory course designed to enable the student to update and review basic nursing skills. The modular approach allows for individualized self-paced instruction. **Prerequisite**: eligibility for course determined by nursing faculty.

NUR-10700   Mental Health Concepts (F, W)   1(1-0)
This course is designed to assist the student nurse to develop knowledge and skills in providing basic psychiatric nursing care. The student will achieve psychosocial adaptation competencies in assisting the client with an acute or chronic mental illness, substance abuse issue, or crisis/violence need. Students will apply scientific process to problem solve client's needs.

NUR-10803   Nursing Practice Lab (F)   3(0-4)
This course consists of guided learning lab practice. The focus is acquisition of basic nursing skills. **Prerequisite**: admission into the nursing program. **Corerequisites**: NUR-10502 and NUR-10804.

NUR-10804   Nursing Clinical I (F)   2(0-6)
This course consists of guided learning clinical experience in selected health care facilities/settings. Emphasis is placed on the principles and activities concerned with basic nursing techniques that are common to the client within the health care facility. **Prerequisite**: admission into the Level I nursing program. **Corequisites**: NUR-10502 and NUR-10803.

NUR-12304   Nursing Clinical II (W)   5(0-15)
This is a clinical course designed to introduce the student to basic concepts of using the nursing process to deliver care to adults with well-defined nursing diagnoses. Safe administration of medications will be integrated. Medical, surgical, and physiology principles serve as the foundation for the course. Application will occur in selected acute care and community sites. **Prerequisite**: NUR-10804. **Corequisite**: NUR-12503.

NUR-12503   Adult Medical-Surgical Nursing (F, W)   4(4-0)
This course introduces students to concepts focusing on how the adult responds to alterations in health. Emphasis is placed on using the nursing process as the student explores disease entities and the physiological responses of the body to these problems. This course presumes a basic understanding of normal anatomy and physiology, nutrition, and nursing foundations. **Prerequisites**: BIO-10701 and BIO-10702 or BIO-11600; ALH-10101; NUR-10502; and ALH-11400.

NUR-12602   Nursing Care of Children (W)   2(2-0)
This course is designed to introduce the student to the concepts of pediatric nursing care. The course will include the health concerns confronting well and ill infants, children, and adolescents and their families, caretakers, and the community. Basic concepts and principles of growth and development will be integrated, as well as nutritional needs and variations of diet therapy. **Corequisite**: NUR-12503.

NUR-12702   Nursing Care of Childbearing Family (W)   2(2-0)
This is an introductory course designed to assist the student in applying the nursing process to the care of women, newborns, and families during childbearing. **Corequisite**: NUR-12503.

NUR-13302   Current Issues in Nursing (S)   1(1-0)
This is a course designed to emphasize the responsibilities and concerns associated with a graduate practical nurse. The course will focus on employment opportunities, continuing education, professional issues, and role. **Prerequisite:** NUR-12302. **Corequisite**: NUR-13402.

NUR-13402   Nursing Clinical III (S)   2(0-6)
This course consists of guided learning clinical experience in selected health care facilities. Continued emphasis is placed on meeting the biopsychosocial developmental needs of the client. Role transition to graduate status is fostered. **Prerequisite**: NUR-12302.

NUR-21400   Nursing Pharmacology (W)   2(2-0)
This course is designed to introduce the nurse to advanced concepts of drug therapy, principles and methods of drug administration, and related nursing activities and responsibilities. The course is based on the pharmaco/physiological concept. Continual association to clinical experience and physiology cellular principles will be emphasized throughout the course. **Prerequisite**: LPN with experience and BIO-11600.

NUR-22001   Nursing Assessment (F)   3(3-0)
This course is designed to explore the nursing process in depth as a foundation for professional nursing practice. Methods for eliciting a sound health history and techniques for physical assessment will be introduced as a means of providing essential information for care planning. This course is designed to build on previous knowledge of the body's anatomy and physiology. **Prerequisite**: LPN with experience or permission of instructor. **Prerequisite or corequisite**: BIO-11600.

NUR-22200   Critical Thinking in Adult Care (F,W)   4(4-0)
This is a critical thinking course designed to aid the students in the use of the nursing process as it relates to adult clients with acute, chronic, and multiple health care problems. Emphasis is on a holistic approach that focuses on the adaptation of clients and significant others to alterations in the wellness-illness continuum and nursing's role in this process. **Prerequisite**: admission into the Level II nursing program. **Corequisite**: NUR-22300. **Prerequisite or corequisite**: BIO-21500, NUR-22001.

NUR-22300   Adult Nursing Clinical (F,W)   5(0-15)
This course provides the student with clinical experiences that emphasize care for adult clients with acute and chronic health care problems. Nursing interventions focus on meeting the needs of clients with multiple health problems from a holistic perspective–wellness to illness. Application of theory to practice is critical to the learning process of students in this course. **Prerequisite**: admission into the Level II nursing program. **Corequisite**: NUR-22200.

NUR-23200   Family Centered Pediatrics (F,W)   2(2-0)
This is a lecture course regarding applying the nursing process to pediatric clients and their families. The student will learn to facilitate the child and family in building, mobilizing, and using their resources in health promotion and maintenance, and managing illness. **Prerequisite**: admission into the Level II nursing program. **Corequisite**: NUR-23300. **Prerequisite or corequisite**: NUR-22001.

NUR-23300   Pediatric Nursing Clinical (F,W)   1(0-3)
This clinical course will provide the student with the opportunity to apply the concepts from Family Centered Pediatrics. The experiences will occur in selected hospital and community settings. **Prerequisite**: admission into the Level II nursing program. **Corequisite**: NUR-23200.

NUR-24200   Community Mental Health Nursing (F,W, S)   2.5(2.5-0)
This is a course designed to develop knowledge to provide psychiatric nursing care to select clients in the hospital or community who demonstrate patterns of maladaptive behavior. The student will explore methods of prevention, maintenance, and treatment of individuals with a mental illness. **Prerequisite:** admission into the Level II nursing program. **Corequisite**: NUR-24300. **Prerequisite or corequisite**: NUR-22001.

NUR-24301   Community Mental Health Nursing Clinical (F,W, S)   2(0-6)
Hospital and community clinical experiences are utilized to provide students opportunities to apply the nursing process to clients with maladaptive behavior. The focus is on one-to-one interpersonal relationships through which the nursing process is applied and analyzed. **Prerequisite**: admission into the Level II nursing program. **Corequisite**: NUR-24200.

NUR-24600   Nursing Care of Women & Families (F,W)   2(2-0)
This course is designed to assist the student in applying the nursing process in giving care to women, newborns, and their families, primarily during the period of childbearing. This course focuses on home care, complications of childbearing, and reproductive health. Emphasis is placed on the nurse's role in disease prevention, health promotion and maintenance, and teaching. **Prerequisite**: admission into the Level II nursing program. **Corequisite**: NUR-24700. **Prerequisite or corequisite**: NUR-22001.

NUR-24700   OB/GYN Nursing Clinical (F,W)   1(0-3)
This course is designed to permit the student an opportunity to apply the nursing process while giving care to women, newborns, and families, primarily during the childbearing period. Application of concepts will occur in selected hospital, clinic, and community sites. **Prerequisite**: admission into the Level II nursing program. **Corequisite**: NUR-24600.

NUR-25201   Professional Practice (S)   2(2-0)
This course is designed to assist the transition of the student to graduate nurse. Professional nursing behaviors, attitudes, and community service are explored. Health care systems, nursing personnel and roles, staffing, and other professional issues are examined and evaluated. **Prerequisites**: Admission into the Level II Nursing program.

NUR-25202   Professional Leadership (S)   2(2-0)
This course is designed to prepare the student for entry into practice. Professional leadership issues as a registered professional nurse will be explored. Communication skills and stress management will be examined. A preparation review for NCLEX is included. **Prerequisites**: BIO-21500, NUR-21400, NUR-22001, NUR22200, and NUR-223. **Corequisite:** NUR-25300.

NUR-25300   Clinical Leadership (S)   1(0-3)
This course is designed to assist in the transition of student nurse to graduate nurse. Clinical leadership is emphasized. Students provide direct supervised nursing care to groups of clients with multiple and/or complex nursing care needs. **Prerequisites**: NUR-23200, NUR-23300, NUR-24200, NUR-24300, NUR-24600, and NUR-24700. **Corequisite**: NUR-25200.

NUR-255--   Nursing Seminar (V)   1-3(Variable)
This is a course designed to assist the student in meeting the requirements for graduation or reentry when a deficiency in clinical hours or clinical experience exists. **Prerequisite**: permission of instructor and the director of health careers.

NUR-25508   Nursing Wellness Seminar (F,W, S)   1(1-0)
This course consists of recommended screening to maintain health, fitness concepts, and stress management. It will help the student understand how an individual can plan a healthier lifestyle. **Prerequisite**: Level I graduate or permission of instructor.

NUR-26001   Nursing Care of Adults (F)   8(8-0)
This course is designed to facilitate the student in using the nursing process to give care to adults who are acutely or chronically ill or who have multiple health problems. Nursing interventions to assist the client and family in their holistic adaptive responses to illness and stress are discussed. Emphasis is placed on the nurse's role in health care management (disease prevention, health promotion and maintenance, and teaching). Information is designed to build upon the theory learned in all completed coursework and will enable the student to apply previously learned knowledge and skills. **Prerequisite**: admission into program.

NUR-27000   Nursing Care of Special Populations (V)   8(8-0)
This is a course designed to facilitate the student in using the nursing process to give care to special populations (mental illness, childbearing family, and childrearing family). Nursing interventions to assist the client and family in their holistic adaptive responses to growth and development, illness, and stress are discussed. Emphasis is placed on the nurse's role in health care management (disease prevention, health promotion and maintenance, and teaching). Information is designed to build upon the theory learned in all completed coursework and will enable the student to apply previously learned knowledge and skills. **Prerequisite**: admission into program and PSY-10100.

NUR-28000   Clinical Application of Nursing Care (V)   8(8-0)
This is a clinical course that focuses on the practice of nursing in selected settings (in-patient, out-patient, and community settings) and with varying client populations. Students apply nursing process to assist clients and families to achieve maximum holistic health through continuous adaptation and growth and development. Students will manage care for increasing numbers of clients within selected settings. Communication skills with clients, peers, and the health care team are emphasized, as are professional nursing behaviors. Knowledge is demonstrated by the safe and effective clinical care to clients in the mental health, childbearing, childrearing, and medical-surgical settings over 15 weeks of clinical experience. **Prerequisites**: NUR-22001, NUR-26001, NUR-27000, and Nursing Leadership (NURS 290.L1)

OFFICE INFORMATION SYSTEMS (OIS)

OIS-10100   Basic Keyboarding (F, W, S)   1
This course is for those who have not had any previous keyboarding instruction. **Prerequisite**: permission of advisor.

OIS-10401   Keyboarding I-A (F, W, S)   1
Students will be using a microcomputer and appropriate software to develop touch-type operation of the keyboard and drill work to develop their keyboarding skills. **Prerequisite**: permission of advisor.

OIS-10402   Keyboarding I-B (F, W, S)   1
Students will be using a microcomputer and appropriate software to develop touch-type operation and basic skills in keyboarding, including the numeric keypad and the ability to prepare memorandums and business letters. Review and drill work are also incorporated into the course. **Prerequisite**: permission of advisor.

OIS-10403   Keyboarding I-C (F, W, S)   1
Students will be using a microcomputer and appropriate software to develop basic skills in keyboarding, including touch-type operation of the keyboard, and the ability to prepare simple business letters, reports, manuscripts, and outlines. Review and drill work are available for those students who have previously developed some keyboarding skill. **Prerequisite**: permission of advisor.

OIS-10500   Business Correspondence (F, W, S)   3
Detailed discussion and examination of methods of communication in business are provided, including instruction and practice in writing and constructing rough drafts, finished letters, and forms used in business. The course also includes a grammatical and mechanical foundation for preparing business correspondence with emphasis on successful human relations. Employability skills, including letters of appreciation, application forms, and interview techniques, are presented. **Prerequisite**: ENG-10300/10303 or permission of advisor.

OIS-10600   Introduction to Health Information Systems (F, W, S) 3   (Formerly MOA-10500)
This course is designed to introduce the student to health information systems from a broad view of the health care industry to the basic elements of health information technology, through the physician's office, acute care setting, and other health care environments. A complete integration of computer-based terminology and concepts will be addressed as it relates to health information technology. The course includes the practical application of various health information functions. **Prerequisite**: permission of advisor.

OIS-10701   Medical Office Transcription-A (F, W, S)   1
This introductory course is designed to expose the student to the beginning stages of medical transcription. The student will learn the different tools of transcription, how to operate the different types of dictation and transcription equipment, how to use the reference materials in terms of punctuation and transcribing numbers. Basic transcription will be introduced. **Corequisites:** ALH-10101; OIS-11401 or OIS-18201 or equivalent; or permission of advisor.

OIS-10702   Medical Office Transcription-B (F, W, S)   1
This course is designed to expose the student to formatting transcription letters and to developing proofreading skills. Guidelines will be introduced for style, grammar, and specific medical transcription mechanics such as editing, spelling, and formatting of medical reports. Intermediate transcription skills will be developed upon completion of this course. **Prerequisites:** OIS-10701; or permission of advisor.

OIS-10703   Medical Office Transcription-C (F, W, S)   1
This course exposes the student to identifying the various mechanical formats used to prepare the diverse medical reports used in transcribing. Upon completion of this course, the student will be typing reports, memos, minutes, and agendas. Advanced transcription skills will be developed upon completion of this course. **Prerequisites:** OIS-10702 or equivalent or permission of advisor.

OIS-10801   Medical Transcription I-A (F, W, S)   1
This course teaches transcription of authentic physician-dictated reports organized by body systems including dermatology, urology, and gastroenterology. Emphasis is on the development of accuracy, speed, and medical knowledge for the transcription of chart notes, history and physical examinations, and discharge summaries. It also teaches the student how to use reference materials and other resources efficiently. Editing and proofreading techniques and grammar and punctuation review are also included. **Prerequisites**: ENG-10300/10303, and OIS-10703 or equivalent; or permission of advisor.

OIS-10802   Medical Transcription I-B (F, W, S)   1
This course teaches transcription of authentic physician-dictated reports organized by body systems including orthopedics, cardiology, pulmonary, endocrinology, and obstetrics-gynecology. Emphasis is on the development of accuracy, speed, and medical knowledge for the transcription of chart notes, history and physical examinations, discharge summaries, letters, and consultations. It also teaches the student how to use reference materials and other resources efficiently. Editing and proofreading techniques and grammar and punctuation review are also included. **Prerequisites**: ENG-10300/10303; and OIS-10801 or equivalent; or permission of advisor.

OIS-10803   Medical Transcription I-C (F, W, S)   1
This course teaches transcription of authentic physician-dictated reports organized by body systems including ophthalmology, ear, nose, and throat, and neurology. Emphasis is on the development of accuracy, speed, and medical knowledge for the transcription of chart notes, letters, consultations, initial office evaluations, and history and physical examinations. It also teaches the student how to use reference materials and other resources efficiently. Editing and proofreading techniques and grammar and punctuation review are also included. **Prerequisites**: ENG-10300/10303; and OIS-10802 or equivalent; or permission of advisor.

OIS-11201   Business Calculations (F, W, S)   3
The student will learn how to add, subtract, multiply, and divide to complete various business application problems using an electronic calculator and the microcomputer ten-key pad. **Prerequisite**: permission of advisor.

OIS-11300   Medical Coding I (F, W)   3
This course includes the study and practical application of coding medical diagnoses and procedures from medical record documentation using CPT-4 coding systems. The student will review medical records to identify the key components of documentation that are used in the coding and documentation process. **Prerequisite**: ALH-10101 or permission of advisor.

OIS-11401   Keyboarding II-A (F, W, S)   1
This course is designed to increase speed and accuracy in the preparation of keyed projects. The student will be introduced to memorandums and e-mail, personal and business letters, and tables. **Prerequisite**: OIS-10403 or equivalent, or permission of advisor.

OIS-11402   Keyboarding II-B (F, W, S)   1
This course is designed to increase speed and accuracy in the preparation of business reports and letters. The student will be introduced to various letter styles, forms, manuscripts, and tabulation problems. **Prerequisite**: OIS-11401 or equivalent or permission of advisor.

OIS-11403   Keyboarding II-C (F, W, S)   1
This course is designed to increase speed and accuracy in the preparation of business reports and letters. The student will be introduced to various letter styles, forms, manuscripts, and tabulation problems. **Prerequisite**: OIS-11402 or equivalent or permission of advisor.

OIS-11500   Medical Insurance Billing (F, W)   3
This course provides students with the knowledge and skills necessary to successfully perform the duties of an insurance billing specialist. It is a concentrated application to learning insurance billing, progressing from easy to more complex issues. Patients' medical records, ledgers, and encounter forms are presented so the student will learn how to abstract information to complete insurance forms properly and accurately. **Prerequisite**: ALH-10101 or permission of advisor.

OIS-17000   Legal Terminology & Transcription (F, W)   3
This course is designed to give the student a background in basic legal terminology including spelling, pronunciation, and meaning. The student will develop transcription skills by transcribing from taped dictation documents dealing with the courts, legal systems, and litigation procedures. **Prerequisites**: ENG-10300/10303 and OIS-10403, or permission of advisor.

OIS-18201   Word Processing I - Word-A (F, W, S)   1
This course is designed to provide students with a knowledge of word processing concepts, equipment, and the ability to perform word processing operations using a word processing system. The student will perform basic word processing functions including inputting, formatting, editing, and printing. **Prerequisite**: OIS-10403 or permission of advisor.

OIS-18202   Word Processing I - Word-B (F, W, S)   1
This course is designed to provide students with a knowledge of word processing concepts, equipment, and the ability to perform word processing operations using a word processing system. The student will perform basic word processing functions including inputting, formatting, editing, saving, retrieving, creating, printing, maintaining files, using writing tools, using tabs, and manipulating text. **Prerequisite**: OIS-18201 or permission of advisor.

OIS-18203   Word Processing I - Word-C (F, W, S)   1
This course is designed to provide students with a knowledge of word processing concepts, equipment, and the ability to perform word processing operations using a word processing system. The student will perform basic word processing functions including inputting, formatting, editing, printing, maintaining files, using writing tools, using tabs, and manipulating text. **Prerequisite**: OIS-18202 or permission of advisor.

OIS-19001   Machine Transcription-A (F, W, S)   1
This is an introductory course, which teaches the basic skills needed to operate a transcribing machine. Emphasis is placed on listening skills, proofreading, and applying the principles of correct grammar to the transcription of letters and memorandums. **Prerequisites**: ENG-10300/10303; OIS-11401 or OIS-18201 or equivalent; or permission of advisor.

OIS-19002   Machine Transcription-B (F, W, S)   1
This intermediate course introduces dictation of documents requiring document-formatting decisions. Emphasis continues to be placed on listening skills, use of proper punctuation, and accurate proofreading techniques. **Prerequisites**: OIS-19001 or equivalent, or permission of advisor.

OIS-19003   Machine Transcription-C (F, W, S)   1
This course requires the student to apply the basic skills acquired in OIS-19001 and OIS-19002 to dictation of increasing difficulty. Grammar, spelling, formatting, and editing decisions will be more challenging. **Prerequisites**: OIS-19002 or equivalent, or permission of advisor.

OIS-20501   Records Management-A (F, W, S)   1
This course is an introduction to the basic principles, procedures, and methods of records storage, control, retrieval, and management. Practical applications of manual filing are utilized to assist students in mastering the rules and principles of alphabetic filing. **Prerequisite**: permission of advisor.

OIS-20502   Records Management-B (F, W, S)   1
This course expands on the introductory course by reviewing the basics of alphabetic filing through additional practical applications. Emphasis is placed on procedures for efficient records retention, retrieval, and transfer procedures. **Prerequisite**: OIS-20501.

OIS-20503   Records Management-C (F, W, S)   1
This course provides the student with advanced training in records management, which includes principles and practical applications of subject, numeric, and geographic filing. For enhancement of records management techniques, an interview with a records manager in an off-campus business will be conducted by the student. **Prerequisite**: OIS-20502.

OIS-20601   Medical Transcription II-A (F, W, S)   1
This course teaches transcription of authentic physician-dictated reports organized by body systems including dermatology, urology, gastroenterology, and orthopedics.. Emphasis is on the development of accuracy, speed, and medical knowledge for more difficult transcription of consultations, discharge summaries, chart notes, history and physical examinations, and initial office evaluations. It also teaches the student how to use reference materials and other resources efficiently. Editing and proofreading techniques and grammar and punctuation review are also included. **Prerequisite**: OIS-10803 or equivalent, or permission of advisor.

OIS-20602   Medical Transcription II-B (F, W, S)   1
This course teaches transcription of authentic physician-dictated reports organized by body systems including cardiology, pulmonary medicine, endocrinology, and obstetrics-gynecology. Emphasis is on the development of accuracy, speed, and medical knowledge for increasingly difficult transcription of chart notes, discharge summaries, consultations, history and physical examinations, initial office evaluations, and emergency room reports. It also teaches the student how to use reference materials and other resources efficiently. Editing and proofreading techniques and grammar and punctuation review are also included. **Prerequisite**: OIS-20601 or equivalent, or permission of advisor.

OIS-20603   Medical Transcription II-C (F, W, S)   1
This course teaches transcription of authentic physician-dictated reports organized by body systems including otorhinolaryngology, ophthalmology, and neurology. Emphasis is on the development of accuracy, speed, and medical knowledge for increasingly difficult transcription of chart notes, discharge summaries, consultations, history and physical examinations, initial office evaluations, and emergency room reports. It also teaches the student how to use reference materials and other resources efficiently. Editing and proofreading techniques and grammar and punctuation review are also included. **Prerequisite**: OIS-20602 or equivalent, or permission of advisor.

OIS-20701   Medical Transcription III-A (F, W, S)   1
This course teaches transcription of authentic physician-dictated radiology and pathology reports. Radiology reports such as nuclear medicine, computer tomagraphy, diagnostic imaging, ultrasound, mammography, and magnetic resonance imaging are included. Pathology reports such as autopsies, surgical pathology, and gross and microscopic pathology are included. Emphasis is on development of accuracy, speed, and medical knowledge. Reports are sequenced so terminology foundation builds as the student advances. Editing, proofreading, grammar, and punctuation review are emphasized. **Prerequisites**: OIS-20603 or permission of advisor.

OIS-20702   Medical Transcription III-B (F, W, S)   1
This course teaches transcription of authentic physician-dictated gastrointestinal and cardiology reports. Gastrointestinal reports such as emergency room notes, history and physical examinations, admissions notes, discharge summaries and operative reports are included. Cardiology reports such as consultations, admission notes, emergency room notes, history and physical examinations, discharge summaries, operative reports, and diagnostic procedures are included. Reports are sequenced so terminology foundation builds as the student advances. Editing, proofreading, grammar, and punctuation review are emphasized. **Prerequisites**: OIS-20701 or permission of advisor.

OIS-20703   Medical Transcription III-C (F, W, S)   1
This course teaches transcription of authentic physician-dictated orthopedic reports including history and physical examinations, discharge summaries, consultations, and operative reports. Reports are sequenced so terminology foundation builds as the student advances to the next report. Editing, proofreading, grammar, and punctuation review are emphasized. **Prerequisites**: OIS-20702 or permission of advisor.

OIS-20800   Medical Keyboarding (F, W, S)   3
This course is a concentrated application of processing medical documents typically used in a medical office setting. Emphasis is placed on speed building through the use of speed-building exercises and applications. **Prerequisites**: ALH-10101; and OIS-11403 or OIS-18203, or equivalent; or permission of advisor.

OIS-20901   Medical Office Administration (F, W, S)   2
This course is a concentrated application of various tasks that a medical clerk performs, including administrative responsibilities, preparing and organizing patient charts, medical ethics and law, Internet projects, telephone procedures, appointments, and records management. The use of the computer is emphasized in each of these applications. **Prerequisites**: ALH-10101; and ENG-10300/10303; or equivalent, or permission of advisor.

OIS-20902   Introduction to Medical Billing & Coding (F, W) 2
This introductory course is a concentrated application of various tasks that a medical clerk performs including methods for reviewing and completing health insurance forms, methods used for diagnosis and procedure coding systems, preparing and organizing patient charts and bills, and various professional activities performed by the medical clerk. The use of the computer is emphasized in each of these applications. **Prerequisites**: ALH-10101 or permission of advisor.

OIS-21000   Office Procedures & Practices (F, W, S)   3
This course provides the application and combination of previously learned skills. It introduces the application of standard office procedures and practices. Emphasis is on the production of quality materials suitable for actual use, with further emphasis on the development of acceptable personal attitudes and personality. The course also includes a review of employability skills. **Prerequisites**: ENG-10300/10303; and OIS-11403 or OIS-18203 or OIS-19003, or equivalent; or permission of advisor.

OIS-21300   Medical Coding II (F, W, S)   3
This course includes the advanced study and practical application of coding medical diagnoses and procedures from medical record documentation using ICD-9-CM and CPT-4. The student will achieve a thorough understanding of the impact of coding on all aspects of the reimbursement process. **Prerequisite**: OIS-11300 or permission of advisor.

OIS-21400   Keyboarding III (F, W, S)   3
This course provides application and study in the preparation of common and specialized letters, business forms, legal papers, and correct office methods and procedures. Also, typing of specialized forms in accounting, government, and professional and technical fields is taught. **Prerequisite**: OIS-11403, OIS-18203, or equivalent, or permission of advisor.

OIS-21500   Desktop Publishing for the Office (F, W, S)   3
This is a course designed to study the technology of desktop publishing. A word processing program will be used to create documents such as reports, brochures, advertisements, newsletters, flyers, and correspondence. Advanced features will also be taught; therefore, the student will acquire a skill that is valuable in both small and large offices. **Prerequisites**: CIS-10500; and OIS-11403; and OIS-22200 or equivalent; or permission of advisor.

OIS-22100   Office Pharmacology (F, W, S)   2
This course is designed for the medical secretary or transcriptionist and will focus on drugs prescribed and/or dispensed in the office setting, patient instructions, reporting reactions, and storage. Emphasis will be placed on correct spelling and transcription of prescribed medications. **Prerequisites**: ALH-10101, BIO-10701, and BIO-10702, or permission of advisor. **Prerequisite or corequisite**: ALH-11201.

OIS-22200   Word Processing II – Word (F, W, S)   3
This course is designed to provide advanced applications of the word processing system and program used in OIS-18203. The student will demonstrate proficiency in advanced word processing applications including power typing, creation of documents, and enhancement to promote efficiency. **Prerequisite**: OIS-18203 or permission of advisor.

OIS-22500   Legal Office Procedures (F, W)   3
This course is designed to provide students with fundamental concepts of American jurisprudence, and practical application of tasks that will be required in a legal office setting. **Prerequisites**: BUS-10100, BUS-21500, OIS-11403, and OIS-17000 with a grade of "C" or better, or permission of advisor.

OIS-24101   Internship - Administrative Assistant (F, W, S)   3
The externship consists of 128 hours of directed office work experience consisting of supervised secretarial duties in a suitable office facility either on or off campus. **Prerequisites**: completion of all courses required for program, a GPA of 2.0 or better, and permission of advisor.

OIS-24102   Internship - Legal Secretary (F, W, S)   3
The externship consists of 128 hours of directed office work experience consisting of supervised legal secretarial duties in a suitable legal office. **Prerequisites**: completion of all courses required for program, a GPA of 2.0 or better, and permission of advisor.

OIS-24103   Internship - Medical Secretary (F, W, S)   3
The externship consists of 128 hours of directed office work experience consisting of supervised medical secretarial duties in a suitable medical facility. **Prerequisites**: completion of all courses required for program, a GPA of 2.0 or better, and permission of advisor.

OIS-24106   Internship - Medical Transcription (F, W, S)   4
This externship consists of coordinated, directed, on-site training under the supervision of a qualified medical record administrator in an office specializing in medical transcription. The externship will involve 144 hours of work experience transcribing the basic four reports (history and physical, consultation, operative report, and discharge summary), as well as other specialty area transcription. A transcription project will be developed along with a transcription procedures manual. **Prerequisites**: completion of all courses required for program, a GPA of 2.0 or better, and permission of advisor.

OIS-24107   Internship - Advanced Word Processing Specialist (F, W, S)   3
The externship consists of 128 hours of directed office work experience consisting of supervised advanced word processing duties in a suitable facility. **Prerequisite**: completion of all courses required for program, a GPA of 2.0 or better, and permission of advisor.

OIS-24108   Internship - Medical Clerk (F, W, S)   3
The externship consists of 128 hours of directed office work experience consisting of supervised medical office assistant duties in a suitable medical facility. **Prerequisite**: completion of all courses required for program, a GPA of 2.0 or better, and permission of advisor.

OIS-24109   Internship - Medical Billing/Coding (F, W, S)   4
The externship consists of 144 hours of directed office work experience consisting of supervised billing and coding duties in a suitable medical facility. **Prerequisite**: completion of all courses required for program, a GPA of 2.0 or better, and permission of advisor.

OIS-275--   Directed Study-Secretarial Science (V)   1-6
This course is designed to meet special occupational needs for individual students. **Prerequisite**: advisor recommendation.

PHILOSOPHY (PHL)

PHL-20100   Introduction to Philosophy (V)   3(3-0)
An introduction to not only the study of philosophy, but also its active and systematic practice. While the course explores such topics as the origin and development of philosophy, the ideas of major philosophers, and significant philosophical issues and problems, students are encouraged, above all, to practice the methods of philosophy as a life skill. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(Humanities Credit)*

PHL-21000   Introduction to Ethics (W)   3(3-0)
An introduction to the study of moral philosophy. Through reading, writing, and discussion, students will explore moral values and the major ethical theories, practice effective moral reasoning, and apply ethical thinking to issues and problems in various fields and their own lives. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(Humanities Credit)*

PHYSICAL EDUCATIONAND RECREATION (PER)

PER-12600 Fitness Evaluation & Exercise Prescription (V) 1(0.5-0.5)
This course is designed to introduce the student to the concepts of personal fitness. The course will discuss fitness appraisal, cardiovascular endurance, nutrition and weight-control, strength training, flexibility, and application of these concepts. Students will practice these concepts.

PER-13600 Strength Training (V) 2(1-1)
This course is designed to introduce the student to the benefits of strength training. The course will outline the principles of planning, developing, and applying a personal program. Students will practice body exercises and learn applicable safety practices.

PER-14600 Beginning Yoga (V) 1(0.3-0.7)
This course is designed to instruct the student in beginning yoga. The basic concepts will be explored, and students will learn patterns of movement that promote grace and ease of movement and will practice measures to reduce body stress.

PER-23000 Principles of Coaching I (V) 2(2-0)
this course is designed to introduce students to the introductory principles of coaching. The course will discuss proper coaching etiquette, how to teach sports skills, dealing with difficult athletes/parents, analyzing skills, and giving appropriate feedback.

PER-24000 Principles of Coaching II (V) 2(2-0)
This course continues to introduce students to the principles of coaching. The course will discuss principles of sport psychology, proper teaching of sports skills, how to plan for practice and games, as well as administrative and legal issues of coaching. **Prerequisite**: PER-23000.

PHYSICS (PHY)

PHY-10501 Physical Science (F,W,S) 3(4-0)
This is a lecture and virtual laboratory classroom course in physical science. The course investigates fundamental matter and energy concepts in the physical universe through the use of selected materials from the areas of astronomy, chemistry, and physics. Attention is given to the methods of scientific inquiry and applications in technology. This course may be elected to meet the science requirement by those not majoring in science. **Prerequisite**: DEV-07300. **Corequisite**: MTH-10100 and PHY-10502. *(Science Credit)*

PHY-10502 Physical Science Lab (F,W,S) 1(0-2)
This is a laboratory course to accompany PHY-10501. **Corequisite**: PHY-10501. *(Science Credit)*

PHY-20101 General Physics I (F) 4(4-0)
This is an algebra-trigonometry-based lecture course in introductory physics. Topics will include general properties of energy and matter with emphasis on mechanics, heat and thermodynamics, and sound. **Prerequisite**: MTH-12100 or permission of instructor. **Corequisite**: PHY-20102. *(Science Credit)*

PHY-20102 General Physics I Lab (F) 1(0-3)
This is a laboratory course to accompany PHY-20101. **Corequisite**: PHY-20101.

PHY-20201 General Physics II (W) 4(4-0)
This is a continuation of General Physics I. Topics will include principles of electricity and magnetism, optics, and concepts of modern physics such as relativity and nuclear physics. **Prerequisite**: PHY-20100 or permission of instructor. **Corequisite**: PHY-20202. *(Science Credit)*

PHY-20202 General Physics II Lab (W) 1(0-3)
This is a laboratory course to accompany PHY-20201. **Corequisite**: PHY-20201. *(Science Credit)*

PHY-22101   College Physics I (V)   4(4-0)
This is an introductory lecture course that will provide a calculus-based background of basic principles and theories with practical applications; topics will include general properties of matter with emphasis on mechanics and waves; heat and thermodynamics, and sound. **Prerequisite**: MTH-22002. **Corequisite**: MTH-22102 and PHY-22102. *(Science Credit)*

PHY-22102   College Physics I Lab (V)   1(0-3)
This is a laboratory course to accompany PHY-22101. It will provide the student with a background of basic laboratory skills and experimental experience in approaching physical principles and theories with practical applications; topics will include electricity and magnetism, optics and light, modern physics, and nuclear physics. Emphasis will be placed on proper laboratory procedures and utilization of the Scientific Method. **Corequisite**: PHY-22101. *(Science Credit)*

PHY-22201   College Physics II (V)   4(4-0)
This is a continuation of PHY-22101 that will provide a calculus-based background of basic principles and theories with practical applications; topics will include electricity and magnetism, optics and light, modern physics, and nuclear physics. **Prerequisite**: PHY-22101. **Corequisite**: PHY-22202. *(Science Credit)*

PHY-22202   College Physics II Lab (V)   1(0-3)
This is an laboratory course that should be taken in tandem with the PHY-22201 physics lecture course. It will provide the student with a background of basic laboratory skills and experimental experience in approaching physical principles and theories with practical applications; topics will include electricity and magnetism, optics and light, modern physics, and nuclear physics. Emphasis will be placed on proper laboratory procedures and utilization of the Scientific Method. **Prerequisite**: PHY-22101 and PHY-22102. **Corequisite**: PHY-22201. *(Science Credit)*

POLITICAL SCIENCE (POL)

POL-10100   Introduction to American Government (F,W,S)   3(3-0)
A study of the processes and functions of national government, this course includes a study of federalism, political parties, constitutional principles, and the role of the citizen. **Prerequisite or corequisite:** ENG-10300/10303.

POL-10500   American Government with Humanities (F,W)   3(3-0)
This course is a survey of national government including the Constitution, federalism, political parties and interest groups, electoral process, governmental institutions, and the role of citizens. Emphasis will be given to civil rights and civil liberties in comparison with other nations. Political dissidence in literature will receive special focus with the examination of political poetry from around the world. Comparisons between the early 20th century and the turn of the 21st century (by analyzing works of fiction) will be another emphasis in order to examine how far we have come in one century or how far we still need to go. **Prerequisite**: ENG-10300/10303. *(Social Science Credit)*

POL-20000   International Relations (V)   3(3-0)
This is a study of the nature of relations among nations with particular reference to the basic principles of international politics, including foreign policy, cooperation, conflict, and the role of international organizations. Special focus will be on global issues such as political and economic development, human rights, population growth, food and energy policies, and conservation. **Prerequisite**: POL-10100. *(Social Science Credit)*

POL-20100   Comparative Government (V)   3(3-0)
This course surveys the government and political institutions in selected Western European democracies, communist systems, and third world countries, emphasizing political socialization, participation, political parties, interest groups, policy making, and governmental structures. The student will come to understand the differences between the American political system and other democratic and non-democratic systems. In addition, the course considers cultural, economic, and social differences. **Prerequisite**: POL-10100. *(Social Science Credit)*

POL-24500   International Economics (V)   **3(3-0)**   (Also listed as ECO-24500)

This course provides an introduction to the international economics for the understanding of the post-Cold War world with the new international system that has succeeded it--globalization. The course examines how globalization now shapes virtually all domestic policies and international relations. It offers a provocative look at the positive and negative impacts of globalization, including the historical, theoretical, and political blend of relationships between the nations, corporations, and individuals. **Prerequisite**: ECO-20100. *(Social Science Credit)*

PSYCHOLOGY (PSY)

PSY-10100   Introduction to Psychology (F,W,S)   **3(3-0)**

This course is a study of human and animal behavior with reference to perception, learning memory, thinking, emotions, intelligence, aptitude, and personality. The need for scientific investigation of behavior is stressed throughout the course. In addition, the behavioral neuroscience, psychodynamic, social/behavioral, cognitive, and humanistic viewpoints are considered for analysis of psychological phenomena. **Prerequisite or corequisite:** ENG-10300/10303. *(Social Science Credit)*

PSY-20100   Educational Psychology (V)   **3(3-0)**

This course demonstrates how to practically apply psychological concepts to teaching and learning. **Prerequisite**: PSY-10100. *(Social Science Credit)*

PSY-20200   Abnormal Psychology (V)   **3(3-0)**

This course deals with the nature and causes of mental disorders. Particular attention will be paid to theories of abnormal behavior and various types of psychotherapy. Description of mental disorders will involve the use of the diagnostic and statistical manual of mental disorders (DSM IV). **Prerequisite**: PSY-10100. *(Social Science Credit)*

PSY-24000   Lifespan Developmental Psychology (V)   **3(3-0)**

This is a course designed to introduce the basic principles of developmental psychology from conception to death (life-span). The course, while pursuing a chronological approach (life-stages) and examining basic developmental tasks appropriate to each stage, will explore the factors that influence growth and development. **Prerequisite**: PSY-10100 or permission of instructor. *(Social Science Credit)*

PSY-26001   Human Sexuality (F)   **3(3-0)**   (Also listed as SOC-26001)

This course will examine the effect of human sexuality and sex roles upon human behavior. Additionally, findings in con-temporary sexual research and therapy will be emphasized. **Prerequisite**: PSY-10100 or SOC-10100. *(Social Science Credit)*

RECREATIONAL ENGINE TECHNOLOGY (RET)

RET-10100   Recreational Engine Technology I (V)   **8(2-8)**

This course will provide fundamentals of service and repair for engines typically found in recreational vehicles such as snowmobiles and watercraft. Objectives for student learning will include topics such as personal safety, lab and tool safety, lab procedures, tool and equipment use, two-stroke cycle engine basic service, lubrication systems, exhaust systems, and recoil starting systems.

RET-20100   Recreational Engine Technology II (V)   **8(2-8)**

This course will provide advanced fundamentals of service and repair for engines typically found in recreational vehicles such as snowmobiles and watercraft. Objectives for student learning will include topics such as fuel systems, electrical systems, ignition systems, electrical starting systems, failure analysis, and leadership competencies. **Prerequisite**: RET-10100.

SOCIOLOGY (SOC)

SOC-10100   Introduction to Sociology (F,W,S)   3(3-0)
This course is an introduction to the nature of society, culture, group relations, social processes, and institutions. **Prerequisite or corequisite**: ENG-10300/10303. *(Social Science Credit)*

SOC-10200   Social Theory & Problems (V)   3(3-0)
The nature and range of social problems and the conditions that cause them are considered in a context of social change and disorganization. **Prerequisite**: SOC-10100. *(Social Science Credit)*

SOC-23500   Racial, Cultural & Ethnic Diversity (F)   3(3-0)
Concepts such as prejudice, stereotyping, discrimination, and racism will be considered from a cross-cultural perspective. Emphasis will be on sociocultural and self-awareness in areas of race, ethnicity, age, and gender. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(Social Science Credit)*

SOC-24000   Criminology (F,W)   3(3-0)   (Also listed as CJS-24000)
This course provides an analysis of crime, criminal behavior, and punishment through a variety of historical and contemporary theoretical perspectives. **Prerequisite or corequisite**: ENG-10300/10303 or permission of instructor. *(Social Science Credit)*

SOC-24500   Social Deviant Behavior (F)   3(3-0)   (Also listed as CJS-24500)
This course provides a study of social deviant behavior, including social and ethnic bias, sociopath, cult behavior and ethical behaviors within the criminal justice process. **Prerequisite**: PSY-10100 or SOC-10100. *(Social Science Credit)*

SOC-26001   Human Sexuality (F)   3(3-0)   (Also listed as PSY-26001)
This course will examine the effect of human sexuality and sex roles upon human behavior. Additionally, findings in contemporary sexual research and therapy will be emphasized. **Prerequisite**: PSY-10100 or SOC-10100. *(Social Science Credit)*

SPEECH (SPE)

SPE-10500   Fundamentals of Speech (F,W)   3(3-0)
Fundamentals of Speech addresses the basic principles of speech construction and delivery. During the course, the student will give various kinds of speeches, including impromptus and extemporaneous. *(Communication)*

SPE-11400   Introduction to Interpersonal & Public Communication (F,W)   3(3-0)
Introduction to Interpersonal and Public Communication is a course aimed at understanding and applying communication theory. Communication skills will be developed through small group activities, public speaking, and personal assessment assignments. *(Communication)*

THEATRE (THE)

THE-11001   Movement/Voice I (W)   3(3-0)
Students will study the basics of voice exercises and movement, learning to free their bodies for communication of emotions, ideas, voice projection, enunciation, and character voices. In addition, stretching exercises will be used to increase the range of motion of the limbs and to develop the students' kinesthetic awareness. Rhythm exercises will expose students to the myriad variations in the rhythms of daily life. *(Humanities Credit)*

THE-12000   Introduction to Theatre (F,W)   3(3-0)
This course is a survey of the evolution of world theatre forms, from the cave drawings of prehistoric man to the most recent shows on the Broadway stage. Classroom discussions will cover the major producers, playwrights, performers, directors, and designers of each era covered, as well as the body of literature that has come to represent that era. Classroom sessions will be augmented by readings from these periods. *(Humanities Credit)*

THE-121--   Theatre Workshop I (F,W,S)   1-3(Variable)
The workshop provides practical experience in mounting a theatrical production. The student will gain familiarity with one or more of the following areas: acting, directing, costuming, scenery construction, properties, lighting and sound, and stage management. A weekly time commitment will be a requirement during the semester. The student will be required to work 30 hours or more for one credit hour, 60 hours or more for two credit hours, and 90 hours or more for three credit hours. *(Humanities Credit)*

THE-12200   Stagecraft I (F)   3(3-0)
This course studies and applies the basic techniques of set construction, theatrical lighting, sound technology, stage rigging, and backstage organization. This "basics" course will introduce the student to the various technical elements that make a theatre run. The class will cover various theatre disciplines outlined above and provide actual hands-on experience with theatre lighting and sound equipment, maneuvering theatre catwalks, and building basic theatrical scenery. This course is required for admission to upper-level design and technology courses. *(Humanities Credit)*

THE-12300   Acting I (F)   3(3-0)
This class is an introduction to the art of acting. The student walks the path of the actor from developing an acting technique to the performance of short scenes. The actor learns to get beyond the limits of self and explore the freedom of creating a character. Along the way, time will be spent exploring the creative process and developing an ensemble approach to acting. Acting I can work in conjunction with the semester's theatrical production. *(Humanities Credit)*

THE-21000   Theatre Makeup (W)   3(3-0)
The student will become familiar with the art and profession of stage makeup. This course will involve hands-on experience in the principles of the art and technique of designing and applying theatrical makeup. Makeup textbooks will be provided as reference material. The course will cover character analysis, facial anatomy, makeup supplies, and professional makeup application. *(Humanities Credit)*

THE-221--   Theatre Workshop II (F,W,S)   1-3(Variable)
This course is a continuation of Theatre Workshop I. Students concentrate their efforts in different areas than they did in Workshop I. A weekly time commitment will be a requirement during the semester. The student will be required to work 45 hours or more for one credit hour, 90 hours or more for two credit hours, and 135 hours or more for three credit hours. **Prerequisite**: THE-12100 or permission of instructor. *(Humanities Credit)*

THE-22200   Stagecraft II (W)   3(1-2)
This course achieves the same goals and works on the same basics as Stagecraft I, but it allows the individual student the opportunity to specialize in a particular area of technical theatre. Each student will be required to commit to working 10 or more hours on a production during the semester. **Prerequisite**: THE-12200 or permission of instructor. *(Humanities Credit)*

THE-22300   Acting II (W)   3(3-0)
This course is a continuation of Acting I. It will focus on character analysis and the presentation of in-class scenes. The student can begin the preparation for competitive auditions in community theatres, colleges, universities, or pre-professional schools. As with Acting I, the course can work in conjunction with the semester's theatrical production. **Prerequisite**: THE-12300 or permission of instructor. *(Humanities Credit)*

THE-22400   Directing I (W)   3(3-0)
This course introduces the student to the fundamental artistic and practical responsibilities of the stage director. Topics include basic principles of directing, script sources, stage terminology, script analysis, casting, rehearsals, and performances. The student will engage in both traditional and experimental approaches to learning and will have the opportunity to practice directorial skills. **Prerequisite**; THE-12300 or permission of instructor. *(Humanities Credit)*

THE-27000   Audition/Résumé Workshop (W)   3(3-0)
This course prepares the student to audition and/or interview for professional employment in theatre or for admission into a B.F.A. training program. Students will develop theatrical résumés, portfolios, and/or audition books specific to the field they wish to pursue. Students will also learn how to modify and update their audition/interview materials as changes in their circumstances dictate. **Prerequisites**: sophomore status, successful completion of THE-12000 or permission of instructor. *(Humanities Credit)*

THE-27511   Directed Study-Dance Exploration I (V)   3(0-4)
This class exposes beginning-level students to the following dance styles: jazz, ballet, and modern dance. Students learn basic techniques of each style along with dance history and vocabulary. Classes consist of barre work, center floor technique, body awareness, improvisation, and choreography, developing in the student a basic foundation, understanding, and appreciation for the art of dance. **Prerequisite**: permission of instructor. *(Humanities Credit)*

THE-27513   Directed Study-Performance Art Workshop (V)   2(0-2)
The focus of this class is to develop, rehearse, and ultimately present an original performance art piece using the student's native skills, abilities, and creative instincts, while developing in the student an understanding of, and appreciation for, ensemble interplay. Using various forms of expression, students learn to use theme and mood to relate and/or contrast abstract concepts and ideas. Musicians, poets, studio artists, actors, and dancers create visual responses to thematic statements and then work to seamlessly present their work simultaneously. **Prerequisite**: permission of instructor *(Humanities Credit)*

THE-27517   Directed Study-Performing Arts Internship (V)   3(0-3)
The student works with a regional or national professional or semiprofessional performing arts company as a performer, designer, assistant designer, director, stage manager, or theatre technician. Employment must be selective and based on an application process, audition, or interview. **Prerequisite**: permission of instructor. *(Humanities Credit)*

THE-27518   Directed Study-Advanced Studies In Theatre Workshop (V) 3(3-0)
These workshops are area-specific studies for AFA Theatre students. These workshops may involve working in the theatre office, performing arts center office, backstage, or as a performer on a main stage performance. Ninety hours of work in the area selected and a program-specific paper are required to successfully complete this course. **Prerequisite**: permission of instructor. *(Humanities Credit)*

THE-27521   Directed Study-Advanced Studies in Technical Theatre (V)   4(4-0)
During this area-specific advanced study, students will select an area (set design, lighting design, stage management, sound, costumes, and makeup) and assist with this area for all main stage performances. At least ninety hours of work in the area selected and a program-specific paper or project are required to successfully complete this course. **Prerequisite**: permission of instructor. *(Humanities Credit)*

WELDING (WLD)

Courses in the welding program at Kirtland can be used to satisfy the continuing education requirement for persons with the Certified Welding Inspector (CWI) credential through the American Welding Society (AWS). Additional welding courses are available at M-TEC^{SM} at Kirtland-Gaylord. For a complete listing, call 989-705-3600 or go to mtec.kirtland.edu.

WLD-10000   Introduction to Welding,   NOTE: This course has been divided into modules WLD-10341 - WLD-10354.

WLD-10200   Advanced Shielded Metal Art Welding, NOTE: This course has been divided into modules WLD-10355 - WLD-10363.

WLD-10341   Welding Shop Safety Rules   .17
This course will introduce the learner to welding lab safety regulations. In this course the student will learn the safety rules that help to make the job site safer for everyone.

WLD-10342   Identifying Joints, Welds & Positions   .13
This course will teach the student to recognize several types of joints, welds, and welding positions.

WLD-10343   Measuring with Rules & Squares   .13
This course will instruct the learner in the appropriate use of a rule and square.

WLD-10344   Defining Oxyacetylene Welding Terms   .17
This course will instruct the student in oxyacetylene welding and safety terms and definitions acceptable to welding industry standards.

WLD-10345   Setting Up Oxyacetylene Welding Station   .08
This course will teach the student to set up welding equipment in a safe and proper manner.

WLD-10346   Running Beads with and without Filler   .29
This course will instruct the student how to run beads with and without a filler rod.

WLD-10347   Welding Basic Joints in Flat Position   1.0
 In this course the student will learn to weld basic joints in the flat position.

WLD-10348   Oxyacetylene, Plasma & Carbon Arc Cutting Processes .13
This course will teach the student to recognize and identify the safety precautions, equipment, procedures, and techniques used in oxygen cutting.

WLD-10349   Cutting Ferrous Metals with Oxyacetylene Equipment .33
The student will learn the proper way to manually cut metal using oxyacetylene.

WLD-10350   Brazing Basic Joints in Flat Position   .33
This course will instruct the learner in the proper way to braze basic joints in the flat position.

WLD-10351   Braze Welding V-Groove Butt Joint   .21
This course will teach the learner the proper way to braze a V-groove butt joint using oxyacetylene.

WLD-10352   Arc Welding Terms & Definitions   .17
This course will introduce the student to the most common terms important to arc welding.

WLD-10353   Identifying & Selecting Electrode for SMAW   .21
This course will teach the student the features and properties of covered electrodes. It also explains the AWS electrode numbering system so the student can learn to identify the different covered electrodes, what electrodes are most commonly used, where and when they are used, and some distinguishing characteristics.

WLD-10354   Striking an Arc & Running Stringer Beads   .67
This course will teach the student how to strike and maintain an arc to run stringer beads.

WLD-10355   Analyzing Good Welding Character   .13
This course will teach the student to recognize good welding characteristics, types of electrode characteristics, and types of machines and their settings. Knowledge of what constitutes a good weld and what constitutes a poor weld is also stressed.

WLD-10356   Multipass Fillet Welds - Flat Position   .50
This course will teach the student to weld a basic lap joint using a multipass or weave weld that will meet or exceed the AWS standards for appearance, strength, and testing.

WLD-10357   Increasing Weld Size Using Weave Techniques   .50
This course will provide the student with information on weaving an electrode and controlling the bead according to the position and requirements of the weld.

WLD-10358   V-Groove Butt Joint with Backing Plate   .50
This course will instruct the student in welding a square butt joint with a backing plate using the SMAW method.

WLD-10359   V-Groove Butt Joint without Backing Plate   .67
This course will teach the student to safely and correctly make a V-groove butt joint in the flat position according to AWS standards.

WLD-10360   Butt Joints with Backing Plate Vertical Up   .46
This course will teach the student how to make a butt joint in the vertical up position with a backing plate.

WLD-10361   Butt Joints without Backing Plate Vertical Up   .75
This course will teach the student how to make a butt joint in the vertical up position without a backing plate.

WLD-10362   Welding Blueprint Reading   .17
This course will teach the student how to read welding blueprints and recognize how to use the various symbols and notations to assure that welded assemblies meet design requirements.

WLD-10363   Fabricating a Project   .50
The student will learn how to develop a sketch (including weld symbols) of a project to build. The student will then order the material and complete the project to AWS standards.

WLD-20200   Advanced MIG & TIG Welding, NOTE: This course has been divided into modules WLD-20400 - WLD-20406 (plus any additional .11 module to equal four credits).

WLD-20400   Explaining Gas Metal Arc Welding   .29
This module will teach the student the general principles of GMAW, some of the advantages and disadvantages of GMAW, and how the wire electrode is applied or transferred to the parent metal being welded.

WLD-20401   Establishing an Arc & Making Beads with GMAW .17
This course will teach the student how to establish the arc and make weld beads using MIG equipment.

WLD-20402   Welding Basic Joints in All Positions   1.67
This course will teach the student how to establish the arc and weld basic joints in all positions using MIG equipment.

WLD-20403   Welding Basic Joints With GMAW Aluminum   .67
This course will teach the student to establish an arc and make welded joints using the GMAW aluminum process.

WLD-20404   Pulse Arc Welding   25
This course will teach the student the basic fundamentals of the pulse arc welding mode.

WLD-20405   Explaining Gas Tungsten Arc Welding   .42
This course will teach the student the basics of the TIG process, equipment, welding machines, and electrodes.

WLD-20406   Starting an Arc & Running Stringer Beads   .42
This course will teach the student how to start an arc and run stringer beads on aluminum using TIG equipment.

WLD-20407   Directed Study-Welding Techniques   4.00
This course is designed to meet special occupational needs for the individual student. **Prerequisite**: recommendation of an advisor.

WLD-20419   Complete 10 Welder Qualifications   4.00
Students complete 10 welder qualification using SMAW, OAW, GMAW, GTAW, and plasma arc. A drawing, layout, and a completed welding project are required in the course, and students complete a variety of welding repairs during the course.

WLD-20420   Cutting Ferrous & Non-Ferrous Metals with Plasma   .33
In this course the student will learn how to cut both ferrous and non-ferrous metals by manual and automatic means.

WLD-20421   Cutting Ferrous Metal With Carbon Arc Gouging .13
In this course the student will learn to identify terms and definitions of the air carbon arc cutting, as well as utilize the process to acceptable industry standards.

WLD-20422   Silver Brazing Dissimilar Metals   .13
In this course the student will learn to solder using silver.

WLD-20423   Lead Soldering Seams   .25
This course will teach the learner to solder joints of ferrous and non-ferrous metals.

WLD-20424   Making a Corner Joint - Flat Position   .67
This course will teach the student the proper way to make a smooth corner weld.

WLD-20425   Welding Tee Joints - Vertical Up   .58
This course will teach the student how to make a tee joint in the vertical up position.

WLD-20426   Welding Tee Joints - Vertical Down   .29
This course will teach the student how to make a tee joint in the vertical down position.

WLD-20427   Butt Joint with Back Plate - Vertical Down   .42
 This course will teach the student how to make a butt joint with back plate in the vertical down position.

WLD-20428   Butt Joint without Back Plate - Vertical Down   .33
This course will teach the student how to make a butt joint without a back plate in the vertical down position.

WLD-20429   Butt Joint with Back Plate - Horizontal   .50
This course will teach the student how to make a butt joint with a back plate in the horizontal position.

WLD-20430   Butt Joint without Back Plate - Horizontal   .50
This course will teach the student how to make a butt joint without a back plate in the horizontal position.

WLD-20431   Weld Tee Joints Overhead   .50
In this course the student will learn how to weld tee joints in the overhead position.

WLD-20432   Butt Joint with Back Plate - Overhead   .58
In this course the student will learn to weld butt joints with a backing plate in the overhead position.

WLD-20433   Butt Joint without Back Plate - Overhead .83
In this course the student will learn how to weld butt joints without a backing plate in the overhead position.

WLD-20434   Identifying Pipe Welding   .21
In this course the student will learn some of the codes governing pipe welding and the tests they must take to qualify. The student will also discuss pipe joint design, edge preparation, and accessories for pipe welding.

WLD-20435   Cast Iron Repair   .17
In this course the student will learn the basics of cast iron repair.

WLD-20436   Hard surfacing   .17
In this module, the student will learn how to hard surface material by one or more techniques, including fusion welding.

WLD-20437   Tool & Die Welding   .67
This course will teach the student to identify and follow proper procedures to make necessary repairs on tool and dies in accordance with industry standards.

WLD-20438   Weld Basic Joints on Aluminum   1.25
This course will teach the student how to weld aluminum in the flat position (GTAW).

WLD-20439   Weld Basic Joints on Stainless Steel   1.25
This course will teach the student the proper way to weld stainless steel in the flat position.

WLD-20440   Weld Basic Joints on Aluminum - Horizontal   1.67
This course will teach the student how to run beads in three positions when welding four basic joints: butt, tee, lap, and corner.

WLD-20441   Weld Pipe 2G Fixed Position   .83
This course will instruct the student in positioning, tacking, and welding pipe in the 2G fixed position.

WLD-20442   Weld Pipe 5G Fixed - Vertical Up   1.25
This course will instruct the student in positioning, tacking, and welding pipe in the 5G fixed position - vertical up.

WLD-20443   Weld Pipe 5G Fixed - Vertical Down   1.04
This course will instruct the student in positioning, tacking, and welding pipe in the 5G fixed position - vertical down.

WLD-20444   Weld Pipe 6G Fixed Position   1.04
This course will instruct the student in positioning, tacking, and welding pipe in the 6G fixed position.

WLD-275--   Directed Study-Welding Technology (V)   1-6(Variable)
This course is designed to meet special occupational needs for the individual student. **Prerequisite**: recommendation of an advisor.

PERSONNEL

KIRTLAND COMMUNITY COLLEGE ADMINISTRATION

Charles D. Rorie, President
    A.A.   Texas Junior College
    B.A.   Sam Houston University
    M.S.   Texas A&M University
    Ph.D.   University of Texas at Austin

Stacey Barnes, Dean of Student Services
    B.S.   Ferris State University
    M.A.   Central Michigan University

Jerry Boerema, Associate Dean
    A.A.S.   West Shore Community College
    B.A.   Central Michigan University
    M.S.A.   Central Michigan University

Karen Brown, Associate Dean
    B.S.N.   University of Michigan
    M.S.   University of Michigan

Louise Bucco, Director of Library
    B.S.   James Madison University
    M.L.S.   University of Maryland

JoAnn Comerford, Director of Facilities
    A.A.S.   Kirtland Community College

Edmund Koliba, Chief Business and Financial Officer
    B.S.   Oakland University
    M.B.A.   Saginaw Valley State University

Doty Latuszek, Provost
    B.S.   Nazareth College
    M.A.   Western Michigan University

Kathy Marsh, Dean of Instruction
    B.S.   Lake Superior State College
    M.S.   George Washington University

Katherine Nemeth, (Sabbatical Leave)
    B.S.N.   University of Michigan
    M.A.   Central Michigan University

Timothy Scherer, Director of Institutional Services
    A.A.S.   Community College of the Air Force
    B.S.   Park College

Dale Shantz, Director of Human Resources
    B.A.   University of Michigan
    M.A.   Michigan State University

FULL-TIME FACULTY AND COUNSELORS

James Backlund, Instructor of Psychology/Sociology
    B.S.   Northern Michigan University
    M.A.   Western Michigan University

Lisa Balbach, Instructor of Computer Information Systems
    B.S.   University of Minnesota
    M.A.   University of Minnesota

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    A.A.S.   Sinclair Community College
    B.S.   Wright State University
    M.A.   Wright State University

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    A.A.S.   Kirtland Community College
    B.A.   Spring Arbor University

Scott Cochran, Instructor of Physical Science
    B.S.   Michigan State University
    B.S.   Eastern Michigan University
    M.S.   University of Michigan

Daniel Crocker, Instructor of English

    B.A.   Southeast Missouri State University
    M.A.   Southeast Missouri State University

Joseph Donna, Instructor of Art
    B.F.A.   Michigan State University
    M.F.A.   Michigan State University

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    B.A.   Syracuse University
    M.S.   State University College at Oneonta

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    M.A.   Iowa State University

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    A.A.S.   Palomar College
    B.A.   Temple University
    M.S.   National University
    M.S.   University of Southern California

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B.A.   Wayne State University
M.A.   Wayne State University

Katherine Girard, Instructor of Health Careers
    A.D.N.   Kirtland Community College
    M.S.N.   Saginaw Valley State University

Judith Grenkowicz, Instructor of Business
    B.S.   Ferris State University
    M.B.A.   University of Detroit
    Ed.D.   Northern Illinois University

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    A.A.S.   Cayuga Community College
    B.S.   State Univ. of NY College at Cortland
    M.S.E.   State Univ. of NY College at Cortland

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    M.S.N.   Wayne State University

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    A.A.S.   Mid Michigan Community College
    B.S.   Saginaw Valley State University

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    M.A.   Central Michigan University

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    M.S.   Central Michigan University

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    B.S.   Central Michigan University

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    M.S.   University of Vermont

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    M.S.N.   Grand Valley State University

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M.A.   Central Michigan University

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    M.S.N.   Northern Michigan University

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    M.A.   Central Michigan University

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    M.F.A.   Central Michigan University

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    M.A.   Central Michigan University

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    M.S.N.   Wayne State University

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    M.A.   Central Michigan University

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    M.A.   Michigan State University

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    M.A.   Central Michigan University

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    M.A.   Western Michigan University

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    M.A.   Central Michigan University
    Ph.D.   Andrews University

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Mark Allen, Director of Auxiliary Services/Purchasing
      A.A.S.   Northwood University
      B.S.   Northwood University

Herbert Atherton, Custodian

Kathleen Barber, Coordinator of Personnel & Business Services

Kristin Barnhart, Bookkeeper, Payroll
      B.B.A.   Western Michigan University

Luann Beilfuss, Student Support Coordinator and
             Interagency Liaison, M-TEC
      B.S.W.   Ferris State University

Matthew Biermann, WAN Administrator

Victoria Borchers, Bookstore Assistant

Brenda Brager, Printing Technician

Raye Bransdorfer-Polasek, Librarian
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      M.S.L.   Western Michigan University

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      B.B.A.   Wichita State University

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             Arts
      B.A.   Southwest State University
      M.A.   University of Washington

Shirley Carton, Development Associate - Kirtland Center for
             the Performing Arts

Rick Daugherty, Computer Support Technician

Angie DeVries, Receptionist/Mail Processor

Elizabeth Ehinger, Coordinator, Special Populations
      A.A.S.   Lake Superior State University

James Enger, Director of Marketing

Marjorie Esch, Webmaster
      B.A.   Goshen College

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      A.A.S.   Macomb Community College
      B.A.   Spring Arbor College

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      A.A.S.   Ferris State University

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      B.A.   Kansas State University

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Gordon Hesse, Custodian

Jeffrey Hinkle, Maintenance

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      B.S.   Saginaw Valley State University

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      A.B.A.   Kirtland Community College
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      B.B.A.   Baker College

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      A.A.S.   Kirtland Community College

Barbara Latham, Financial Aid Secretary

Susanne Lewis, Coordinator Admissions/Recruiting
      A.A.   Kirtland Community College

Jackie Liddle, Conference Services Specialist
      C.C.   Kirtland Community College

Penny Lund, Registrar
      A.A.S.   Kirtland Community College

Tony Madaj, LAN Administrator
      A.A.S.   Kirtland Community College

Dawn McGillis, Coordinator of Instructional Services

Cathy Meadows, Food Service Assistant/Catering Coordinator
      C.C.   Kirtland Community College

Joseph Meadows, Maintenance II

Fred Miracle, Maintenance

Larry Miracle, Utility Worker

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    A.A.S.   Kirtland Community College

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Debra Near, Health Careers Office Support Specialist
    C.C.   Kirtland Community College
    A.A.S.   Kirtland Community College

Suzanne Nelson, Bookkeeper, Accounts Payable

Dennis Noel, Custodian

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    A.A.S.   Kirtland Community College

Tonya Ouillette, Admissions Assistant

Robert Rowland, Building and Grounds, M-TEC

Kimberly Ruddy, Bookkeeper, Accounts Receivable
    A.A.S.   Kirtland Community College

Evelyn Schenk, Secretary, Physical Plant
    A.A.S.   Kirtland Community College
    B.S.   Ferris State University

Mark Schroeder, Groundskeeper

Karen Sessions, Faculty Support Specialist
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    B.S.   Spring Arbor University

Ron Sharpe, Maintenance II

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    A.A.S.   Kirtland Community College

Cynthia Sikarskie, Office Support Specialist – Business Division
    A.A.   Ferris State University

Carol Silverman, Coordinator, Tutorial Services
    B.A.   University of Michigan

Stanley Souva, Custodian

Ilene St. Onge, Director of Accounting

Rodger Steinbrink, Custodian

Robert Wallace, Custodian

Gail Westmoreland, Administrative Assistant MTEC
    B.A.   National University

Kathleen Wray, Counseling Office Support Specialist/ Transfer Credit Specialist
    B.S   Harding University

Helen Yopp, eLearning Specialist
    A.A.S.   Kirtland Community College

KIRTLAND COMMUNITY COLLEGE FOUNDATION

The Kirtland Community College Foundation was established in 1972 for the purposes of soliciting funds to augment and extend the financial base of the college. The Foundation is a tax-exempt nonprofit corporation. Funds are used for capital construction, scholarships, library acquisitions, fellowships, faculty improvement grants, and the equipping and staffing of existing programs with modern tools of technology.

The Foundation officers and members work closely with the college board of trustees and the administration. A member of the college board of trustees serves as a member of the Foundation and the President of the college serves as secretary of the Foundation.

Members as of August 2004

William Curnalia, President
Loretta Hassan, Vice President
Ruggero Dozzi, Treasurer
Charles D. Rorie, Ph.D., Secretary

Peter Allen	Mary Fox
Warren Bontrager	Bill Gannon
Pauline Cournyer	Ron Joyce
Ruth Ferguson	C. A. Pepper Karstendiek

KIRTLAND COMMUNITY COLLEGE ADVISORY COMMITTEES

Advisory committees for individual occupational programs at Kirtland provide information concerning competencies needed by employees, physical facilities and types of equipment used in the business or industry, technical curriculum content, and recruitment opportunities. Members also assist with promotion of the programs, evaluation of programs, job placement, and work experience. At times advisory members are instrumental in acquiring donations of equipment and supplies for occupational programs.

Automotive

Jeremy Akin	Matt Jernigan	Robert Oakes
Steve Ament	Chris Kalthoff	David Petrie
Richard Bonk	Ed Krause	Frank Schultz
Karen Brown	Cliff Lemcool	Robert
Jim Decker	Bernie Milnes	Shingledecker
		James Witt

Corrections

Jerry Boerema	Rick Hoig	Randy Stevenson
Rick Charboneau	James McBride	Dale Suiter
Gary Cowdrey	Dennis Murphy	Daniel VanPelt
Kirt Cripps	Gerald Runde	Jennie Walker
Charles Hinman		

Cosmetology

Karen Brown	Teresa Henry	Tim O'Karski
Greg Bush	Sara Hise	Mary Rom
Carol Costello	Janet Hupcik	Patt Shepard
Christi David	Nancy Magdama	Wendy Sheldon
Billie Grezeszak	Fran McDonald	Debbie Wilson
Patrick Hanafin	Gary McDonald	Francis Wilson
Shannon Hasty	Carmen Miller	Robin Winton

Criminal Justice/Law Enforcement Consortium

Jerry Boerema	Dan Gaffka	Michael Larrison
Dale Clarmont	Howard Hanft	Kim Miller
Robert Denslow	Melvin Hill	Tim Rynearson
Gary Finstrom	Kurt Jones	Thad Taylor

CWB&I

Vicki Barnes	Agnes Feldman	Jack Kramer
Lori Brunner	Norm Fullmer	Phil Lewis
Lois Byrd	Bill Gannon	Donna Pflum
Greg Bush		

Industrial Technologies Advisory

Charles Adams	Don Duggar	Jason Prout
Jacob Ames	Dale Eisenbrenner	Chris Squires
Dan Beltz	Donald Gusler	Peter Vejcik
Mark Brown	Kerry Harwood	Gerry Wangler
Dave Clover	Doty Latuszek	Lee Wiltse
Robert Devine	Jack McCauley	Kevin Zettle

Emergency Medical Services

Dr. Michael Beasley	Mari Golub	Steve Myers
Karen Brown	Jill Howell	Paul Owens
Deb Frank	Rob Lacey	Deana Smith
	Sue Mueller	Pattie Walker

Industrial & Construction Technology (M-TEC)

Jim Gothrup	Gary Knirk	Alan Mabarak
Don Gusler	Chuck Klee	Ray Ranstadler
Todd Hancock	Doty Latuszek	Daron Shimel
Kerry Harwood	Eric Moore	Dan Sherle
Brian Kasper	Amy Potvin	Lori Slocum

Marketing/Business

Vickie Barnes	Judith	Donna Pflum
Carl Bourdelais	Grenkowicz	Denis Weiss
Lois Byrd	Carl Kummer	Barbara Whittington
Ken Cramer	Kerry Lashley	Bonnie Wichtner-Zoia
Steve Oppy	Steve Leonard	T. J. Wright
	Rick MacKenzie	

Massage Therapy

Mary Berger	Alan Karoub, D.C.	Nancy Pavelek
Karen Brown	Allen Neubecker	Sr. Jean Umlor
Carolyn Courneya	Mary Jo Oppy	Frank Varga
Kathie Ehinger	Ken Paulson, D.C.	Deb Walker

Medical Assistant

Sharon Blasch	Connie Isenhauer	Judy Ranney
Debbie Frank	Brenda LaFrancis	Luann Rosebrook
Cathy	Suzanne	Dr. David Sharp
Frederick	MacGillivray	Kathy Taylor
Linda Garett	Terri Melia	Janet White
Karen Gilbert		

Nursing

Jenny Allen	Cindy Fleming	Frances Meredith
Jan Bersted	Martie Hang	Kay Petrie
Barbara Biggar	Maureen Hayes	Anita Percy
Debbie Bills	Glenda Jacobs	Mary Prudhomme
Karen Bloom	Cynde	Lori Robinson
Suzanne Cleere	Kochensparger	Gay Showalter
Gleniss Daversa	Mary Lee Lord	Pam Swantek
Vicky Diehl	Margo Maurer	Barb Walters
Carolyn Douglas	Pam McKenna	Gayle Willett
James Fischer	Charles Meredith	Kathy Zelinsky

Office Information Systems

Sue Arb	Betty Ehinger	Diane Moerland
Linda Atherton	Joann Enboden	Bobbie Otwell
Nyla Blanchard	Jan Funkey	Judy Ranney
Sharon Blasch	Lydia (Hiatt)	Lori Rau
Karen Brown	Peters	Brenda Rinke
Sarah Bruder	Penny Jenereaux	Louann Rosebrugh
Elizabeth Chapman	Bonnie Klann	Dawn Sears
Linda Cunningham	Lisa Lashley	Kathy Taylor
Linda Curtis	Alishia Lynd	Jill Uhouse
Mary Dasho	Kathy Marsh	Dawn Ward
	Cindy Miller	Gail Westmoreland

Special Populations

Brenda Dawe	Shelly Kammer	Dave Parker
Lorraine Downing	Doty Latuszek	Carol Silverman
Don Dyer	Chuck	Becky Smith
Betty Ehinger	Nienhuis	Jennie Walker
Anne Essmaker	Chris Horndt	Genene Warren
Susan Hopkins-Lyndup	Steve Oppy	Ginna Wenger