

Kirtland Community College

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WELCOME

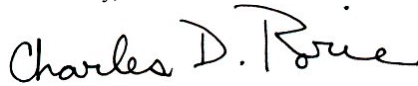
A MESSAGE FROM THE PRESIDENT

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

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The Student Handbook is the first section of this catalog, pages 13-49.

The Financial Aid Handbook is included in this section, pages 15-23.

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.

Kirtland Community College is an equal opportunity institution, encourages diversity, and does not discriminate against race, color, religion, national origin or ancestry, age, sex, marital status, sexual orientation, disability, or other protected category under Michigan and federal law. Compliance with Section 504 of the Rehabilitation Act of 1973 and with the Americans with Disabilities Act (ADA) is a priority of the college. Dale Shantz, Director of Human Resources, is the 504 Coordinator and the ADA Compliance Officer. Katherine Nemeth is the 504 Coordinator and the ADA Compliance Officer for M-TECSM at Kirtland-Gaylord.

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.

available to citizens and community groups

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

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

munity 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
Fairview	40 miles
Frederic	35 miles
Houghton Lake	30 miles
Mio	30 miles

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

Roscommon	11 miles
Rose City	35 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 sixty-four occupational (technical career oriented) certificate and degree programs and six 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-seven percent of the students attend on a part-time basis. Most are employed at least part-time.

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. The Kirtland Firebirds compete in

men's and women's basketball and men's and women's golf.
For more information, call the athletic director's office at
989- 275-5000, extension 325.

STUDENT PROFILE (2001 Fall Semester)

Total enrollment (census date): 1,311

Student Gender:

Males 37%
Females 63%

Student Age Distribution:

24 and under 51%
25 to 39 28%
40 to 59 16%
60 and older 5%
Unknown 0%

Average Age: 30

County of Residence:

Crawford 15%
Ogemaw 20%
Oscoda 12%
Roscommon 34%
Other 19%

Student Status:

FTIAC (first time in any college) 28%
Returning to KCC 59%
First-time Transfer 12%
Guest 1%

Student Program Areas:

Automotive 3%
Business 7%
Contracting with Business and Industry 1%
Cosmetology 3%
Criminal Justice 7%
Health Careers 20%
Industrial Technology 4%
Secretarial 5%
Transfer 27%
Personal Interest 23%

Student Credit Hour Load:

Non-Credit 2%
Part-Time: 1-11 cr. hrs 57%
Full-Time: 12 & over cr. hrs. 41%

Average Student Cr. Hr. Load: 9.3 Credit Hours

2002-2003 COLLEGE CALENDAR

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

FALL 2002 SEMESTER

Fall Registration Wednesday - Friday
August 21-23, 2002

Fall 2002 Semester Begins . . . Saturday, August 24, 2002

Late Registration Monday & Tuesday
August 26 & 27, 2002

Labor Day Break Saturday - Tuesday
August 31-September 3, 2002

Thanksgiving Break Wednesday - Sunday
November 27-December 1, 2002

Fall 2002 Semester Ends Sunday
December 15, 2002

WINTER 2003 SEMESTER

Winter Semester Registration . . . Wednesday & Thursday
January 15 & 16, 2003

Winter 2003 Semester Begins . . . Friday, January 17, 2003

Late Registration Friday, Monday, & Tuesday
January 17, 20, & 21, 2003

Spring Break Monday - Sunday
March 17-23, 2003

Easter Break Friday - Sunday
April 18-20, 2003

Commencement Friday, May 9, 2003

Winter 2003 Semester Ends Sunday, May 11, 2003

SUMMER 2003 SESSION

Registration Monday - Wednesday
June 2- 4, 2003

Summer 2003 Session Begins . . . Thursday, June 5, 2003

Late Registration Thursday
June 5, 2003

Independence Day Break Thursday - Sunday
July 3-6, 2003

Summer 2003 Session Ends Sunday, August 3, 2003

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

DIRECTORY OF SERVICES

MAIN SWITCHBOARD

Telecommunication Device for the Deaf (TDD)

989-275-5000

989-275-6721

Offices	Extension Numbers
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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 through 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.

FINANCIAL AID 257

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

Offices	Extension Numbers
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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.)

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 page 30 for library hours and more information.

SERVICES FOR STUDENTS WITH DISABILITIES 218

This office assists students who need supportive services to succeed in their college courses. Examples of services include scribes, notetakers, readers, textbooks on tape, and sign language interpreters.

RECORDS OFFICE 291

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

Telecommunication Device for the Deaf (TDD)

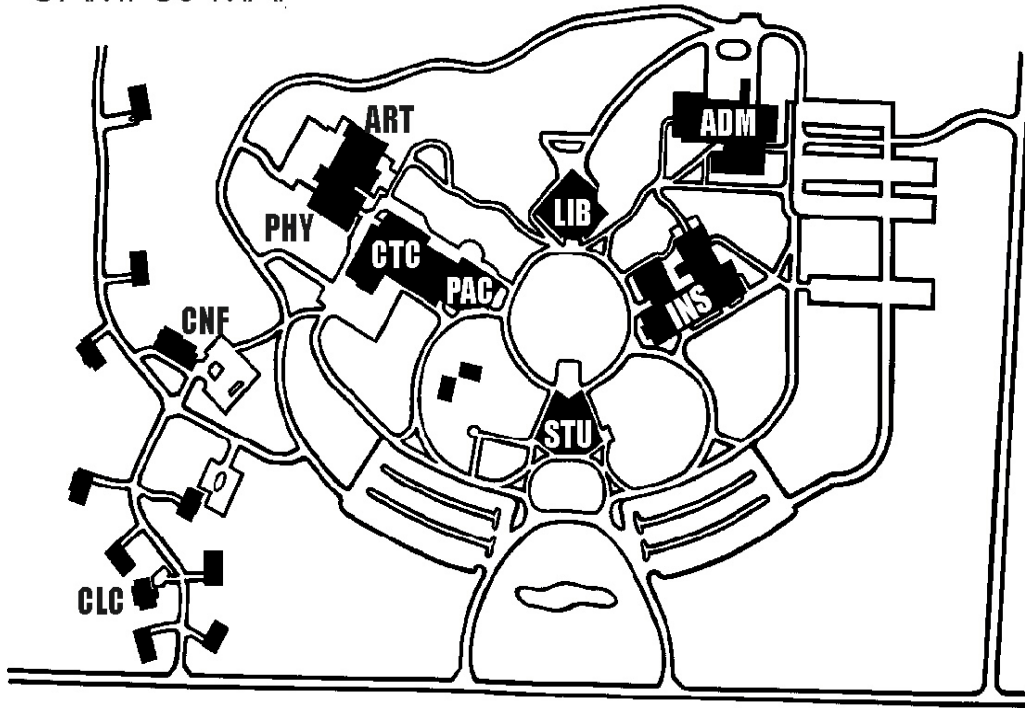
989-275-5000

989-275-6721

Accounting	262, 337, 238	Journalism Office	229
Admissions	284	KCC Chronicle	242
Allied Health Lab	421	KCC Foundation	253
Assessment Office	430	Law Enforcement	283
Audiovisual Equipment	327	Library	246
Auditorium	403, 261	Literary Magazine	229
Automotive Lab	215	Mailroom	227
Biology Lab	417	Maintenance	381, 214, 223
Boardroom	314	Massage Therapy	392
Bookstore	273, 342	MCCVLC	700
Box Office	(275-6777) 777	Media Services	327
Business Conference Room	292	M-TEC	351, 705-3600
Business Office	239	Nursing	281
Cafeteria	268, 343	Nursing Lab	332
Career and Employment Services	450	OSKAR	(275-6712), 712
Ceramics Lab	258	Payroll	244
Chemistry Prep Room	417	Performing Arts Center	311, 397
Children's Learning Center	232	Personnel Office	271
Community Services	210, 220	Phone Registration	(275-6712), 712
Conference Center	393, 224	Photo Lab	409
COOR	286	Placement Testing	339
Cosmetology Lab	274	President's Office	253
Counseling	280, 231	Printshop	243, 272
Courtesy Phone - Academic Building	317	Public Relations	242
Courtesy Phone - Administration Center	400	Records, Registrar	291, 248
Courtesy Phone - Art Building	409	Registration	251
Courtesy Phone - Conference Center	224	Receivables	238
Courtesy Phone - Library	373	Security	355, 0, 283, 390
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Criminal Justice	283	Special Needs	252, 218
Cultural Events	397	Student Senate Office	288
Data Processing (Administration)	282	Student Services	284
Day Care	232	Student Support Services	252
Educational Technologies	327, 276	Switchboard	0, 227
Employment Services	450	TDD	(275-6721), 721
Emergency-Sheriff's Dept.	911	Testing Center	339
Faculty Office	279, 210	Theatre Arts	311
Faculty Lounge	319	Transfer Credit Evaluation	280
Financial Aid	257, 310	Tutoring	252, 211
Game Room	289	Veteran's Office	257
Health Careers	281	Warbler Festival Office	347, 397
Hearing Impaired (LTD)	1-800-649-3777	Welding Lab	294
Help Desk (Technology or Internet)	349	Writing Center	338, 386
Honors Program	359		
InterVarsity Office	250		

COLLEGE MAPS

CAMPUS MAP



A - H - Parking lots ADM - Administration Center - Administrative offices; Accounting; Business Conference Room; Business Office; Computer labs; Career & Employment Services; Disability Services Office; Financial Aid Office; FLEX Lab; Criminal Justice Program offices; General, computer, and multimedia classrooms; Institutional Services; Journalism office; President's Office; President's Board Room; Secretarial lab, Special Populations Office, Student Services (including admissions, counseling, registrar); Computer Help Desk; Testing Center; Developmental classrooms ART - Fine Arts Center - Art Department Office; Art labs; Sculpture lab CLC - Children's Learning Center CNF - Conference Center - Conference Center; Art Gallery 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 LIB - Library - Computer labs; Honors Program Office; Educational Technologies Department; ITV Room, Library facilities; Telecommunications Center; Media Services 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
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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.

achieved by the applicant must be received and verified by the college.

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 dual-enrolled student is 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**
A 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

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
- Nursing Level II - Associate Degree in Nursing
- Emergency Medical Services/Paramedic/EMT

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. 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 51) 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 student services 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 participate in CLEP Subject Examinations and achieve the minimum passing score as recommended by the American Council on Education (ACE). CLEP General Examinations are not considered. 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). 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, Fairview, Gaylord, Gerrish-Higgins, Hale, Houghton Lake, Huron Area Technical Center, Iosco RESA Tech Center, Johannesburg-Lewiston, Mio, Oscoda, West Branch-Rose City, Whittemore-Prescott, Wolverine.

For further information, students should consult with their high school counselor or contact Kirtland's articulation coordinator at 989-275-5000, extension 351. Send e-mail inquiries to: marbles@kirtland.edu

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 four 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 Kirtland Placement Tests within four years of enrollment at the college. The Kirtland Placement Tests will consist of departmentally approved 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 51) or the director 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 register. 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: \$58.40 per credit hour.

Out-of-district residency: \$87.25 per credit hour.

Out-of-state residency: \$113.20 per credit hour.

International student status: \$129.60 per credit hour.

Residency categories are described in more detail in the "Residency" section on the next page. M-TECSM residency rules are addressed on page 102 in the M-TECSM 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: Please refer to the class schedule.

Facilities fee: \$2.00 per credit hour.

Registration fee: \$15.00 per semester (nonrefundable).

Technology fee: \$4.00 per credit hour.

NOTE: Tuition and fees are subject to change without notice. M-TECSM 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 (whether a bill has been received or not). When registering in person, each student will be given a statement of account, as well as his/her class schedule. For students registering by telephone or on the Internet, a statement of charges will be mailed within 7-10 days. Students with questions concerning their accounts are encouraged to contact the accounting office in the administration center.

If payment 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. A student will 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 via the Internet at www.kirtland.edu/campusweb.

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.

- Voter registration card
- Place of residence property tax receipt
- Secretary of State identification card

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, VISA, 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. To apply, students should connect to <http://www.kirtland.edu/> and click on the Current Student tab, scroll down to Services for Students, select the FACTS e-CASHIER link, and select the appropriate button at the bottom of each page. Once the application is submitted, the student will receive an e-mail from FACTS verifying the agreement. FACTS brochures are available at the accounting office, or a student may call 989-275-5000, extension 238, for more information.

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 being admitted to 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
- Rental receipt with address on it
- Voter registration card
- 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 being admitted to Kirtland, but cannot prove in-district residency. Acceptable proof includes the following:

- Driver's license
- Rental receipt with address on it

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 director 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.

Students are not asked where they live. This is not generally a factor in determining family unit status.

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, and work-study pay checks, which are issued biweekly.

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 60 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 the class load (full-time, 12 credit hours; three-quarter-time, 9 credit hours; or half-time, 6 credit hours) at which they are enrolled as of the official census date of their program.

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 2.00 or the student's

advisor can document good cause why the course should be repeated.

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 five 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 enroll for at least six credit hours and must satisfactorily complete the probationary semester. 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 must 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. There have to be very good reasons to make any adjustments, and adequate proof to support any adjustments must be provided. 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, the State of Michigan, 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. All required employment forms must be submitted at least five days prior to any compensation being authorized.

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.

MICHIGAN COMPETITIVE SCHOLARSHIP

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 ADULT PART-TIME GRANT (APTG)

This grant is awarded on the basis of exceptional need to independent undergraduates enrolled part-time at a Michigan college. Funds are limited and are awarded on a first-come, first-served basis. Maximum award is \$600 for the academic year.

The student must score well on the ACT exam in high school

and show financial need by filing the Free Application for Federal Student Aid (FAFSA). The state makes the award, and it is disbursed by the college.

MICHIGAN EDUCATIONAL OPPORTUNITY GRANT (MEOG)

This grant is awarded on the basis of need to undergraduates enrolled at least half-time at a public Michigan college. Funds are limited and are awarded on a first-come, first-served basis. Maximum award is \$1,000 for the academic year.

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

DEAN'S ADULT EDUCATION SCHOLARSHIP

Students must have completed, within the past two years, a GED through a certified adult education program with an average GED test score of at least 60.

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. Equal weight is given to the student's overall GPA, the program advisor's recommendation, and a brief essay by the student.

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.

PAGEANT SCHOLARSHIP

Students must participate in an eligible district pageant and have graduated from high school or received their GED within the past two years.

PRESIDENT'S SCHOLARSHIP

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

PUBLIC SCHOOL EMPLOYEE SCHOLARSHIP

Students must be regular employees of COOR or one of the six school districts within the Kirtland Community College district. Selection is made by the district superintendents or their designees. Each school district has three scholarships per academic year.

SECONDARY-VOCATIONAL SCHOLARSHIP

Students must have graduated from high school within the past academic year with a minimum 2.00 GPA and have been or be participating in a certified secondary-vocational program as a high school student.

SENIOR CITIZEN SCHOLARSHIP

Students must be residents of the Kirtland district, age 60 or over.

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, reside in Roscommon County, and 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

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 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. It is recommended that **applications be made six to eight weeks before registration**. 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.
6. 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 re-

ceived 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 servicemembers. 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. In addition to registering in person, students may register by phone by calling 989-275-6712 during times specified in the schedule. Students may also register on the Internet at specified times at the following web site: www.kirtland.edu/campusweb.information.htm.

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 records 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.

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 51). In the instance where the college catalog lists more than 18 hours as a suggested semester load, students may register without need of a dean's or associate dean's 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:

Grade	Definition	Honor Point 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 received by FAX (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 should 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 51) 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 director 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 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 director 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 director of student services to the student's (petitioner'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 director 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 51) 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 51) 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 51).

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 records office at 989-275-5000, extension 291.

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 291, for ordering information. Payment must be received before a diploma will be mailed to the student.

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 may 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

COOPERATIVE EDUCATION

Cooperative education at Kirtland is an educational technique that combines classroom study with on-the-job education and experience in business or industry.

A cooperative education coordinator is responsible for the development of the program, and it is designed to meet the needs of the individual student and his or her occupational goal. The employer, coordinator, and student confer during the creation of the program and agree on the experience schedule. The student receives related instruction at the college; the coordinator receives reports from the employers

as the situation dictates. A total integration of the academic and the applied sciences is created for the benefit of the student. For more information, contact Steve Oppy at 989-275-5000, extension 450.

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 (<http://www.kirtland.edu/library/>). 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 interlibrary 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. This service helps students with topic formulation and research. Call the director of the library, extension 246, for an appointment.

Educational Technologies Department

The educational technologies department coordinates the distance learning activities, the use of instructional technology, and provides media services for the college. More information is available at the web site:

<http://kosmo.kirtland.cc.mi.us/edtech/>

Media Services

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, and DVDs. A complete list of services is available at the web site:

<http://kosmo.kirtland.cc.mi.us/edtech/>

Distance Learning

The distance learning center is located in the library building. Services provided to students, faculty, staff, and the community include satellite video-conferences, interactive television, telecourses, and online Internet classes. More information is available at the web site:

<http://kosmo.kirtland.cc.mi.us/distancelearning/>

- **ONLINE CLASSES**—Online Internet classes allow students to complete their coursework without time and place restrictions. Technology and the Internet provide the link between the student and the instructor. More information is available at the web site:

<http://kosmo.kirtland.cc.mi.us/distancelearning/>

- **TELECOURSES**—A telecourse is an integrated learning system that uses telecommunications to teach and inform. Telecourses are a convenient, flexible way for the mature, self-directed student with a busy schedule to pursue a college education. More information is available at the web site:

<http://kosmo.kirtland.cc.mi.us/distancelearning>

- **ITV**—The college has interactive television, which connects Kirtland with 10 local area schools in the COOR ISD and AMA ESD districts. Kirtland has the technology (via videoconferencing) to take students on interactive virtual field trips to institutes, museums, and zoos around the country. More information is available at the web site: <http://www.nmecatm.net/>

Kirtland also provides services through the use of satellites for distance learning. Downlinked educational opportunities are available for Kirtland classes or community groups.

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

Free to Kirtland students, peer tutors are available in most subject areas. Individual appointments can be scheduled one or 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.

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. Contact the writing center, room 134 in the administration center, or 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 Career Development, 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, note-takers, 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 and counseling, at 989-275-5000, extension 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 Sandy Hull, honors secretary at 989-275-5000, extension 359, (or e-mail hulls@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 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 68 students.

Each year, Alpha Omicron Gamma engages in projects and services related to scholarship (study topics) and community service. In 2002-04, the study topic is "Directions and Dimensions of Health: Choices in the Maze." The service project theme is "Conquering Cancer: A Prevention and Awareness Program with the American Cancer Society." 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 cocurricular 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 in the student bulletin. 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 the bookstore.

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, Nursing Club, InterVarsity Christian Fellowship, Criminal Justice Club, Student Art League, and Chess 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 342.

GAME ROOM

Pool and ping pong tables, electronic dart boards, 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 Center Players is the academic organization that produces plays using Kirtland Community College students and area citizens.

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

For more information on scheduled events, tickets, and on becoming a Kirtland Center volunteer, contact Gary Carton, director of the Kirtland Center for the Performing Arts 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	Parking in fire lane
\$25.00	Parked within 15 feet of fire hydrant
\$25.00	Blocking emergency exit
\$10.00	All other parking violations

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.

<http://www.kirtland.edu>.

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	1999	2000	2001
Murder	0	0	0
Sex Offenses-Forcible	0	0	0
Sex Offenses-Non-forcible	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	0	0
Motor Vehicle Theft	0	0	0
 Arrests	 1999	 2000	 2001
Liquor Law Violations	0	0	0
Drug Abuse Violations	0	0	0
Weapons Possessions	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 following radio and TV stations and on the Kirtland web page located at:

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:

H o u g h t o n L a k e
 W H G R - W U P S
 98.5 FM
 Grayling W G R Y
 101 FM
 Grayling W Q O N K o o l
 100 FM
 Gaylord W K P K
 107 FM
 Gaylord W P H N
 90.5 FM
 Gaylord W M J Z M a g i c
 101.5 FM
 Tawas City W I O S - W K J C
 104.7 FM
 Tawas City N E W B A Y I O 8
 107.3 FM
 Traverse City W T C M
 103.5 FM
 Alpena W H S B
 107.7 FM
 Mt. Pleasant W C M U (N P R)
 89.5 FM
 Alpena W C M L (N P R)
 91.7 FM
 Petoskey WKHQ96 FM
 West Branch WBMI
 Kool 105.5

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.)

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-TECSM 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

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
- Right to and procedures for requesting amendment of student's education records that student/parent believes to be inaccurate, misleading, or in violation of student privacy rights
- Right to consent to disclosure of personally identifiable information contained in student's education record
- Right to file a complaint with U.S. Department of Education for alleged school or educational agency failure to comply with FERPA requirements
- 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

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 Data

- 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: <http://www.kirtland.edu/disclosures/> (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. Katherine Nemeth 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, Katherine Nemeth may be contacted at 989-705-3610.

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 origin 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 Conduct 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 center, or call 989-275-5000, extension 291.

- A. According to the Family Rights and Privacy Act of 1974 (FERPA), certain information may be released by the college without the written consent of the student. Such information is called "directory information" and may be given to any inquirer unless the student specifically requests the records office to withhold such information. The following "directory information" will be released by the college:
- Student name
 - Whether a student is or has been registered at Kirtland Community College
 - Degrees and awards received by the student.
- (This enables Kirtland to use the student's name for the student bulletin, electronic bulletin boards, newspaper articles regarding academic achievements, commencement programs, or phone inquiries.)
- B. Other information that is part of a student's record will not be released to anyone outside the college without prior written permission, signed and dated by the student, except for the following:
- To school officials with legitimate educational interests
 - To federal, state, and local authorities involving an audit or evaluation of compliance with educational programs
 - In connection with financial aid
 - To state and local authorities pursuant to a state law adopted before November 1994 requiring the disclosure
 - To organizations conducting studies for or on behalf of educational institutions
 - To accrediting organizations
 - To comply with a judicial order or a lawfully issued subpoena
 - In a health or safety emergency
 - As a result of any disciplinary proceeding conducted by Kirtland Community College, to an alleged victim of a crime of violence

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 judgement 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 director of student services.

NOTE: For a detailed description of nonacademic and academic due process, please see pages 43 and 44 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 director 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 director of student services may impose any of the following disciplinary actions:

1. **Warning**

A **warning** is 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**

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**

If **removal from a course** occurs, 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**

Suspension is 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**

Expulsion is an action that permanently separates the student from the institution.

6. **Specific Orders**

Specific Orders are 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 director 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 director 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 director 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 director 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 director 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 director of student services will appoint a student judiciary committee composed of three full-time college employees and two students. The director 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 director 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 director of student services.

- E. The director of student services will render a decision on the case, which may include sanctions imposed on the student. The director 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 director 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 51).
- 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 recom-

mendation 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.

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.

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 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.

FACILITIES, SERVICES, AND PARKING

BOOKSTORE

The campus bookstore is located in the student center and provides textbooks, reference books, fiction and nonfiction paperback books, 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 5 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 Friday from 8:00 a.m. to 8:00 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.

COMPUTERS FOR STUDENT 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 Friday from 8:00 a.m. to 8:00 p.m. An updated listing of all computers for student use is also available at the following website:

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

Ogemaw Public Transit 345-5790

Regional Ride 877-4-MY-LIFT

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 251.

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.

CUSTOMIZED TRAINING

The Customized Training Program was developed to assist employers in setting up a productive training program for current employees in a particular field. The individual design of the program is the result of joint planning by the company and Kirtland training specialists in order to facilitate immediate or long-term needs of the company.

Training is carried out either at the business site or Kirtland's campus. Financial assistance for training may be obtained from the Michigan Department of Education, Department of Labor, or other state/federal agencies.

For more information about Kirtland's Customized Training Program, call the director of customized training 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-TECSM AT KIRTLAND-GAYLORD

The M-TECSM at Kirtland-Gaylord is a state-of-the art facility offering technical education in a unique, flexible, student-friendly manner. The M-TECSM 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-TECSM 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-TECSM at Kirtland-Gaylord at 989-705-3600 or Scott Marble, Director of Customized Training and Community Education, 989-275-5000, extension 351, or e-mail marbles@kirtland.edu. 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. 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.** A catalog may be requested from the student services office. 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.

STUDENT BULLETIN

A student bulletin is issued weekly during each semester by the student services office and is distributed and posted on designated bulletin boards around campus. It is the student's responsibility to read the student bulletin as official notices appear there. Students may request personal notices to be placed in the student bulletin.

STUDENT MAGAZINE

The *Kirtland Chronicle* is a student magazine that publishes news articles, feature stories, opinion pieces, and photographs of interest to the college community.

Students can earn one to four humanities credits and learn reporting, editing, photography, desktop publishing, or advertising skills.

The magazine is published by students, and opinions expressed in the *Chronicle* are attributed to individuals and do not reflect the policy of the Kirtland Board of Trustees, administration, or faculty. For more information about joining the *Kirtland Chronicle* staff, call the advisor, Keith Gave, 989-275-5000, extension 242.

WEB SITE

Kirtland's web site can be accessed at:
<http://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 which is 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.

Sophomore - Class level for students with 30 or more 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.

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KIRTLAND PROGRAMS AND INSTRUCTIONAL ADMINISTRATORS

Arts & Communication	Math, Science, & Health	Industrial & Construction Technology	Human Services & Social Science	Business & Technology
PROGRAMS Associate in Arts Associate in Fine Arts Creative Writing Studio Art Theatre Arts Graphic Design Honors Program	PROGRAMS Associate in Science Life Science Physical Science Health Careers EMT Massage Therapy Medical Assistant Nursing Paramedic Radiography Plant Science Horticulture Turfgrass Landscape & Nursery	PROGRAMS Automotive Chassis Electrical Systems General Powertrain Customized Training & CWB&I Industrial Technologies Computer Aided Design Machine Tool Manufacturing Processes Multi-Technology Welding M-TECSM Programs Carpentry Electrical Technology Heating/Ventilation/ AC/Refrigeration Industrial Maintenance Machine Tool Welding & Fabricating	PROGRAMS Criminal Justice Administration Corrections Generalist Pre-Service Business Business Administration Business Management Entrepreneurship General Business Cosmetology Cosmetology Cosmetology Instructor Nail Technician Salon Management Office Information Systems Administrative Assistant Legal Secretary Medical Billing/Coding Medical Clerk Medical Secretary Medical Transcription Office Assistant Word Processing	PROGRAMS Associate in Computers Computer Science Information Systems Business Business Administration Business Management Entrepreneurship General Business Cosmetology Cosmetology Cosmetology Instructor Nail Technician Salon Management Office Information Systems Administrative Assistant Legal Secretary Medical Billing/Coding Medical Clerk Medical Secretary Medical Transcription Office Assistant Word Processing
COURSES Art Communication Developmental Reading/Writing English English as a Second Language Honors Language Music Philosophy Speech Theatre	COURSES Allied Health Biology Chemistry Developmental Math Geology Massage Therapy Mathematics Nursing Physical Education Physics	COURSES Automotive Aviation Cooperative Occupational Education Computer Aided Design CWB&I Manufacturing M-TEC SM Courses Welding	COURSES Anthropology Criminal Justice Education Geography History Humanities Political Science Psychology Sociology	COURSES Accounting Business Career & Personal Development Computer Information Systems Cosmetology Economics Marketing Office Information Systems
OTHER Athletics KCPA Library Media Services & Distance Education	OTHER COOR Campus Wellness	OTHER Career/Tech Administrator	OTHER Campus Security Fitness Center Public Safety	OTHER Assessment Program Testing Services
Administrator <i>Richard Silverman</i> Dean of Instruction & Educational Services 989-275-5000, ext. 388	Administrator <i>Karen Brown</i> Associate Dean 989-275-5000, ext. 298	Administrator <i>Doty Latuszek</i> Associate Dean 989-705-3600	Administrator <i>Jerry Boerema</i> Associate Dean 989-275-5000, ext. 283	Administrator <i>Kathy Marsh</i> Associate Dean 989-275-5000, ext. 245

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GRAPHIC DESIGN

Associate in Applied Science (DGRA0)

Students with questions about this program should consult a graphic design advisor.

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.

Students can obtain an Associate in Applied Science - Graphic Design degree after completing a **minimum of 63 credit hours**. However, 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.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
CIS-10500	Introduction to Computers	3
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
HUM-20500	The Individual & Society	3
MTH-_____	Mathematics Elective	4
MTH-_____	Mathematics Elective	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Graphic Design Major

Course Number	Course Title	Cr. Hrs.
ART-10000	Art History I	3
ART-10103	Art History II	3
ART-10500	Introduction to Design	3
ART-10600	Fundamentals of Drawing I	3
ART-11500	Photography I	3
ART-19000	Digital Communications I	3
ART-20600	Drawing II	3
ART-21500	Photography II	3
ART-23500	Digital Communications II	3
ART-25000	Illustration I	3
ART-27545	DS-Computer Generated Images I . . .	3
ART-27546	DS-Computer Generated Images II . . .	3
ART-28000	Portfolio	3

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I

ART-10000
ART-10600
ART-11500
ART-27545
CIS-10500

Semester II

ART-10103
ART-20600
ART-21500
ART-27546
ENG-10000
ENG-10300 **or** ENG-10303

Semester III

ART-10500
ART-19000
ART-25000
MTH elective
PHY-10501
PHY-10502

Semester IV

ART-23500
ART-28000
COM-10000
HUM-20500
MTH elective

GRAPHIC DESIGN

Certificate of Completion (CGRA0)

Students with questions about this program should consult a graphic design advisor.

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 can obtain a Certificate - Graphic Design degree after completing a **minimum of 30 credit hours**. Students may also elect to pursue an Associate in Applied Science - Graphic Design degree or an Associate in Fine Arts - Studio Art degree at any point in the certificate program.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Graphic Design Major

Course Number	Course Title	Cr. Hrs.
ART-10500	Introduction to Design	3
ART-10600	Fundamentals of Drawing I	3
ART-11500	Photography I	3
ART-19000	Digital Communications I	3
ART-25000	Illustration I	3
ART-27545	DS-Computer Generated Images I	3
ART-28000	Portfolio	3
CIS-10500	Introduction to Computers	3

...and two studio electives from the following:

ART-20600	Drawing II	3
ART-21500	Photography II	3
ART-23500	Digital Communications II	3
ART-27546	DS-Computer Generated Images II . .	3

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I

ART-10600
ART-11500
ART-27545
CIS-10500

Semester II

ART-10500
ART-19000
ART-25000

Semester III

Studio art elective
Studio art elective
ART-28000

GRAPHIC DESIGN

Special Certificate (SGRA0)

Students with questions about this program should consult a graphic design advisor.

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 can obtain a Special Certificate - Graphic Design after completed a **minimum of 18 credit hours**. 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 the special certificate program.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Graphic Design Major

Course Number	Course Title	Cr. Hrs.
ART-10600	Fundamentals of Drawing I	3
ART-11500	Photography I	3
ART-19000	Digital Communications I	3
ART-25000	Illustration I	3
ART-27545	DS-Computer Generated Images I	3
ART-28000	Portfolio	3

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I

ART-10600
ART-11500
ART-27545

Semester II

ART-19000
ART-25000
ART-28000



AUTOMOTIVE TECHNOLOGY

Associate in Applied Science (DAUT0)

Students with questions about this program should consult an automotive technology advisor.

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 leads to an Associate in Applied Science degree and has a **minimum of 71 credit hours**. 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.

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.

Prerequisites

It is recommended that students make an appointment for an interview with an automotive advisor prior to entering the program.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of**

SA in DEV-09000 or DEV-09904.



AUTOMOTIVE

Course Number	Course Title	Cr. Hrs.
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
HUM-20500	The Individual & Society or	
POL-10500	American Government/Humanities. . .	3
MTH-10100	Finite Mathematics (or higher)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Automotive Major

Course Number	Course Title	Cr. Hrs.
AUT-16100	Engine Fundamentals & Overhaul . . .	4
AUT-16201	Fuel Systems & Emission Control . . .	4
AUT-16302	Automotive Fundamentals	4
AUT-16401	Basic Electricity	3
AUT-16500	Steering, Suspension & Alignment . . .	4
AUT-16801	Automotive Electrical Systems	4
AUT-17001	Heating & Air Conditioning	3
AUT-17702	Automotive Braking Systems	5
AUT-17901	Manual Transmission, Drivelines & Rear Axles	4
AUT-20402	Introduction to Automotive Service Management	2
AUT-20403	Advanced Automotive Service Management	1
AUT-21800	Automatic Transmissions	4
AUT-23100	Auto Service Area	8
AUT-26601	Engine Performance & Diagnostics . .	4

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)

AUT-16302
AUT-16401
AUT-17702
ENG-10000
ENG-10300 **or** ENG-10303
MTH-10100 (or higher)

Semester II (Winter)

AUT-16100
AUT-16201
AUT-16801
PHY-10501 **and** PHY-10502

Semester III (Fall)

AUT-16500
AUT-17001
AUT-21800
AUT-26601
COM-10000

Semester IV (Winter)

AUT-17901
AUT-20402
AUT-20403
AUT 23100
HUM-20500 **or** POL-10500

AUTOMOTIVE TECHNOLOGY

Master Certification Certificate (CAUT1)

Students with questions about this program should consult an automotive technology advisor.

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.

This program has a minimum of 53 credit hours.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Automotive Major

Course Number	Course Title	Cr. Hrs.
AUT-16100	Engine Fundamentals & Overhaul . . .	4
AUT-16201	Fuel Systems & Emission Control . . .	4
AUT-16302	Automotive Fundamentals	4
AUT-16401	Basic Electricity	3
AUT-16500	Steering, Suspension & Alignment . . .	4
AUT-16801	Automotive Electrical Systems	4
AUT-17001	Heating & Air Conditioning	3
AUT-17702	Automotive Braking Systems	5
AUT-17901	Manual Transmission, Drivelines & Rear Axles	4
AUT-20402	Introduction to Automotive Service Management	2
AUT-21800	Automatic Transmissions	4
AUT-23100	Auto Service Area	8
AUT-26601	Engine Performance & Diagnostics . . .	4

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)

AUT-16302
AUT-16401
AUT-17702

Semester II (Winter)

AUT-16100
AUT-16201
AUT-16801
AUT-20402

Semester III (Fall)

AUT-16500
AUT-17001
AUT-21800
AUT-26601

Semester IV (Winter)

AUT-17901
AUT-23100

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor for additional information.



AUTOMOTIVE CHASSIS SPECIALIST Special Certificate (SAUT0)

Students with questions about this program should consult an automotive technology advisor.

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.

This certificate program is available to part-time students and requires a **minimum of 23 credit hours**.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Automotive Major

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

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor for additional information.

AUTOMOTIVE ELECTRICAL SYSTEMS SPECIALIST Special Certificate (SAUT1)

Students with questions about this program should consult an automotive technology advisor.

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.

This certificate program is available to part-time students and requires a **minimum of 25 credit hours**.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or

mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Automotive Major

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

NOTE: The writing and mathematics requirements for



certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor for additional information.

AUTOMOTIVE POWERTRAIN SPECIALIST

Special Certificate (SAUT3)

Students with questions about this program should consult an automotive technology advisor.

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.

This certificate program is available to part-time students and requires a **minimum of 23 credit hours**.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Automotive Major

Course Number	Course Title	Cr. Hrs.
AUT-16100	Engine Fundamentals & Overhaul . . .	4
AUT-16302	Automotive Fundamentals	4
AUT-17702	Automotive Braking Systems	5
AUT-17901	Manual Transmission, Drivelines & Rear Axles	4
AUT-20402	Introduction to Automotive Service Management	2
AUT-23102	Auto Service Area - Powertrain	4

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor for additional information.

AUTOMOTIVE GENERAL

Special Certificate (SAUT2)

Students with questions about this program should consult an automotive technology advisor.

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).

This certificate program is available to part-time students and has a **minimum of 18 credit hours**.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results

show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Automotive Major

Course Number	Course Title	Cr. Hrs.
AUT-16302	Automotive Fundamentals	4
AUT-23100	Auto Service Area	8

... and six or more hours of electives from the following:

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

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor.

BUSINESS MANAGEMENT

Associate in Applied Science (DBSM0)

Students with questions about this program should consult a business advisor.

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.

This program leads to an Associate in Applied Science degree and requires a **minimum of 62 credit hours**. 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 as listed on page 130.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level

courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3
MTH-10100	Finite Mathematics or	
MTH-12000	Intermediate Algebra	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities . .	3
PSY-10100	Introduction to Psychology	3

Business Management Major

Course Number	Course Title	Cr. Hrs.
ACC-12100	Accounting Principles I*	4
ACC-12200	Accounting Principles II	4
BUS-10100	Introduction to Business	3
BUS-21000	Principles of Management	3
BUS-21500	Legal Environment of Business	3
BUS-24500	Personnel Management	3
CIS-10500	Introduction to Computers or	
CIS-_____	CIS elective	3
ECO-20100	Principles of Economics-MACRO	3
ECO-20200	Principles of Economics-MICRO	3
MKT-20000	Principles of Marketing	3
OIS-10401/02/03		
Keyboarding I-A, B, and C or		
BUS-_____	Business elective	3
OIS-10500	Business Correspondence	3

...and three or more credit hours from the following:

ACC-22100	Computer Accounting with QuickBooks 4	
ART-27545	DS-Computer Generated Images I	3
BUS-201--	Internship in Business & Marketing 3-9	
BUS-250--	Business Seminars	1-6
CIS-_____	CIS elective (with advisor approval)	3
MKT-11000	Principles of Selling	3
MKT-20100	Principles of Retailing	3
MKT-20400	Advertising	3
OIS-18201/02/03		

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Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)

ACC-12100*
BUS-10100
CAR-10300
ENG-10000
ENG-10300 **or** ENG-10303
MTH-10100 **or** MTH-12000
OIS-10401/02/03 **or**
BUS elective

Semester II (Winter)

ACC-12200
BUS-21000
CIS-10500 **or** CIS elective
COM-10000
PSY-10100

Semester III (Fall)

BUS-21500
BUS-24500
ECO-20100
MKT-20000

Semester IV (Winter)

Approved elective
ECO-20200
OIS-10500
POL-10500
PHY-10501 **and** PHY-10502

NOTE: *Students with little or no accounting background will be required to take ACC-10600 or ACC-10601 before taking ACC-12100.

ENTREPRENEURSHIP

Certificate of Completion (CENT0)

Students with questions about this program should consult a business advisor.

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 a knowledge of business with their technical expertise.

After completing a **minimum of 33 credit hours**, students can obtain a certificate of completion. Students may also elect to pursue an Associate in Applied Science - Business Management at any point in the certificate program.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Entrepreneurship Major

Course Number	Course Title	Cr. Hrs.
ACC-12100	Accounting Principles I*	4
ACC-12200	Accounting Principles II	4
ACC-22100	Computer Accounting with QuickBooks	4
BUS-10100	Introduction to Business	3
BUS-21000	Principles of Management	3
BUS-21500	Legal Environment of Business	3
BUS-24500	Personnel Management	3
BUS-250--	Business Seminars	3
MKT-20000	Principles of Marketing	3
OIS-10500	Business Correspondence	3

NOTES: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Therefore, students in certificate programs should consult with their advisor for additional information.

****Students should have basic algebra skills before enrolling in accounting courses.**

BUSINESS

GENERAL BUSINESS

Certificate of Completion (CBUS0)

Students with questions about this program should consult a business advisor.

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.

After completing a **minimum of 31 credit hours**, students can obtain a certificate of completion. Students may also elect to pursue an Associate in Applied Science degree in Business Management at any point in the certificate program.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
ENG-10400	English Composition II or	
ENG-10403	English Composition II/Computers . . .	3

General Business Major

Course Number	Course Title	Cr. Hrs.
ACC-10600	Fundamentals of Accounting or	
ACC-10601	Fundamental of Accounting w/Computers or	
ACC-12100	Accounting Principles I**	4

BUS-10100	Introduction to Business	3
CIS-17001	Microsoft Office XP	3
MTH-12000	Intermediate Algebra or	
OIS-11201	Business Calculations	3-4
OIS-10401/02/03	Keyboarding I-A, B, and C or	
OIS-11401/02/03	Keyboarding II-A, B, and C or	
---	Business elective	3
OIS-10500	Business Correspondence	3

...and six credit hours from the following electives:

ACC-22100	Computer Accounting with QuickBooks	4
BUS-201--	Internship in Business & Marketing	3-9
BUS-21500	Legal Environment of Business	3
BUS-24500	Personnel Management	3
CIS-17001	Microsoft Office XP	3
MKT-20000	Principles of Marketing	3
MKT-20100	Principles of Retailing or	
BUS-250--	Business Seminar	3
MKT-20400	Advertising	3
OIS-18201/02/03	Word Processing I-Word-A, B, and C	3
OIS-21500	Desktop Publishing for the Office . . .	3

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)	Semester II (Winter)
ACC-10600 or	Approved elective
ACC-10601 or	Approved elective
ACC-12100**	CIS-10500 or CIS-17001
BUS-10100	ENG-10400 or ENG-10403
ENG-10000	OIS-10500
ENG-10300 or ENG-10303	
MTH-12000 or OIS-11201	
OIS-10401/02/03 or	
OIS-11401/02/03 or	
Business elective	

NOTES: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Therefore, students in certificate programs should consult with their advisor for additional information.

*Students who have completed one year of high school typing may substitute OIS-11401/02/03 Keyboarding II-A, B, and C or a Business elective.

**Students should have basic algebra skills before enrolling in accounting courses.

SALON MANAGEMENT - COSMETOLOGY

Associate in Applied Science - (DSMN0)

Students with questions about this program should consult a cosmetology advisor.

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.

ENG-10000

Writing Lab (if required) 0-1

This program leads to an Associate in Applied Science - Salon Management - Cosmetology degree preparing students to successfully pass the Michigan State Board of Cosmetology Exam. The student must earn a **minimum of 60 credit hours** (1,536 clock hours) to qualify for graduation. Job placement in this program is excellent. Students also have the opportunity to continue their education by enrolling in the Cosmetology Instructor program after obtaining a license.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours. enrolling in other courses requiring these prerequisites.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Students will need to submit a copy of a current cosmetology license prior to completing this program.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ACC-22100	Computer Accounting with QuickBooks	4
BUS-10100	Introduction to Business	3
CAR-10300	Career Development Skills	1
CIS-10500	Introduction to Computers	3
COM-10000	Written & Oral Communication	3

ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
MTH-10100	Finite Mathematics (or higher	
	 excluding MTH-20500 or	
	 MTH-20600)	
	4	
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities . . .	3

Salon Management - Cosmetology Major

Course Number	Course Title	Cr. Hrs.
	 Kirtland Certificate - Cosmetology	
	 (see page 66) or	
	 current State of Michigan	
	 Cosmetology License	
	30-40	
COS-17500	Salon Management	1
--- ---	Elective approved by	
	 advisor (if required)	
	1	

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I	Semester II
BUS-10100	CAR-10300
COS-12100	COS-12700
COS-12200	COS-12800
COS-12300	COS-12900
COS-12400	COS-13000
COS-12500	COS-13100
COS-12600	COS-13200
ENG-10000	COS-17500
ENG-10300 or ENG-10303	MTH-10100 (or higher)

Semester III

ACC-22100
CIS-10500
COM-10000
COS-13300
COS-13400
COS-13500
COS-13600
PHY-10501 **and** PHY-10502
POL-10500

NOTE: Students may accelerate progress by attending maximum hours available and by attending in the summer.

COSMETOLOGY

SALON MANAGEMENT - NAIL TECHNICIAN

Associate in Applied Science - (DSMN1)

Students with questions about this program should consult a cosmetology advisor.

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 leads to an Associate in Applied Science - Salon Management - Nail Technician degree preparing students to successfully pass the Michigan State Board Exam. The student must earn a **minimum of 60 credit hours (1,536 clock hours)** to qualify for graduation. Job placement in this program is excellent. Students also have the opportunity to continue their education by enrolling in the Cosmetology Instructor program after obtaining a license.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours. enrolling in other courses requiring these prerequisites.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Students must submit a copy of a current nail technician license before completing the program.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ACC-22100	Computer Accounting with QuickBooks	4
CAR-10300	Career Development Skills	1
CIS-10500	Introduction to Computers	3
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3

MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or MTH-20600)	4
OIS-10500	Business Correspondence	3
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities . . .	3

Salon Management - Nail Technician Major

Course Number	Course Title	Cr. Hrs.
	Kirtland Certificate - Nail Technician (see page 67) or current State of Michigan Nail Technician License	10-31
COS-17500	Salon Management	1
---	Electives approved by advisor (if required)	0-21

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I	Semester II
COS-11200	CAR-10300
COS-11300	COS-11500
COS-11400	COS-11600
ENG-10000	COS-11700
ENG-10300 or ENG-10303	MTH-10100 (or higher)
	OIS-10500

Semester III
ACC-22100
CIS-10500
COM-10000
PHY-10501 and PHY 10502
POL-10500

NOTE: Students may accelerate progress by attending maximum hours available and by attending in the summer.

SALON MANAGEMENT - COSMETOLOGY INSTRUCTOR

Associate in Applied Science - (DSMN2)

Students with questions about this program should consult a cosmetology advisor.

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 leads to an Associate in Applied Science - Salon Management - Cosmetology Instructor degree preparing students to successfully pass the State of Michigan Exam for Cosmetology Instructors. The student must earn a **minimum of 65 credit hours (1,536 clock hours)** to qualify for graduation. Job placement in this program is excellent.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours. enrolling in other courses requiring these prerequisites.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Students must submit a copy of a current cosmetology license prior to beginning the courses. Students must also submit a copy of a current cosmetology instructor license prior to completing the program.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ACC-22100	Computer Accounting with QuickBooks	4
BUS-10100	Introduction to Business	3
CAR-10300	Career Development Skills	1
CIS-10500	Introduction to Computers	3
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	

ENG-10303	English Composition I/Computers . .	3
MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities . . .	3

Salon Management - Cosmetology Instructor Major

Course Number	Course Title	Cr. Hrs.
	Kirtland Certificate - Cosmetology Instructor (see page 67) or current State of Michigan Cosmetology Instructor License	35-45
COS-17500	Salon Management	1
---	Elective approved by advisor (if required)	1

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I	Semester II
BUS-10100	CAR-10300
COS-22100	COS-22400
COS-22200	COS-22500
COS-22300	COS-22600
ENG-10000	COS-17500
ENG-10300 or ENG-10303	MTH-10100 (or higher)

Semester III
ACC-22100
CIS-10500
COM-10000
PHY-10501 and PHY-10502
POL-10500

NOTE: Students may accelerate progress by attending maximum hours available and by attending in the summer.

COSMETOLOGY

Certificate of Completion (CCOS1)

Students with questions about this program should consult a cosmetology advisor.

Introduction

Kirtland's certificate program in Cosmetology is designed to provide specialized instruction and practical application for employment in beauty salons. This program leads to a certificate of completion in Cosmetology, preparing 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** (1,536 clock hours) to qualify for graduation. Job placement in this program is excellent. Students also have the opportunity to continue their education by enrolling in the Associate degree program or the Cosmetology Instructor program after they have a license. The courses are taught in modern facilities utilizing cutting edge equipment.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Cosmetology Major

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

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I

COS-12100
COS-12200
COS-12300
COS-12400
COS-12500
COS-12600

Semester II

COS-12700
COS-12800
COS-12900
COS-13000
COS-13100
COS-13200

Semester III

COS-13300
COS-13400
COS-13600
COS-13700

NOTES

1. Students may complete sooner by attending summer session or completing required hours on an accelerated basis.
2. The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor for additional information.

COSMETOLOGY INSTRUCTOR

Certificate of Completion (CCIN1)

Students with questions about this program should consult a cosmetology advisor.

Introduction

Kirtland's Cosmetology Instructor program is designed to provide instruction and practice to become a cosmetology instructor. This program leads to a certificate of completion preparing students to pass the State of Michigan State Exam for Cosmetology Instructors. Students must earn a **minimum of 45 credit hours** (576 clock hours) to qualify for graduation.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

The student must be a licensed cosmetologist prior to entering the program.

Cosmetology Instructor Major

Course Number	Course Title	Cr. Hrs.
	Kirtland Certificate - Cosmetology (see page 66) or current State of Michigan Cosmetology License	30-40
COS-22100	Cosmetology Instructor I	2.5
COS-22200	Cosmetology Instructor II	2.5
COS-22300	Cosmetology Instructor III	2.5
COS-22400	Cosmetology Instructor IV	2.5
COS-22500	Cosmetology Instructor V	2.5
COS-22600	Cosmetology Instructor VI	2.5

NOTES

1. The student must have a high school diploma or GED certificate in order to take the Michigan State Board Exam for Cosmetology Instructors.
2. The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor for additional information.

NAIL TECHNICIAN

Certificate (CNTC0)

Students with questions about this program should consult a cosmetology advisor.

Nail Technician is a **minimum 31 credit hour**, 832 clock hour, seven course program designed to prepare the student to pass the Michigan State Board Exam and for employable skills as a nail technician.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Nail Technician Major

Course Number	Course Title	Cr. Hrs.
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ACC-22100	Computer Accounting with QuickBooks	4
CAR-10300	Career Development Skills	1
COM-10000	Written & Oral Communication	3
MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or MTH-20600).	4
OIS-10500	Business Correspondence	3
Course Number	Course Title	Cr. Hrs.
COS-11200	Manicuring I	2.5
COS-11300	Manicuring II	2.5
COS-11400	Manicuring III	2.5
COS-11500	Manicuring IV	2.5
COS-11600	Manicuring V	2.5
COS-11700	Manicuring VI	2.5
COS-17500	Salon Management	1

NOTE: Students should see their advisor for information regarding transfer of cosmetology hours toward the nail technician program.

CORRECTIONS ADMINISTRATION

Associate in Applied Science (DCRA0)

Students with questions about this program should consult a criminal justice advisor.

Introduction

The Corrections Administration program is designed to provide the student with an Associate in Applied Science degree. The courses are 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.

or DEV-09904.

All candidates must complete a **minimum of 64 credit hours** and maintain a 2.0 cumulative GPA or better, with a grade of C or better in all criminal justice courses. Students have the opportunity to plan for transfer to a four-year college or university. A mandatory dress code is in effect for all students enrolled in the corrections curriculum.

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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000**

Course Number	Course Title	Cr. Hrs.
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
MTH-10100	Finite Mathematics (or higher)	4
OIS-10401/02/03		
Keyboarding I-A, B, and C or		
CIS-10500	Introduction to Computers	3
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10100	Introduction to American Government .	3
PSY-10100	Introduction to Psychology	3
SOC-10100	Introduction to Sociology	3
--- ---	Humanities or Social Science elective	
	. . . (see glossary, page 48 for choices)	
	3	

Corrections Administration Major

Course Number	Course Title	Cr. Hrs.
CJS-10000	Introduction to Criminal Justice	3
CJS-10900	Introduction to Corrections	3
CJS-11000	Careers in Criminal Justice	1
CJS-11100	Legal Issues in Corrections	3
CJS-11200	Client Growth & Development	3
CJS-17000	Correctional Institutions & Facilities . .	3
CJS-17103	Correctional Officer's Report	
	 Writing w/Computers	
CJS-17200	Client Relations in Corrections	3
CJS-20800	Criminal Justice Internship	3
CJS-21100	Narcotics Investigation	3
CJS-24000	Criminology	3
CJS-27000	Community Based Corrections	3

... and three credit hours from the following electives:

CJS-10200	Physical Training	3
CJS-10800	Firearms	3
CJS-12100	Photography for Police/Firefighters . .	3
CJS-24500	Social Deviant Behavior	3
CJS-28001	Institutional Jail & Prison	
	 Administration	3

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

(continued)

CORRECTIONS ADMINISTRATION

Associate in Applied Science (DCRA0)

(continuation)

Semester I (Fall)

Semester II (Winter)

Semester V (Winter)

CJS-24000

CJS-27000

CJS elective

Humanities or Social Science
electivePHY-10501 **and** PHY-10502**Semester III (Summer)**

CJS-20800

Semester IV (Fall)

CJS-17000

CJS-17200

CJS-21100

MTH-10100 (or higher)

PSY-10100

NOTE: Students must carry a grade of C for all CJS courses.
Students may take up to nine credits in Criminal Justice
Internship.

CRIMINAL JUSTICE

CORRECTIONS ADMINISTRATION - JAIL ADMINISTRATION

Associate in Applied Science (DCRA1)

Students with questions about this program should consult a criminal justice advisor.

Introduction

The Corrections Administration - Jail Administration program is designed to provide a student with an Associate in Applied Science degree. The courses are 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 complete a **minimum of 64 credit hours** and maintain a 2.0 cumulative GPA or better, with a grade of C or better in all criminal justice courses. Students have the opportunity to plan for transfer to a four-year college or university. A mandatory dress code is in effect for all students enrolled in the corrections curriculum.

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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay**

(writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.

Course Number	Course Title	Cr. Hrs.
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
MTH-10100	Finite Mathematics (or higher)	4
OIS-10401/02/03	Keyboarding I-A, B, and C or	
CIS-10500	Introduction to Computers	3
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10100	Introduction to American Government .	3
PSY-10100	Introduction to Psychology	3
SOC-10100	Introduction to Sociology	3
---	Humanities or Social Science elective	
	(see glossary, page 48 for choices) . .	3

Corrections Administration - Jail Administration Major

Course Number	Course Title	Cr. Hrs.
CJS-10000	Introduction to Criminal Justice	3
CJS-10900	Introduction to Corrections	3
CJS-11000	Careers in Criminal Justice	1
CJS-17200	Client Relations in Corrections	3
CJS-20800	Criminal Justice Internship	3
CJS-21100	Narcotics Investigation	3
CJS-24000	Criminology	3
CJS-26007	Corrections Academy	10
CJS-27000	Community Based Corrections	3

... and three credit hours from the following electives:

CJS-10200	Physical Training	3
CJS-10800	Firearms	3
CJS-12100	Photography for Police/Firefighters . .	3
CJS-24500	Social Deviant Behavior	3
CJS-28001	Institutional Jail & Prison	
	Administration	3

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

(continued)

**CORRECTIONS ADMINISTRATION - JAIL
ADMINISTRATION****Associate in Applied Science (DCRA1)****(continuation)**

Semester I (Fall)

CJS-10000
CJS-10900
CJS-11000
ENG-10000
ENG-10300 **or** ENG-10303
OIS-10400 **or** CIS-10500

Semester II (Winter)

COM-10000
POL-10100
SOC-10100

Semester III (Summer)

CJS-20800

Semester IV (Fall)

CJS-17200
CJS-21100
CJS-26007
MTH-10100 (or higher)
PSY-10100

Semester V (Winter)

CJS-24000
CJS-27000
CJS elective
Humanities or Social Science
elective
PHY-10501 **and** PHY-10502

NOTE: Students must carry a grade of C for all CJS courses.
Students may take up to nine credits in Criminal Justice
Internship.

CRIMINAL JUSTICE

CORRECTIONAL OFFICER

Certificate of Completion (CCRR1)

Students with questions about this program should consult a criminal justice advisor.

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 for the Correctional Officer certificate must complete a **minimum of 32 credit hours** and 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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3

Correctional Officer Major

Course Number	Course Title	Cr. Hrs.
CJS-10000	Introduction to Criminal Justice	3
CJS-10900	Introduction to Corrections	3
CJS-11000	Careers in Criminal Justice	1
CJS-11100	Legal Issues in Corrections	3
CJS-11200	Client Growth & Development	3
CJS-17000	Correctional Institutions & Facilities . .	3
CJS-17103	Correctional Officer's Report	
	Writing w/Computers	1
CJS-17200	Client Relations in Corrections	3
CJS-24000	Criminology	3
CJS-_____	CJS elective with advisor approval . . .	3

...and three credit hours from the following electives:

CIS-10500	Introduction to Computers	3
--- ---	CIS or MTH elective (approved by advisor)	3-4

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)	Semester II (Winter)
CJS-10000	CJS-17000
CJS-10900	CJS-17100 or CJS-17103
CJS-11000	CJS-17200
CJS-11100	CJS-24000
CJS-11200	CIS or MTH elective
ENG-10000	approved by advisor
ENG-10300 or ENG-10303	CJS elective

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor for additional information.

CRIMINAL JUSTICE ADMINISTRATION

Associate in Applied Science (DCJA0)

Students with questions about this program should consult a criminal justice advisor.

Introduction

Criminal Justice Administration is a program leading to an Associate in Applied Science degree. The courses in this program are 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 for the Associate in Applied Science - Criminal Justice Administration degree must complete a **minimum of 60 credit hours** and 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. Please contact the 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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3
MTH-10100	Finite Mathematics (or higher)	4
OIS-10401/02/03	Keyboarding I-A, B, and C or	
CIS-10500	Introduction to Computers	3
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10100	Introduction to American Government .	3
PSY-10100	Introduction to Psychology	3
SOC-10100	Introduction to Sociology	3
---	Humanities or Social Science elective	
	(see glossary, page 48 for choices) . .	3

Criminal Justice Administration Major

Course Number	Course Title	Cr. Hrs.
CJS-10000	Introduction to Criminal Justice	3
CJS-11000	Careers in Criminal Justice	1
CJS-17000	Correctional Institutions & Facilities . .	3
CJS-20800	Criminal Justice Internship	3
CJS-24000	Criminology	3

... and 18 credit hours from the following electives:

CJS-10200	Physical Training	3
CJS-10800	Firearms	3
CJS-10900	Introduction to Corrections	3
CJS-11100	Legal Issues in Corrections	3
CJS-11200	Client Growth & Development	3
CJS-12100	Photography for Police/Firefighters . .	3
CJS-17103	Correctional Officer's Report	
	Writing w/Computers	1
CJS-17200	Client Relations in Corrections	3
CJS-21100	Narcotics Investigation	3
CJS-24500	Social Deviant Behavior	3
CJS-27000	Community Based Corrections	3
CJS-28001	Institutional Jail & Prison	
	Administration	3

(continued)

CRIMINAL JUSTICE

CRIMINAL JUSTICE ADMINISTRATION

Associate in Applied Science (DCJA0)

(continuation)

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)

CJS-10000
CJS-11000
CJS elective
OIS-10401/02/03 **or**
CIS-10500
ENG-10000
ENG-10300 **or** ENG-10303

Semester II (Winter)

CJS-17000
CJS elective
COM-10000
MTH-10100 (or higher)
PSY-10100

Semester III (Summer)

CJS-20800

Semester IV (Fall)

CJS elective
CJS elective
Humanities or Social Science
elective
POL-10100
SOC-10100

Semester V (Winter)

CJS-24000
CJS elective
CJS elective
PHY-10501 **and** PHY-10502

CRIMINAL JUSTICE PRE-SERVICE

Associate in Applied Science (DCJP0)

Students with questions about this program should consult a criminal justice advisor.

Introduction

Criminal Justice Pre-Service is a program leading to an Associate in Applied Science degree and certification by the Michigan Commission on Law Enforcement Standards (MCOLES). Upon completion of the 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 complete a **minimum of 66 credit hours** and 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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3
MTH-10100	Finite Mathematics (or higher)	4
OIS-10401/02/03	Keyboarding I-A, B, and C or	
CIS-10500	Introduction to Computers	3
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10100	Introduction to American Government	3
PSY-10100	Introduction to Psychology	3
PSY-20200	Abnormal Psychology	3
SOC-10100	Introduction to Sociology	3

Criminal Justice Pre-Service Major

Course Number	Course Title	Cr. Hrs.
CJS-10000	Introduction to Criminal Justice	3
CJS-10200	Physical Training	3
CJS-11000	Careers in Criminal Justice	1
CJS-20800	Criminal Justice Internship	3
CJS-24000	Criminology	3
CJS-24500	Social Deviant Behavior	3
CJS-26600	Police Academy	21

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

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CRIMINAL JUSTICE

CRIMINAL JUSTICE PRE-SERVICE

Associate in Applied Science (DCJP0)

(continuation)

Semester I (Fall)

CJS-10000
CJS-11000
OIS-10401/02/03 **or**
CIS-10500
PSY-10100
ENG-10000
ENG-10300 **or** ENG-10303

Semester III (Summer)

CJS-20800

Semester V (Winter)

CJS-26600

Semester II (Winter)

CJS-24000
COM-10000
MTH-10100 (or higher)
POL-10100
SOC-10100

Semester IV (Fall)

CJS-10200
CJS-24500
PHY-10501 **and** PHY-10502
PSY-20200

POLICE ACADEMY

The Academy is a 17-week, 40-hour per week, **MCOLIS** (Michigan Commission on Law Enforcement Standards)-certified program that covers the following:

- A. 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.
- B. Patrol Procedures** - Patrol operations, interpersonal relations and conflict mediation, patrol techniques, report writing, and juveniles.
- C. Detention and Prosecution** - Receiving and booking process, case prosecution, and civil process.
- D. Police Skills** - First aid, firearms, police physical skills, and emergency vehicle operation.
- E. Traffic** - Motor vehicle law, vehicle stops, traffic control and enforcement, operating under the influence of liquor, and motor vehicle traffic crash investigation.
- F. Special Operations** - Emergency preparedness/disaster control, civil disorders, and tactical operations.

CONTRACTING WITH BUSINESS AND INDUSTRY (CWB&I)

Associate in Applied Science (DBIO0)

Students with questions about this program should consult the CWB&I advisor.

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.

The CWB&I program leads to an Associate of Applied Science degree and requires a **minimum of 60 credit hours**. This program is intended to provide students with the required training to gain entry-level positions in their chosen career field.

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 450, for an appointment.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Suggested Programs

CWB&I is a unique program that has great flexibility. The career training options appear to be limitless. **Students may select from the list of training programs on page 78. The CWB&I advisor may also develop a different career option to meet an individual need.**

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3
HUM-20500	The Individual & Society	3
MTH-10100	Finite Mathematics or	
MTH-12000	Intermediate Algebra (or higher) . .	4
POL-10100	Introduction to American Government or	
POL-10500	American Government/Humanities . .	3
PSY-10100	Introduction to Psychology or	
SOC-10100	Introduction to Sociology	3

Contracting with Business and Industry Major

Course Number	Course Title	Cr. Hrs.
CBI-101--	Off Campus Training	8
CBI-102--	Off Campus Training	8

Specified Electives: 25 credit hours of courses specific to each program.

EXAMPLE:

Automotive Body Repair

Course Number	Course Title	Cr. Hrs.
AUT-16302	Automotive Fundamentals	4
AUT-16401	Basic Electricity	3
AUT-16500	Steering, Suspension, & Alignment	3
CAR-10300	Career Development Skills	1
WLD-10341- WLD-10354	Welding Modules	4.02

...and 10-11 more credit hours from the following electives:

AUT-17001	Heating & Air Conditioning	3
CIS-10500	Introduction to Computers	3
SPE-11400	Introduction to Interpersonal & Public Communication	3
--- ---	Elective approved by advisor	3-4

CUSTOMIZED TRAINING

CONTRACTING WITH BUSINESS AND INDUSTRY (CWB&I)

Certificate of Completion (CBIO0)

Students with questions about this program should consult the CWB&I advisor.

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 twelve hours per week (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.

The CWB&I program leads to a certificate of completion and has a **minimum of approximately 32 credit hours**. This program is intended to provide students with the required training to gain entry-level positions in their chosen career field. 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 450, for an appointment.

Suggested Programs

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.**

Upon request, students may receive a booklet which displays all required courses for each of the listed training programs.

Accounting Clerk	Recreational Engine
Automobile Body	Technician
Repairer	Restaurant Manager
Computer Technician	Trainee
Dental Assistant	Retail Manager Trainee
Golf Course Operations	Teacher's Aide
Hotel/Motel Management	Title Research and
Insurance Sales	Abstract
Medical Billing Clerk	Veterinarian Aide
Pharmacy Technician	Web Master I
Physical Therapist Aide	Web Master II

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program.

Hotel/Motel Management

Course Number	Course Title	Cr. Hrs.
BUS-10100	Introduction to Business	3
BUS-21000	Principles of Management	3
BUS-24500	Personnel Management	3
CAR-10300	Career Development Skills	1
CBI-10111	Off-Campus Training	8
CBI-10211	Off-Campus Training	8
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers .	3
SPE-11400	Introduction to Interpersonal &	
	Public Communication	3

Physical Therapist Aide

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-11201	Medical Ethics & Law	1
ALH-20201	Standard First Aid	1
BIO-10701	Essentials of Anatomy &	
	Physiology	3
BIO-10702	Essentials of Anatomy &	
	Physiology Lab	1
CAR-10300	Career Development Skills	1
CBI-10113	Off-Campus Training	8
CBI-10213	Off-Campus Training	8
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers .	3
SPE-11400	Introduction to Interpersonal &	
	Public Communication	3

Two **examples** of CWB&I training programs follow.

PRACTICAL NURSING - LEVEL I

Certificate of Completion (CLPN0)

Students with questions about this program should consult the health careers advisor.

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. A **minimum of 42 credit hours** is required for a Certificate in Practical Nursing. The program must be completed within two years after beginning the nursing courses..

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:

1. Demonstrate proficiency in basic academic skills in writing, reading, and mathematics according to the guidelines set forth on page 14 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.
2. Successfully complete with grade of C or better all required prerequisite courses.
3. Successfully complete with a grade of B or better BIO-10701 and BIO-10702 or BIO-11500 and BIO-11600.
4. Students requesting admission to the program for summer/fall 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 that same year.
5. 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.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

HEALTH CAREERS

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Prerequisite and General Education Courses to be Completed prior to entry or during the first semester of the Level I Nursing program

ALH-10101	Medical Terminology	2
ALH-12401	Lifetime Wellness & Nutrition	2
ALH-20201	Standard First Aid	0-1
(may substitute Healthcare Provider CPR if taken within 60 days of the start of this program)		

BIO-10701	and	Essentials of Anatomy & Physiology
BIO-10702		Essentials of Anatomy & Physiology Lab

OR

BIO-11500	and	Anatomy & Physiology I	
BIO-11600		Anatomy & Physiology II	4-8
ENG-10000		Writing Lab (if required)	0-1
ENG-10300		English Composition I	or
ENG-10303		English Composition I/Computers	3

Practical Nursing Major

Course Number	Course Title	Cr. Hrs.
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-10802	Nursing Skills & Clinical I	5
NUR-12302	Nursing Clinical II	6
NUR-12502	Nursing Care of Adults	4
NUR-12602	Nursing Care of Children	2
NUR-12702	Nursing Care of Childbearing Family .	2
NUR-13302	Current Issues in Nursing	1
NUR-13402	Nursing Clinical III	2
NUR-13600	Parent/Child Nursing Clinical	1

(continued)

PRACTICAL NURSING - LEVEL I

Certificate of Completion (CLPN0)

(continuation)

Course Sequence - Level I

Listed below is a suggested sequence of courses. The health careers advisor will help students make any necessary changes to this recommended sequence and can advise students regarding part-time program options.

Semester I (Fall)

ALH-11400
NUR-10502
NUR-10700
NUR-10802

Semester II (Winter)

ALH-15000
NUR-12302
NUR-12502

Semester III (Summer)

NUR-12602
NUR-12702
NUR-13302
NUR-13402
NUR-13600

NOTES

1. Conviction for some criminal offenses may render a candidate ineligible for writing the examination (NCLEX-PN) for state licensure.
2. 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.
3. Professional provider CPR certification must be obtained no earlier than three months prior to the start of the first clinical semester.
4. The above information is applicable for students entering the nursing program in 2003. 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)

Students with questions about this program should consult the health careers advisor.

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 may be considered for direct 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. Graduates of the Level II program are qualified to enter the many B.S.N. completion programs available.

Upon completion of a **minimum of 84 credit hours**, an Associate in Applied Science degree is awarded. Following successful completion of Level II, graduates are eligible to take the licensure exam to practice as a Registered Nurse (RN).

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:

1. Successful completion of Level I nursing program or experience as an LPN.
2. Demonstrate evidence of high school chemistry with a GPA of 2.0 (C or better). As an alternative, applicant may successfully complete Kirtland's Chemical Science (CHE-10003 and CHE-10004) or equivalent with a grade of C or better.
3. 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.
4. Submit an official college transcript that shows successful completion (grade C or better) of all required courses.
5. Successful completion of Anatomy and Physiology courses with a grade of B or better.
6. Have competency in the use of computers, Internet search, and e-mail. As an alternative, applicant may successfully complete Kirtland's Introduction to

Computers course (CIS-10500).

7. Demonstrate competency in mathematics at a level equivalent to successful completion of MTH-10100 or higher.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
	Successful completion of Level I or other Practical Nursing Program with 3.0.	
ALH-12401	Lifetime Wellness & Nutrition or	
NUR-25508	Nursing Wellness Seminar (if completed Nutrition course) . . .	1-2
BIO-11600	Anatomy & Physiology II	4
ENG-10400	English Composition II or	
ENG-10403	English Composition II/Computers .	3
POL-10100	Introduction to American Government	3
PSY-10100	Introduction to Psychology	3

Associate Degree Nursing Major

Course Number	Course Title	Cr. Hrs.
BIO-21500	Pathophysiology	4
NUR-21202	Nursing Assessment	2
NUR-21400	Nursing Pharmacology	2
NUR-22200	Critical Thinking in Adult Care	4
NUR-22300	Adult Nursing Clinical	5
NUR-23200	Family Centered Pediatrics	2
NUR-23300	Pediatric Nursing Clinical	1
NUR-24200	Community Mental Health Nursing .	2.5
NUR-24300	Community Mental Health Nursing Clinical	2.5
NUR-24600	Nursing Care of Women & Families .	2
NUR-24700	OB/GYN Nursing Clinical	1

HEALTH CAREERS

NUR-25200	Professional Practice & Leadership . . .	4
NUR-25300	Leadership Clinical	1
(continued)		

ASSOCIATE DEGREE IN NURSING - LEVEL II

Associate in Applied Science (DADN1) (continuation)

Course Sequence

Listed below is a suggested sequence of courses for completing the Level II Nursing program. The health careers advisor will help students make necessary changes in this recommended sequence and can advise students about part-time course options.

Semester I (Fall)

NUR-21202
NUR-23200
NUR-23300
NUR-24200
NUR-24300
NUR-24600
NUR-24700

Semester II (Winter)

BIO-21500
NUR-21400
NUR-22200
NUR-22300

Semester III (Summer)

NUR-25200
NUR-25300

NOTES

1. Conviction for some criminal offenses may render a candidate ineligible for writing the examination (NCLEX-RN) for state licensure.
2. 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.
3. Professional provider CPR certification must be obtained no earlier than three months prior to the start of the first clinical semester.

MEDICAL ASSISTANT

Certificate of Completion (CMEA0)

Students with questions about this program should consult the health careers advisor.

Introduction

A Medical Assistant is an allied health professional who 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 of a **minimum of 37 credits**, the student will receive a certificate of completion and be eligible to write the American Association of Medical Assistants' CMA Certification Exam.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers	3

Medical Assistant Major

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-10801	Pathology	3
ALH-11201	Medical Ethics and Law	1
ALH-11400	Math for Medication Administration	1
ALH-12300	MA Administrative Procedures	3
ALH-12600	MA Clinical Procedures	3
ALH-15000	Basic Pharmacology	3
ALH-20201	Standard First Aid	1
ALH-25500	Professional Issues & Internship	4
BIO-10701	Essentials of Anatomy & Physiology	3
BIO-10702	Essentials of Anatomy & Physiology Lab	1
COM-10000	Written & Oral Communication	3
OIS-18201/02/03	Word Processing I-Word-A, B and C	3
PSY-10100	Introduction to Psychology	3

Course Sequence

Listed below is a suggested sequence of courses. The health careers advisor will help students make any changes in this recommended sequence.

Semester I (Fall)	Semester II (Winter)
ALH-10101	ALH-10801
ALH-11400	ALH-11200
BIO-10701	ALH-12300
BIO-10702	ALH-12600
ENG-10000	ALH-15000
ENG-10300 or ENG-10303	COM-10000
OIS-18201/02/03	
PSY-10100	
Semester III (Summer)	
ALH-20201	
ALH-25500	

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.

HEALTH CAREERS

MEDICAL ASSISTANT

Associate in Applied Science (DMEA0)

Students with questions about this program should consult the health careers advisor.

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. Following successful completion of this program, graduates are eligible to write the American Association of Medical Assistants' CMA Certification Exam.

The Associate in Applied Science degree is awarded after a completion of a **minimum of 60 credit hours**.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ALH-12401	Lifetime Wellness & Nutrition	2
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
HUM-20500	The Individual & Society	3
MTH-10100	Finite Mathematics	4
NUR-20000	Introduction to Complementary	
	Therapies	2
OIS-10700	Medical Office Transcription or	
OIS-20800	Medical Keyboarding	3
OIS-11401/		
02/03	Keyboarding II-A, B, and C	3
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
--- ---	Elective (with advisor	
	recommendation)	2-4

Medical Assistant Major

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-10801	Pathology	3
ALH-11201	Medical Ethics & Law	1
ALH-11400	Math for Medication Administration .	1
ALH-12300	MA Administrative Procedures	3
ALH-12600	MA Clinical Procedures	3
ALH-15000	Basic Pharmacology	3
ALH-20201	Standard First Aid	1
ALH-25500	Professional Issues & Internship	4
BIO-10701	Essentials of Anatomy & Physiology .	3
BIO-10702	Essentials of Anatomy &	
	Physiology Lab	1
COM-10000	Written & Oral Communication	3
OIS-18201/02/03	Word Processing I-Word-A, B and C .	3
PSY-10100	Introduction to Psychology	3

Course Sequence

Listed below is a suggested sequence of courses. The health careers advisor will help students make any changes in this recommended sequence.

Semester I (Fall)

ALH-10101
BIO-10701
BIO-10702
ENG-10000
ENG-10300 **or** ENG-10303
HUM-20500
OIS-18201/02/03

Semester II (Winter)

ALH-10801
ALH-12401
OIS-10700 **or** OIS-20800
OIS-11401/02/03
PSY-10100
Elective

Semester III (Fall)

ALH-11201
ALH-11400
COM-10000
MTH-10100
NUR-20000
PHY-10501 **and** PHY-10502

Semester IV (Winter)

ALH-12300
ALH-12600
ALH-15000

Semester V (Summer)

ALH-20201
ALH-25500

NOTES

1. 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.
2. Students are required to complete all required courses with a grade of C or better.

BASIC EMERGENCY MEDICAL TECHNICIAN (EMT) Special Certificate (SEMT0)

Students with questions about this program should consult the health careers advisor.

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 a **minimum of 11 credits**, the student will receive a certificate of completion and be eligible to take the national certification examination, which is required to obtain a state license.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation from this program.

Basic Emergency Medical Technician Major

Course Number	Course Title	Cr. Hrs.
ALH-12500	EMT I	7
ALH-13500	EMT II	4

Course Sequence

Listed below is a suggested sequence of courses. The health careers advisor will help students make any changes in this recommended sequence.

Semester I
ALH-12500

Semester II
ALH-13500

NOTES

1. Conviction for some criminal offenses may render a candidate ineligible for taking the national certification examination.
2. 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.
3. Students are required to complete all required courses with a grade of C or better.

HEALTH CAREERS

PARAMEDIC

Certificate of Completion (CPAR0)

Students with questions about this program should consult the health careers advisor.

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. A **minimum of 40 credit hours** is required for a certificate of completion.

Prerequisites

A current and valid State of Michigan Basic EMT license is required.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ALH-11400	Math for Medication Administration . .	1
ALH-15000	Basic Pharmacology	3
BIO-10701	Essentials of Anatomy and Physiology	3
BIO-10702	Essentials of Anatomy and Physiology Lab	1
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3

Paramedic Major

Course Number	Course Title	Cr. Hrs.
ALH-22300	Paramedic I	5
ALH-23300	Paramedic II	5
ALH-24300	Paramedic III	3
ALH-25300	Paramedic IV	12
ALH-26300	Paramedic V	4

Course Sequence

Listed below is a suggested sequence of courses. The health careers advisor will help students make any changes in this recommended sequence.

Semester I (Fall)

ALH-11400
ALH-22300
BIO-10701
BIO-10702

Semester III (Winter)

ALH-15000
ALH-23300
ENG-10000
ENG-10300 **or** ENG-10303

Semester II (Summer)

ALH-24300

Semester IV (Fall)

ALH-25300

Semester V (Winter)

ALH-26300

NOTES

1. Conviction for some criminal offenses may render a candidate ineligible for taking the national certification examination.
2. 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.
3. Students are required to complete all required courses with a C or better.

EMERGENCY MEDICAL SERVICES (PARAMEDIC)

Associate in Applied Science (DEMS0)

Students with questions about this program should consult the health careers advisor.

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. **A minimum of 62 credit hours** is required for an Associate in Applied Science degree in Emergency Medical Services.

Prerequisites

A current and valid State of Michigan Basic EMT license is required.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-10801	Pathology	3
ALH-11400	Math for Medication Administration	1
ALH-15000	Basic Pharmacology	3
BIO-10701	Essentials of Anatomy & Physiology	3
BIO-10702	Essentials of Anatomy & Physiology Lab	1
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1

ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers	3
HUM-20500	The Individual & Society or	
POL-10500	American Government/Humanities	3
MTH-10100	Finite Mathematics (or higher)	4
PHY-10501	Physical Science	3
PHY 10502	Physical Science Lab	1
PSY-10100	Introduction to Psychology	3

Emergency Medical Services Major

Course Number	Course Title	Cr. Hrs.
ALH-22300	Paramedic I	5
ALH-23300	Paramedic II	5
ALH-24300	Paramedic III	3
ALH-25300	Paramedic IV	12
ALH-26300	Paramedic V	4

Course Sequence

Listed below is a suggested sequence of courses. The health careers advisor will help students make any changes in this recommended sequence.

Semester I (Fall)

ALH-11400
ALH-22300
BIO-10701
BIO-10702
ENG-10000
ENG-10300 or ENG-10303

Semester II (Winter)

ALH-10101
ALH-15000
ALH-23300
MTH-10100 (or higher)

Semester III (Summer)

ALH-24300
PSY-10100

Semester IV (Fall)

ALH-10801
ALH-25300

Semester V (Winter)

ALH-26300
COM-10000
HUM-20500 or POL-10500
PHY-10501 and PHY-10502

NOTES

1. Conviction for some criminal offenses may render a candidate ineligible for taking the national certification examination.
2. 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.
3. Students are required to complete all required courses with a grade of C or better.

MASSAGE THERAPY

Certificate of Completion (CMAS0)

Students with questions about this program should consult the health careers advisor.

Introduction

The Kirtland Community College Massage Therapy program is dedicated to advancing the science and art of massage therapy through introductory education, continuing education, and community service in an effort to promote wellness and enhance existing academic programs such as nursing and cosmetology. Students completing the program will be prepared to practice massage therapy and to register for the National Certification Examination for Professional Massage and Bodywork currently administered by the Psychological Corporation. **A minimum of 37.5 credit hours and 600 contact hours are required for a certificate in Massage Therapy.**

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program.

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-11201	Medical Ethics & Law	1
ALH-12401	Lifetime Wellness & Nutrition	2
ALH-20201	Standard First Aid	1
BIO-10701	Essentials of Anatomy & Physiology	3
BIO-10702	Essentials of Anatomy & Physiology Lab	1
BUS-10100	Introduction to Business	3

Massage Therapy Major

Course Number	Course Title	Cr. Hrs.
MAS-10000	Introduction to Massage Therapy	1
MAS-10200	Introduction to Clinic Operations	1
MAS-10300	Swedish Massage I	2
MAS-10400	Swedish Massage II	2
MAS-12200	Clinic I	2
MAS-12300	Structural Based Bodywork I	1
MAS-12401	Structural Based Bodywork II	3
MAS-12500	Structural Based Bodywork III	1
MAS-12600	Energy Based Bodywork I	2
MAS-12700	Energy Based Bodywork II	2
MAS-12801	Integrated Structural Dynamics	2
MAS-13004	Topics I	1
MAS-13005	Topics II	1
MAS-13100	Clinic II	2
MAS-13200	Internship	1.5

Course Sequence

Listed below is a suggested sequence of courses for students who wish to complete their program in the shortest amount of time.

Semester I (Fall)

ALH-10101
ALH-20201
BIO-10701
BIO-10702
MAS-10000

Semester II (Winter)

ALH-12401
MAS-10200
MAS-10300
MAS-10400
MAS-12801
MAS-13004

Semester III (Summer)

MAS-12200
MAS-12300
MAS-12401
MAS-12500
MAS-13005

Semester IV (Fall)

ALH-11201
BUS-10100
MAS-12600
MAS-12700
MAS-13100
MAS-13200

NOTES

1. 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.
2. Students are required to complete all required courses with a grade of C or better.

MASSAGE THERAPY

Associate in Applied Science (DMAS0)

Students with questions about this program should consult the health careers advisor.

Introduction

Kirtland's Massage Therapy program is dedicated to advancing the science and art of massage therapy through introductory education, continuing education, and community service in an effort to promote wellness and enhance existing academic programs such as nursing and cosmetology. Students completing the program will be prepared to practice massage therapy and to register for the National Certification Examination for Professional Massage and Bodywork currently administered by the Psychological Corporation. **A minimum of 62.5 credit hours and 1,000 contact hours are required** for an Associate in Applied Science degree in Massage Therapy.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-11201	Medical Ethics & Law	1
ALH-12401	Lifetime Fitness & Nutrition	2
ALH-20201	Standard First Aid	1
BIO-10701	Essentials of Anatomy & Physiology	3
BIO-10702	Essentials of Anatomy & Physiology Lab	1
BUS-10100	Introduction to Business	3
COM-10000	Written & Oral Communication	3
CIS-10500	Introduction to Computers	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers	3
HUM-20500	The Individual & Society or	
POL-10500	American Government/Humanities	3

MTH-10100	Finite Mathematics (or higher)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
PSY-10100	Introduction to Psychology	3

Massage Therapy Major

Course Number	Course Title	Cr. Hrs.
MAS-10000	Introduction to Massage Therapy	1
MAS-10200	Introduction to Clinic Operations	1
MAS-10300	Swedish Massage I	2
MAS-10400	Swedish Massage II	2
MAS-12200	Clinic I	2
MAS-12300	Structural Based Bodywork I	1
MAS-12401	Structural Based Bodywork II	3
MAS-12500	Structural Based Bodywork III	1
MAS-12600	Energy Based Bodywork I	2
MAS-12700	Energy Based Bodywork II	2
MAS-12801	Integrated Structural Dynamics	2
MAS-13004	Topics I	1
MAS-13005	Topics II	1
MAS-13100	Clinic II	2
MAS-13200	Internship	1.5
MAS-27500	Directed Study - Massage Therapy I	2

Course Sequence

Listed below is a suggested sequence of courses for students who wish to complete their program in the shortest amount of time.

Semester I (Fall)	Semester II (Winter)
ALH-10101	ALH-12401
ALH-20201	COM-10000
BIO-10701	MAS-10200
BIO-10702	MAS-10300
ENG-10000	MAS-10400
ENG-10300 or ENG-10303	MAS-12801
MAS-10000	MAS-13004
PSY-10100	PHY-10501
	PHY 10502
Semester III (Summer)	Semester IV (Fall)
CIS-10500	ALH-11201
MAS-12200	BUS-10100
MAS-12300	HUM-20500 or POL-10500
MAS-12401	MAS-12600
MAS-12500	MAS-12700
MAS-13005	MAS-13100
MAS-27500	MAS-13200
MTH-10100 (or higher)	

NOTES

1. 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

HEALTH CAREERS

- prior to beginning the program
2. Students are required to complete all required courses with a grade of C or better.

RADIOGRAPHY

1 + 2 Transfer Agreement - Mid Michigan Community College Associate in Applied Science

Students with questions about this program should consult the health careers advisor.

Introduction

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. The remainder of the program, which generally takes two years, will be taken at Mid Michigan Community College. Program graduates are eligible to take the American Registry of Radiologic Technologists certification examination. The associate degree is conferred by Mid Michigan Community College.

Admission Requirements

1. High school graduate or GED
2. Submission of both a Kirtland admissions application and a Mid Michigan admissions application (prior to transferring).
3. Students completing the general education courses at Kirtland are to arrange for an official transcript to be sent to Mid Michigan Community College immediately following the semester in which all prerequisite courses have been completed.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. Please note that ENG-10000 is required of all students in this program, unless they either demonstrate

satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.

HONORS PROGRAM

Prerequisite Courses

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
BIO-11500	Anatomy & Physiology I	4
BIO-11600	Anatomy & Physiology II	4
CHE-10003	Chemical Science	
CHE-10004	Chemical Science Lab	
OR		
CHE-10101	General Chemistry I	
CHE-10102	General Chemistry I Lab	4-5
CIS-10500	Introduction to Computers	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3

Other General Education Courses

The following general education courses included in the radiography program are also offered at Kirtland.

HUM-20500	The Individual & Society	3
PSY-10100	Introduction to Psychology	3
SPE-10500	Fundamentals of Speech or	
SPE-11400	Introduction to Interpersonal & Public Communication	3

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

1. All but one of the general education and prerequisite courses can be taken at Kirtland. HUM 200 must be taken at Mid Michigan Community College.
2. Mid Michigan has reserved seats for qualified Kirtland students ready to transfer into the program.
3. Kirtland students who are accepted into the program and transfer to Mid Michigan for their radiography courses will continue to pay in-district tuition.
4. Kirtland students who are in the program and ready for their on-the-job practical training in a hospital will be assigned to an in-district hospital.

NOTES

1. Science classes must have been completed within five years of program entry.
2. For anatomy and physiology courses, a grade of B- or better must be earned. All other classes should be completed with a grade of C or better in order to transfer them to Mid Michigan Community College.
3. Students planning to work toward the radiography program should contact the Program Director, John Skinner, at 989-386-6646 or by e-mail at jskinner@midmich.cc.mi.us

KIRTLAND HONORS PROGRAM

Students with questions about this program should consult the honors advisor.

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 Applied Science
Honors Associate in Business Administration
Honors Associate in Fine Arts
Honors Associate in Science

Students interested in earning an honors degree in another area should contact Fred Giacobazzi at 989-275-5000, extension 321.

Honors Degree Requirements

Students admitted to the Kirtland Honors Program who complete the following requirements will be awarded an honors degree:

1. The student must complete at least one 3-credit course designated as an Honors Colloquium (HON-25000).

2. 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)
- in additional Honors Colloquia
- in Honors Projects (HON 225; up to three credits) undertaken in conjunction with non-honors courses

3. The student must have a cumulative Kirtland grade point average of at least 3.5.
4. At least 6 of the required 12 honors credit hours must be earned at Kirtland.
5. 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.

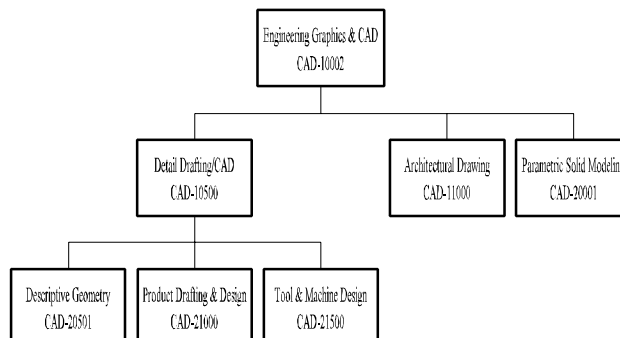
INDUSTRIAL TECHNOLOGIES

COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGY

Associate in Applied Science (DCAD0)

Students with questions about this program should consult a CAD advisor.

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-10002 and CAD-10500 are offered every fall and winter semester. CAD-20001 and CAD-21000 are offered in the fall semester. CAD-20501 and CAD-21500 are offered in the winter semester. CAD-11000 is offered as needed.



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 hi-tech demands of modern industry, students are now receiving instruction and experience on computer-aided drafting (CAD) systems.

Upon completion of a **minimum of 60 credit hours**, an Associate in Applied Science degree is awarded. 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.

Prerequisites

A high school background in one or more of the following areas will be helpful but not required: algebra, trigonometry, chemistry, physics, English, speech, keyboarding, woods, metals or drafting.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at

Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3
HUM-20500	The Individual & Society or	
POL-10500	American Government/Humanities .	3
MTH-_____	Mathematics elective (MTH-12000 or higher excluding MTH-20500 or MTH-20600)	4
MTH-_____	Mathematic elective (MTH-12000 or higher excluding MTH-20500 or MTH-20600)	4

INDUSTRIAL TECHNOLOGIES

PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

(continued)

COMPUTER AIDED DRAFTING & DESIGN TECHNOLOGY Associate in Applied Science (DCAD0) (continuation)

Computer Aided Drafting & Design Technology Major		
Course Number	Course Title	Cr. Hrs.
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CAD-20001	Parametric Solid Modeling	4
CAD-20501	Descriptive Geometry/CAD	4
CAD-21000	Product Drafting & Design/CAD	4
CAD-21500	Tool & Machine Design/CAD	4
MPT-10000	Metal Machining I	4
MPT-10100	Metal Machining II	4
--- ---	Elective (two classes selected from the following list: computer aided design, computers, humanities, manufacturing processes, mathematics, science, or social science)	6-7

NOTE: It is recommended that students investigate the possibilities of the Drafting & Design/Manufacturing Processes Multi-technology associate degree program.

INDUSTRIAL TECHNOLOGIES

COMPUTER AIDED DRAFTING (CAD) PROGRAM

Certificates of Completion

Students with questions about this program should consult a CAD advisor.

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. Additionally, Level II includes intermediate problem solving, the use of reference materials, and the preparation of assembly and detail/working drawing packages. Level III also involves advanced engineering drawing, problem solving, and introduction to design through the use of standard components.

Graduates are able to obtain employment as CAD operators, drafters, or technicians in a variety of mechanical, product, tool or architectural/building-related industries.

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.

Prerequisites

A high school background in one or more of the following areas is helpful but not required: algebra, trigonometry, English, physics, keyboarding, computers, woods, metals, or drafting.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

CAD OPERATOR LEVEL I,

Special Certificate (SCAD3)

Course Number	Course Title	Cr. Hrs.
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CAR-10300	Career Development Skills	1
MPT-_____	Electives	3-4

...and three suggested electives:

MTH-_____	Elective (MTH-10100 or higher-level mathematics)	4
--- ---	Elective (two classes selected from the following list: computer aided design, computers, humanities,	

manufacturing processes, mathematics, science, or social science) 6-7

Total Credit Hours: 22-24

CAD OPERATOR-MECHANICAL LEVEL II,

Certificate (CCAD0)

Course Number	Course Title	Cr. Hrs.
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CAD-20001	Parametric Solid Modeling	4
CAD-20501	Descriptive Geometry/CAD	4
CAD-21000	Product Drafting & Design/CAD	4
CAR-10300	Career Development Skills	1
MPT-10000	Metal Machining I	4

...and three suggested electives:

MTH-_____	Elective (MTH-10100 or higher-level mathematics)	4
--- ---	Elective (two classes selected from the following list: computer aided design, computers, humanities, manufacturing processes, mathematics, science, or social science)	6-7

Total Credit Hours: 35-36

CAD OPERATOR-ARCHITECTURAL LEVEL II,

Certificate (CCAD1)

Course Number	Course Title	Cr. Hrs.
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CAD-11000	Architectural Drawing/CAD	4
CAD-20501	Descriptive Geometry/CAD	4
CAR-10300	Career Development Skills	1
ART-_____	Studio Art elective (with permission of advisor)	3
--- ---	Elective	4

...and three suggested electives:

MTH-_____	Elective (MTH-10100 or higher-level mathematics)	4
--- ---	Elective (two classes selected from the following list: computer aided design, computers, humanities, manufacturing processes, mathematics, science, or social science)	6-7

Total Credit Hours: 34-35

(continued)

COMPUTER AIDED DRAFTING (CAD) PROGRAM

Certificates of Completion (continuation)

**CAD OPERATOR LEVEL III,
Certificate (CCAD2)**

Course Number	Course Title	Cr. Hrs.
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CAD-20001	Parametric Solid Modeling	4
CAD-20501	Descriptive Geometry/CAD	4
CAD-21000	Product Drafting & Design/CAD	4
CAD-21500	Tool & Machine Design/CAD	4
CAR-10300	Career Development Skills	1
MPT-10000	Metal Machining I	4
MPT-21200	Statistical Processes Control	4

...and three suggested electives:

MTH-_____	Elective (MTH-10100 or higher-level mathematics)	4
--- ---	Elective (two classes selected from the following list: computer aided design, computers, humanities, manufacturing processes, mathematics, science, or social science) 6-7	
Total Credit Hours:		43-44

MANUFACTURING PROCESSES TECHNOLOGY

Associate in Applied Science (DMPT0)

Students with questions about this program should consult a manufacturing processes technology advisor.

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.

This program leads to an Associate in Applied Science degree and has a **minimum of 63.02 credit hours**. 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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3
HUM-10500	The Individual & Society or	
POL-10500	American Government/Humanities . .	3
MTH-_____	Mathematics elective (MTH-12000 or higher excluding MTH-20500	

or MTH-20600) 4

INDUSTRIAL TECHNOLOGIES

MTH-_____	Mathematics elective (MTH-12000 or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Manufacturing Process Technology Major

Course Number	Course Title	Cr. Hrs.
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
MPT-10000	Metal Machining I	4
MPT-10100	Metal Machining II	4
MPT-10900	Metrology I	3
MPT-20200	Metallurgy	3
MPT-20300	Metal Machining III	4
MPT-20800	Metal Machining IV	4
MPT-21200	Statistical Processes Control	4
WLD-10341- WLD-10354	Welding Modules	4.02

...a minimum of six credit hours from the following electives:

CIS-10500	Introduction to Computers	3
MPT-21000	Understanding & Application of Machinist Handbook	3
WLD-10355- WLD-10363	Welding Modules	4.18
--- ----	General elective	2-4

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)	Semester II (Winter)
CAD-10002	CAD-10500
ENG-10000	CAR-10300
ENG-10300 or ENG-10303	MPT-10100
MPT-10000	MTH-12100 (or higher)
MPT-10900	WLD-10341-10354
MTH-12000 (or higher)	
Semester III (Fall)	Semester IV (Winter)
HUM-20500 or POL-10500	MPT-20200
MPT-20300	MPT-20800
PHY-10501 and PHY-10502	MPT-21200
Elective	Elective

NOTE: It is recommended that students also investigate the possibilities of the Computer Aided Drafting and Design and Manufacturing Processes Multi-Technology associate degree programs.

MACHINE TOOL OPERATION

Certificate of Completion (CMT00)

Students with questions about this program should consult a manufacturing processes technology advisor.

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.

This program leads to a certificate of completion and has a **minimum of 32.02 credit hours**. 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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program.

Course Number	Course Title	Cr. Hrs.
DEV-06300	Basic Mathematics	4

Machine Tool Operation Major

Course Number	Course Title	Cr. Hrs.
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
MPT-10000	Metal Machining	4
MPT-10100	Metal Machining II	4
MPT-10900	Metrology I	3
MPT-20200	Metallurgy	3
WLD-10341- WLD-10354	Welding Modules	4.02

...a minimum of six credit hours from the following electives:

CIS-10500	Introduction to Computers	3
MPT-21000	Understanding & Application of Machinist Handbook	3
MTH-12000	Intermediate Algebra	4
WLD-10355- WLD-10363	Welding Modules	4.18

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)

CAD-10002
DEV-06300
MPT-10000
MPT-10900
WLD-10341-10354

Semester II (Winter)

CAD-10500
MPT-10100
MPT-20200
Approved elective
Approved elective

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Therefore, students in certificate programs should consult with their advisor for additional information.

MULTI-TECHNOLOGY COMPUTER AIDED DRAFTING & DESIGN/MANUFACTURING PROCESSES

Associate in Applied Science (DMLT0)

Students with questions about this program should consult a multi-technology advisor.

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.

Upon completion of a **minimum of 76.02 credit hours**, an Associate in Applied Science degree is awarded. 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.

Prerequisites

A high school background in one or more of the following areas is helpful but not required: algebra, trigonometry, English, speech, chemistry, physics, keyboarding, computers, metals, woods, machining, or drafting.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers	3
HUM-20500	The Individual & Society or	
POL-10500	American Government/Humanities	3
MTH-_____	Mathematics elective (MTH-12000 or higher excluding MTH-20500 or MTH-20600)	4
MTH-_____	Mathematics elective (MTH-12000 or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Multi-Technology Major

Course Number	Course Title	Cr. Hrs.
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CAD-20001	Parametric Solid Modeling	4
CAD-20501	Descriptive Geometry/CAD	4
CAD-21000	Product Drafting & Design/CAD	4
CAD-21500	Tool & Machine Design/CAD	4
MPT-10000	Metal Machining I	4
MPT-10100	Metal Machining II	4
MPT-20300	Metal Machining III	4
MPT-20800	Metal Machining IV	4
MPT-21200	Statistical Processes Control	4
WLD-10341- WLD-10354	Welding Modules	4.02
--- ---	Elective (two classes selected from the following list: computer aided design, computers, humanities, manufacturing processes, mathematics, science, or social science)	6-7

WELDING TECHNOLOGY

Associate in Applied Science (DWLD0)

Students with questions about this program should consult a welding technology advisor.

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.

ENG-10300
ENG-10303

English Composition I or
English Composition I/Computers . . 3

This program leads to an Associate in Applied Science degree and has a **minimum of 60.20 credit hours**. 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.

Prerequisites

It is recommended that students make an appointment for an interview with a welding advisor prior to entering the program.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1

INDUSTRIAL TECHNOLOGIES

HUM-20500	The Individual & Society or	
POL-10500	American Government/Humanities	3
MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Welding Technology Major

Course Number	Course Title	Cr. Hrs.
AUT-16401	Basic Electricity	3
CAD-10002	Engineering Graphics & CAD	4
MPT-10000	Metal Machining I	4
MPT-20200	Metallurgy	3
MPT-21200	Statistical Processes Control	4
WLD-10341- WLD-10354	Welding Modules	4.02
WLD-10355- WLD-10363	Welding Modules	4.18
WLD-20400- WLD-20406	Welding Modules (plus any .11 module)	4
WLD-20419	Welder Qualifications, General Repair & Maintenance	4
--- ---	Mathematics or Technical elective (approved by advisor)	3-4
--- ---	Technical elective (approved by advisor)	4

Course Sequence

Listed is a suggested sequence of courses for full-time students. Part-time students or students who have transferred courses from another college should complete the courses listed under Semester I before moving on to the next semester, and so on. The student's advisor will help make necessary changes to this recommended sequence.

Semester I (Fall)

CAD-10002
CAR-10300
MPT-10000
WLD-10341-10354

Semester II (Winter)

ENG-10000
ENG-10300 **or** ENG-10303
MPT-20200
MTH-10100 (or higher)
WLD-10355-10363

Semester III (Fall)

AUT-16401
COM-10000
HUM-20500 **or** POL-10500
PHY-10501 **and** PHY-10502
WLD-20400-20406

Semester IV (Winter)

MPT-21200
WLD-20419
Mathematics **or** Technical
elective
Technical elective

WELDING

Certificate of Completion (CWLD0)

Students with questions about this program should consult a welding technology advisor.

Introduction

Kirtland's program in Welding is designed to provide

instruction and marketable skills needed for employment. This program leads to a certificate of completion and has a **minimum of 30.20 credit hours**. Students may also elect to pursue an associate degree in Welding Technology at any point in the certificate program.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the course listed here is required for graduation in this program.

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1

Welding Major

Course Number	Course Title	Cr. Hrs.
AUT-16401	Basic Electricity	3
CAD-10002	Engineering Graphics & CAD	4
MPT-10000	Metal Machining I	4
MPT-20200	Metallurgy	3
WLD-10341- WLD-10354	Welding Modules	4.02
WLD-10355- WLD-10363	Welding Modules	4.18
WLD-20400- WLD-20406	Welding Modules (plus any .11 module)	4
WLD-275--	Directed Study in Welding Technology.	3-4

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Therefore, students in certificate programs should consult with their advisor for additional information.

M-TECSM AT KIRTLAND-GAYLORD

Michigan Technical Education Center

Introduction

The M-TECSM at Kirtland-Gaylord is a state-of-the art facility offering technical education in a unique, flexible, student-friendly manner. M-TECSM 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-TECSM 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 will be developed in response to locally and regionally defined needs as determined by representatives of business and industry. Emphasis will be placed on developing 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 will be placed on the ongoing assessment of student learning as each individual progresses through the various courses within each program. Specific areas of concentration will include the following:

Core Curriculum

The Core Curriculum Programs of the M-TECSM will serve postsecondary students who are interested in apprenticeship training, postsecondary degree programs, and job skills development in Manufacturing Technology (tool and die makers, machinist and tool programmers, plastics and metals machine operators), Construction Technology (carpenters, electricians, plumbers, HVAC, masons) and Welding Technology. The specific programs planned for the M-TECSM include the following:

Certificate of Completion

Carpentry
Electrical Technology
Heating/Ventilation/AC/
Refrigeration
Industrial Maintenance
Machine Tool Technology
Plumbing (pending)
Welding and Fabricating

Associate in Applied Science

Carpentry
Electrical Technology
Heating/Ventilation/AC/
Refrigeration
Industrial Maintenance
Machine Tool Technology
Plumbing (pending)
Welding and Fabricating

Customized Training and Contracted Education

The Customized Training Programs will serve specific employers in the region and their current employees who are seeking job skills upgrades and/or personal growth. Areas of concentration will include, but not be limited to, manufacturing technology, construction technology, information technology, human resources, and business practices.

Employment Readiness

The Employment Readiness Programs of the M-TECSM will serve unemployed and underemployed adults in the development of "soft skills," such as team building, problem-solving, and critical thinking for success in the workplace.

WorkKeys^R Testing

All students entering the program offered through the M-TECSM will be required to complete WorkKeys^R Testing. WorkKeys^R provides an assessment of skills required to be successful in college-level coursework. Students pursuing a certificate and/or degree will be charged a one-time assessment fee of \$20 for WorkKeys^R Testing.

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.

K-12 Career and Technical Skills Exploration

The K-12 Career and Technical Skills Exploration Programs of the M-TECSM will serve students enrolled in the constituent school districts of the college who wish to become acquainted with career and technical education program and employment opportunities. Exploration programs will be designed for students of all ages and may be offered as summer technical camps and/or after-school programs.

Dual Enrollment

Kirtland Community College will partner with area high schools to provide career and technical dual-enrollment opportunities to qualified high school students.

Additional Programs

The programs of the M-TECSM will adapt to meet the changing needs for workforce development and technology training for the region. The M-TECSM, upon the recommendation of local advisory boards and approval of Michigan Works! and the Kirtland Community College Board of Trustees, may establish additional workforce development and technology training programs as needed.

(continued)

M-TECSM AT KIRTLAND-GAYLORD**Michigan Technical Education Center****(continuation)**

A key component of the mission of the M-TECSM 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. It is anticipated that many of the training needs of industry will be met through the modules developed for the manufacturing and construction technology certificate and degree programs. Employers will be able to choose training topics for their employees from over 500 different modules in an effort to improve the skills of their existing workforce. Where necessary, new courses will be developed. Areas of concentration currently planned beyond manufacturing and construction technology include the following:

Information Technology: Approximately 600 custom-designed modules will be available to business and industry partners and M-TECSM students through NETg, an online source for information technology courses, certification, and credentialing.

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-TECSM will deliver programs and training through traditional classroom delivery and through an open-entry/open-exit modular system, 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-entry/open-exit environment at the M-TECSM will promote flexible scheduling and individualized learning opportunities to better meet the needs of the student, as well as employers in the region.

The M-TECSM 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-TECSM 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-TECSM facility will contain 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 will be available for use by business, industry, and community partners. Additionally, a learning and resource center to support the open-entry/open-exit scheduling will be available to students enrolled at the M-TECSM as a result of the partnership with the University Center at Gaylord.

For information, contact the M-TECSM at Kirtland-Gaylord at 989-705-3600 or Scott Marble, Director of Customized Training and Community Education at 989-275-5000, extension 351, or e-mail marbles@kirtland.edu.

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.

CARPENTRY

Certificate of Completion (CCPT0)

Associate in Applied Science (DCPT0)

Students with questions about this program should consult the carpentry advisor.

Introduction

A **minimum of 31.5 credit hours** is required to complete the Certificate - Carpentry. After completing the requirements for the certificate, students may continue on with the Associate in Applied Science - Carpentry by completing the requirements listed under the General Education portion. A **minimum of 60.5 credit hours** is required for the Associate in Applied Science - Carpentry degree.

Prerequisites

WorkKeys[®] is used to assess the core competency levels of reading, mathematics, and locating information. Students will be required to take all eight WorkKeys[®] assessments as they proceed to completion of requirements for a certificate and/or degree. Students should consult an advisor for information about how the WorkKeys[®] test can be used to meet prerequisites for general education courses.

CERTIFICATE OF COMPLETION

Carpentry

Course Number	Course Title	Cr. Hrs.
Core		
COR-10001	Basic Safety	.6
COR-10002	Introduction to Construction Math	.6
COR-10003	Introduction to Hand Tools	.4
COR-10004	Introduction to Power Tools	.2
COR-10005	Introduction to Blueprints	.3
COR-10006	Basic Rigging	.8
Core Total		2.9

Carpentry Level I

CPT-10007	Orientation to the Trade	.1
CPT-10008	Building Materials, Fasteners, & Adhesives	.3
CPT-10009	Hand & Power Tools	.8
CPT-10010	Floor Systems	1.0
CPT-10011	Wall & Ceiling Framing	.8
CPT-10012	Roof Framing	1.5
CPT-10013	Windows & Exterior Doors	.5
Carpentry Level I Total		5.0

Carpentry Level II

CPT-10014	Reading Plans & Elevations	.8
CPT-10015	Site Layout I: Dist Measurements & Leveling	.9
CPT-10016	Introduction to Concrete & Reinforcing Materials	.4
CPT-10017	Foundation & Flatwork	.6
CPT-10018	Concrete Forms	1.3

CPT-10019	Reinforcing Concrete	.6
CPT-10020	Handling & Placing Concrete	.9
CPT-10021	Patented Forms	.9
CPT-10022	Tilt-Up Wall Systems	.6
Carpentry Level II Total		7.0

Carpentry Level III

CPT-20023	Exterior Finish	1.4
CPT-20024	Roofing Applications	1.0
CPT-20025	Thermal & Moisture Protection	.2
CPT-20026	Stairs	.6
CPT-20027	Framing with Metal Studs	.6
CPT-20028	Drywall One: Installation	.6
CPT-20029	Drywall Two: Finishing	.5
CPT-20030	Interior Finish One: Doors	.8
CPT-20031	Interior Finish Two: Suspended Ceilings	1.0
CPT-20032	Interior Finish Three: Window, Door, Ceiling & Floor Trim	1.0
CPT-20033	Interior Finish Four: Cabinet Installation	.4
Carpentry Level III Total		8.1

Carpentry Level IV

CPT-20034	Site Layout II: Angular Measurement	1.0
CPT-20035	Advanced Roof Systems	.6
CPT-20036	Advanced Floor Systems	.6
CPT-20037	Advanced Wall Systems	.8
CPT-20038	Advanced Stair Systems	1.0
CPT-20039	Introduction to Light Equipment	.4
CPT-20040	Welding	1.0
CPT-20041	Metal Buildings	.5
CPT-20042	Introduction to Project Management & Supervision	.6
Carpentry Level IV Total		6.5

COR-20043	Core Education Capstone	2.0
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Certificate of Completion Total 31.5

Students wanting to continue in the program and pursue the associate's degree need to also complete the following requirements.

(continued)

CARPENTRY**Certificate of Completion (CCPT0)****Associate in Applied Science (DCPT0)****(continuation)**

ASSOCIATE IN APPLIED SCIENCE

General Education

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CIS-10500	Introduction to Computers	3
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities	3

General Education Total	Minimum of 29.0 credits
Certificate Total	Minimum of 31.5 credits

Associate Degree Total	Minimum of 60.5 credits
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ELECTRICAL TECHNOLOGY

Certificate of Completion (CELC0)

Associate in Applied Science - Electrical Technology (DELC0)

Students with questions about this program should consult the electrical technology advisor.

Introduction

A **minimum of 31 credit hours** is required to complete the Certificate - Electrical Technology. After completing the requirements for the certificate, students may continue on with the Associate in Applied Science - Electrical Technology by completing the requirements listed under the General Education portion. A **minimum of 60 credit hours** is required for the Associate in Applied Science - Electrical Technology degree.

Prerequisites

WorkKeys[®] is used to assess the core competency levels of reading, mathematics, and locating information. Students will be required to take all eight WorkKeys[®] assessments as they proceed to completion of requirements for a certificate and/or degree. Students should consult an advisor for information about how the WorkKeys[®] test can be used to meet prerequisites for general education courses.

CERTIFICATE OF COMPLETION

Electrical Technology

Course Number	Course Title	Cr. Hrs.
Core		
COR-10001	Basic Safety	.6
COR-10002	Introduction to Construction Math . . .	.6
COR-10003	Introduction to Hand Tools	.4
COR-10004	Introduction to Power Tools	.2
COR-10005	Introduction to Blueprints	.3
COR-10006	Basic Rigging	.8
Core Total		2.9

Electrical Technology Level I

ELT-10044	Electrical Safety	.5
ELT-10045	Hand Bending	.3
ELT-10046	Fasteners & Anchors	.2
ELT-10047	Electrical Theory I	.3
ELT-10048	Electrical Theory II	.3
ELT-10049	Electrical Test Equipment	.2
ELT-10050	Introduction to the NEC	.1
ELT-10051	Raceways, Boxes, & Fittings	.5
ELT-10052	Conductors	.6
ELT-10053	Introduction to Electrical Blueprints . .	.3
ELT-10054	Electrical Writing: Commercial & Industrial	.3
ELT-10055	Electrical Wiring: Residential	.6
Electrical Technology Level I Total		4.2

Electrical Technology Level II

ELT-10056	Alternating Current	.6
ELT-10057	Motors: Theory & Application	.8
ELT-10058	Grounding	.5
ELT-10059	Conduit Bending	.6
ELT-10060	Boxes & Fittings	.4
ELT-10061	Conductor Installation	.4
ELT-10062	Cable Tray	.6
ELT-10063	Conductor Terminations & Splices	.3
ELT-10064	Installation of Electrical Services . . .	.6
ELT-10065	Circuit Breakers & Fuses	.5
ELT-10066	Contactors & Relays	.4
ELT-10067	Electrical Lighting	.4
Electrical Technology Level II Total		6.1

Electrical Technology Level III

ELT-20068	Load Calculations - Branch Circuits . .	.5
ELT-20069	Conductor Selection & Calculations	.6
ELT-20070	Overcurrent Protection	.5
ELT-20071	Raceway, Box & Fitting Fill Requirements	.5
ELT-20072	Wiring Devices	.4
ELT-20073	Distribution Equipment	.5
ELT-20074	Distribution System Transformers . . .	.6
ELT-20075	Basic Lighting	.2
ELT-20076	Motor Calculations	.5
ELT-20077	Motor Maintenance, Part I	.5
ELT-20078	Motor Controls	.8
ELT-20079	Electricity in HVAC Systems	.8
ELT-20080	Hazardous Locations	.6
Electrical Level Technology III Total		7.0

Electrical Technology Level IV

ELT-20081	Load Calculations - Feeder & Services	.6
ELT-20082	Practical Applications of Lighting . . .	.4
ELT-20083	Standby & Emergency Systems	.5
ELT-20084	Basic Electronic Theory	.8
ELT-20085	Fire Alarm Systems	.6
ELT-20086	Specialty Transformers	.6
ELT-20087	Advanced Controls	.8
ELT-20088	HVAC Controls	.6
ELT-20089	Welding Machines	.4
ELT-20090	Heat Tracing & Freeze Protection . . .	.4
ELT-20091	Motor Maintenance, Part 2	.5
ELT-20092	High Voltage Terminations/Splices . .	.4
Electrical Technology Level IV Total		6.6

(continued)

ELECTRICAL TECHNOLOGY**Certificate of Completion (CELC0)****(continuation)****Associate in Applied Science - Electrical Technology (DELC0)**

COR-20043	Core Education Capstone	2.0
---	Technical Electives approved by Advisor	2.2

Certificate of Completion Total 31.0

Students wanting to continue in the program and pursue the associate's degree need to also complete the following requirements.

ASSOCIATE IN APPLIED SCIENCE

General Education

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CIS-10500	Introduction to Computers	3
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities	3

General Education Total	Minimum of 29 credits
Certificate Total	Minimum of 31 credits

Associate Degree Total	Minimum of 60 credits
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HEATING/VENTILATION/AC/REFRIGERATION

Certificate of Completion (CHVC0)

Associate in Applied Science (DHVC0)

Students with questions about this program should consult a heating/ventilation advisor.

Introduction

A **minimum of 31 credit hours** is required to complete the Certificate - Heating/Ventilation/AC/Refrigeration. After completing the requirements for the certificate, students may continue on with the Associate in Applied Science - Heating/Ventilation/AC/Refrigeration by completing the requirements listed under the General Education portion. A **minimum of 60 credit hours** is required for the Associate in Applied Science - Heating/Ventilation/AC/Refrigeration degree.

Prerequisites

WorkKeys[®] is used to assess the core competency levels of reading, mathematics, and locating information. Students will be required to take all eight WorkKeys[®] assessments as they proceed to completion of requirements for a certificate and/or degree. Students should consult an advisor for information about how the WorkKeys[®] test can be used to meet prerequisites for general education courses.

CERTIFICATE OF COMPLETION

HVACR

Course Number	Course Title	Cr. Hrs.
Core		
COR-10001	Basic Safety	.6
COR-10002	Introduction to Construction Math ...	.6
COR-10003	Introduction to Hand Tools	.4
COR-10004	Introduction to Power Tools	.2
COR-10005	Introduction to Blueprints	.3
COR-10006	Basic Rigging	.8
Core Total		2.9

HVAC Level I

HVC-10093	Introduction to HVAC	.1
HVC-10094	Trade Mathematics	.5
HCC-10095	Tools of the Trade	.2
HVC-10096	Copper & Plastic Piping Practices ...	.2
HVC-10097	Soldering & Brazing	.3
HVC-10098	Ferrous Metal Piping Practices	.2
HVC-10099	Basic Electricity	.5
HVC-10100	Introduction to Cooling	1.2
HVC-10101	Introduction to Heating	.6
HVAC Level I Total		3.8

HVAC Level II

HVC-10102	Air Properties & Distribution	.6
HVC-10103	Chimneys, Vents, & Flues	.2
HVC-10104	Introduction to Mechanical Maintenance	.5
HVC-10105	Alternating Current	.5

HVC-10106	Basic Electronics	.2
HVC-10107	Electric Furnaces	.2
HVC-10108	HVAC Controls	.6
HVC-10109	Accessories & Optional Equipment	.3
HVC-10110	Metering Devices	.3
HVC-10111	Compressors	.6
HVC-10112	Heat Pumps	.6
HVC-10113	Leak Detection, Evacuation, Recovery & Charging	.8
HVC-10114	Refrigerant Transition & Recovery Program	.4
HVAC Level II Total		5.8

HVAC Level III

HVC-20115	Preventative Maintenance	.7
HVC-20116	Introduction to Electrical Troubleshooting	.4
HVC-20117	Troubleshooting Electronic Controls	.3
HVC-20118	Troubleshooting Gas Heating	.3
HVC-20119	Troubleshooting Electric Heating ...	.2
HVC-20120	Troubleshooting Oil Heating	.3
HVC-20121	Troubleshooting Cooling	.5
HVC-20122	Troubleshooting Heat Pumps	.5
HVC-20123	Troubleshooting Accessories	.5
HVC-20124	Commercial Heating & Cooling Systems	.6
HVC-20125	Water & Air Balance	.8
HVC-20126	Steam Systems	.6
HVC-20127	Customer Relations	.1
HVAC Level III Total		5.8

HVAC Level IV

HVC-20128	Advanced Blueprint Reading	1.2
HVC-20129	Indoor Air Quality	.4
HVC-20130	Energy Conservation Equipment ...	.3
HVC-20131	Energy Management Systems	.6
HVC-20132	Water Treatment	.4
HVC-20133	System Start-Up & Shut-Down	.9
HVC-20134	Heating & Cooling System Design	1.2
HVC-20135	Commercial & Industrial Refrigeration	.9
HVAC Level IV Total		5.9
COR-20043	Core Education Capstone	2.0
---	Technical Electives approved by Advisor	4.8

Certificate of Completion Total **31.0**

Students wanting to continue in the program and pursue the

associate's degree need to also complete the following requirements.

(continued)

HEATING/VENTILATION/AC/REFRIGERATION

Certificate of Completion (CHVC0)

Associate in Applied Science (DHVC0)

(continuation)

ASSOCIATE IN APPLIED SCIENCE

General Education

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CIS-10500	Introduction to Computers	3
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Introduction to Physical Science	3
PHY-10502	Introduction to Physical Science Lab . .	1
POL-10500	American Government/Humanities	3

General Education Total Minimum of 29 credits

Certificate Total Minimum of 31 credits

Associate Degree Total Minimum of 60 credits

INDUSTRIAL MAINTENANCE

Certificate of Completion (CIND0)

Associate in Applied Science (DIND0)

Students with questions about this program should consult the industrial maintenance advisor.

Introduction

A **minimum of 40 credit hours** is required to complete the Certificate - Industrial Maintenance. After completing the requirements for the certificate, students may continue on with the Associate in Applied Science - Industrial Maintenance by completing the requirements listed under the General Education portion. A **minimum of 69 credit hours** is required for the Associate in Applied Science - Industrial Maintenance degree.

Prerequisites

WorkKeys[®] is used to assess the core competency levels of reading, mathematics, and locating information. Students will be required to take all eight WorkKeys[®] assessments as they proceed to completion of requirements for a certificate and/or degree. Students should consult an advisor for information about how the WorkKeys[®] test can be used to meet prerequisites for general education courses.

CERTIFICATE OF COMPLETION

Industrial Maintenance

Course Number	Course Title	Cr. Hrs.
Core		
COR-10001	Basic Safety	.6
COR-10002	Introduction to Construction Math . . .	.6
COR-10003	Introduction to Hand Tools	.4
COR-10004	Introduction to Power Tools	.2
COR-10005	Introduction to Blueprints	.3
COR-10006	Basic Rigging	.8
Core Total		2.9

Industrial Maintenance Level I

IND-10202	Electrical Safety	.5
IND-10203	Hand Bending	.3
IND-10204	Fasteners & Anchors	.2
IND-10205	Electrical Theory One	.3
IND-10206	Electrical Theory Two	.3
IND-10207	Electrical Test Equipment	.3
IND-10208	Introduction to NEC	.1
IND-10209	Conductors	.6
IND-10210	Introduction to Electrical Blueprints . .	.3
IND-10211	Oxyfuel Cutting	.7
Industrial Maintenance Level I Total		3.6

Industrial Maintenance Level II

IND-10212	Wiring: Commercial & Industrial	.3
IND-10213	Alternating Current	.6
IND-10214	Motors: Theory & Application	.8
IND-10215	Grounding	.5
IND-10216	Boxes & Fittings	.4
IND-10217	Cable Tray	.6

M-TEC

IND-10218	Conductor Terminations & Splices	.3
IND-10219	Installation of Electrical Services	.6
INS-10220	Circuit Breakers & Fuses	.5
IND-10221	Contactors & Relays	.4
IND-10222	Lubrication	.8
IND-10223	Introduction to Bearings	.6
IND-10224	Copper & Plastic Piping Practices	.2
IND-10225	Ferrous Metal Piping Practices	.2
IND-10226	Piping Systems	.2
IND-10227	SMAW Equipment & Setup	.2
Industrial Maintenance Level II Total		7.2

Industrial Maintenance Level III

IND-20228	Overcurrent Protection	.5
IND-20229	Distribution Equipment	.5
IND-20230	Motor Controls	.8
IND-20231	Motor Maintenance, Part One	.5
IND-20232	Motor Maintenance, Part Two	.5
IND-20233	Installing Couplings	.6
IND-20234	Installing Mechanical Seals	.8
IND-20235	Installing Belt & Chain Drives	.4
IND-20236	Installing Bearings	.8
IND-20237	Gaskets & Packing	.3
IND-20238	Installing Seals	.2
IND-20239	Pumps	.8
IND-20240	Basic Hydraulic Systems	.4
IND-20241	Basic Pneumatic Systems	.6
IND-20242	Basic Electronic Theory (Optional)	
Industrial Maintenance Level III Total		7.7

Industrial Maintenance IV

IND-20243	Practical Applications of Lighting	.4
IND-20244	Standby & Emergency Systems	.5
IND-20245	Advanced Controls	.8
IND-20246	Commercial & Industrial Refrigeration	.9
IND-20247	Electricity in HVAC Systems	.8
IND-20248	HVAC Controls	.6
IND-20249	Conventional Alignment	1.2
IND-20250	Maintaining Valves	.4
IND-20251	Identifying & Installing Valves	.8
IND-20252	Steam Traps	.4
IND-20253	Steam Systems	.6
IND-20254	Programmable Logic Controllers	.3
IND-20255	High Voltage Terminations/ Splices	.4
IND-20256	Vibration Analysis	.2
IND-20257	Commercial Heating & Cooling Systems (Optional)	
Industrial Maintenance Level IV Total		8.3

(continued)

INDUSTRIAL MAINTENANCE

Certificate of Completion (CIND0)

Associate in Applied Science (DIND0)

(continuation)

Industrial Maintenance Level V

IND-20258	Preventive & Predictive Maintenance	.4
IND-20259	Performing Reverse Alignment	1.2
IND-20260	Performing Laser Alignment	1.0
IND-20261	Troubleshooting & Repairing Pneumatic Equipment	.4
IND-20262	Troubleshooting & Repairing Pumps	.4
IND-20263	Troubleshooting & Repairing Hydraulic Equipment	.4
IND-20264	Troubleshooting & Repairing Gearboxes	.8
IND-20265	Programmable Logic Controllers	1.2
IND-20266	Instrument Drawings & Documents	.4
IND-20267	Flow, Pressure, Level, & Temperature	.4
IND-20268	Process Control Theory	.7
IND-20269	Precision Measuring Tools	1.0
IND-20270	Forklifts (Optional)	
IND-20271	Fiber Optics (Optional)	
Industrial Maintenance Level V Total		8.3
COR-20043	Core Education Capstone	2.0

Certificate of Completion Total 40.0

Students wanting to continue in the program and pursue the associate's degree need to also complete the following requirements.

ASSOCIATE IN APPLIED SCIENCE

General Education

Course Number	Course Title	Cr. Hrs.
CAR-10300	Career Development Skills	1
CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4
CIS-10500	Introduction to Computers	3
COM-10000	Written & Oral Communication	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities . . .	3

General Education Total Minimum of 29 credits

Certificate Total Minimum of 40 credits

Associate Degree Total Minimum of 69 credits

MACHINE TOOL TECHNOLOGY

Certificate of Completion (CMTT0)

Associate in Applied Science (DMTT0)

Students with questions about this program should consult the machine tool technology advisor.

Introduction

A **minimum of 39.30 credit hours** is required to complete the Certificate - Machine Tool Technology. After completing the requirements for the certificate, students may continue on with the Associate in Applied Science - Machine Tool Technology by completing the requirements listed under the General Education portion. A **minimum of 74.64 credit hours** is required for the Associate in Applied Science - Machine Tool Technology degree.

Prerequisites

WorkKeys[®] is used to assess the core competency levels of reading, mathematics, and locating information. Students will be required to take all eight WorkKeys[®] assessments as they proceed to completion of requirements for a certificate and/or degree. Students should consult an advisor for information about how the WorkKeys[®] test can be used to meet prerequisites for general education courses.

CERTIFICATE OF COMPLETION

Metal Machining Level I

Course Number	Course Title	Cr. Hrs.
MPT-10272	Machine Tool Safety	.17
MPT-10273	Identifying Surface Finishes	.08
MPT-10274	Shop Math - Speeds & Feeds	.21
MPT-10275	Sharpening Drill Bits	.25
MPT-10276	Drilling on a Press	.17
MPT-10277	Power Tap on the Drill Press	.25
MPT-10278	Drill Press Project	.58
MPT-10279	Band Saw Blade Welding	.25
MPT-10280	Vertical Band Saw Project	.25
MPT-10281	Maintaining the Lathe	.17
MPT-10282	Grinding Lathe Tools	.25
MPT-10283	Facing on the Lathe	.21
MPT-10284	Aligning Lathe Centers	.17
MPT-10285	Cutting External Threads	.50
MPT-10286	Dial In Vise/Tram in Head	.21
MPT-10287	Fly Cutter & End Mill/Square Block	.21
MPT-10288	Digital Read/Drill, Tap, & Ream	.25
Metal Machining Level I Total		4.18

Metal Machining Level II

MPT-10289	Parallel Turning on the Lathe	.21
MPT-10290	Groove & Part on the Lathe	.13
MPT-10291	Cutting Internal Threads	.42
MPT-10292	Knurling on the Lathe	.13
MPT-10293	Sharpen End Mills (End)	1.00
MPT-10294	Sharpen Various Cutters	1.00

MPT-10295	Tilt Head & Turn Vise/Cut "V"	.50
MPT-10296	Turntable/Cut Radii	.33
MPT-10297	Sine Plate/Cut Angles	.33
MPT-10298	Boring Head/Bore 4 Holes	.33
MPT-10299	Indexing Head/Key Ways	.17
MPT-10302	Square & Block (6 Sides)	.25
MPT-10303	Grind Angles & Radii	.50
MPT-10304	Parallel Grind to Print	1.00
MPT-10305	External/Internal Tapers	.50
MPT-10306	CNC Fundamentals	.83
MPT-10364	Cut Radius & External Tapers	.50
MPT-10408	Math for Dividing Head	.17
MPT-10409	Dividing Head/Cut Gear	.42
Metal Machining Level II Totals		8.72

Metrology

MPT-10307	Geometric Dimensioning & Tolerancing	.33
MPT-10308	Micrometer	.13
MPT-10309	Calipers: Digital, Vernier, Dial	.17
MPT-10310	Telescoping Gage	.13
MPT-10311	Depth Micrometer	.13
MPT-10312	Dial Indicators	.13
MPT-10313	Gage Blocks	.13
MPT-10314	Machine Shop Trigonometry	.67
MPT-10315	Height Gage	.17
MPT-10316	Sine Bar	.17
MPT-10317	CMM Fundamentals	.25
MPT-10318	CMM Part Inspection	.67
Metrology Totals		3.08

Metallurgy

MPT-20319	Property of Metals/Physical Metallurgy	.13
MPT-20320	Constitution of Alloys	.17
MPT-20321	Carbon & Alloy Steels	.13
MPT-20322	Heat & Surface Treat for Steel	.13
MPT-20323	Cast Irons	.13
MPT-20324	Light Metals & Alloys	.13
MPT-20325	Lead, Tin, & Zinc	.13
MPT-20326	Introduction to Metallurgy	.46
MPT-20327	Examining & Identifying Metals	.13
MPT-20328	Fundamentals of Welding & Brazing/Casting	.13
MPT-20329	Fundamentals of Welding	.13
MPT-20330	Stainless Steel	.13
	Testing Metals	.42
Metallurgy Totals		2.22

(continued)

MACHINE TOOL TECHNOLOGY**Certificate of Completion (CMTT0)****Associate in Applied Science (DMTT0)****(continuation)**

Machinist Handbook

MPT-20331	Machinery Handbook	.17
MPT-20332	Machine Tool Blueprint Reading . . .	.83
MPT-20333	Basic Shop Math	.67
MPT-20334	Machine Tool Math	.75
MPT-20335	Machinist Scale	.08
MPT-20336	Dividers	.08
MPT-20337	Spring Calipers	.08
MPT-20338	Combination Square	.08
MPT-20339	Legged Calipers (Hermaphrodite) . .	.08
MPT-20340	Surface Gage	.08

Machinist Handbook Totals 2.90**Welding Level I**

WLD-10341	Welding Shop Safety Rules	.17
WLD-10342	Identifying Joints, Welds & Positions .	.13
WLD-10343	Measuring with Rules & Squares . . .	.13
WLD-10344	Define Oxyacetylene Welding Terms .	.17
WLD-10345	Setting Up Oxyacetylene Welding Station	.08
WLD-10346	Running Beads with & without Filler	.29
WLD-10347	Weld Basic Joints in Flat Position . .	1.00
WLD-10348	Oxyacetylene, Plasma, & Carbon Arc Cutting Processes	.13
WLD-10349	Cut Ferrous Metal with Oxyacetylene Equipment	.33
WLD-10350	Brazing Basic Joints in Flat Position .	.33
WLD-10351	Braze Welding V-Groove Butt Joint . .	.21
WLD-10352	Arc Welding Terms & Definitions . .	.17
WLD-10353	Identifying & Selecting Electrode for SMAW	.21
WLD-10354	Striking an Arc & Running Stringer Beads	.67

Welding Level I Total 4.02**Welding Level II**

WLD-10355	Analyzing Good Weld Character . . .	.13
WLD-10356	Multipass Fillet Welds - Flat Position	.50
WLD-10357	Increasing Weld Size Using Weave Techniques	.50
WLD-10358	V-Groove Butt Joint with Backing Plate	.50
WLD-10359	V-Groove Butt Joint without Backing Plate	.67
WLD-10360	Butt Joints with Backing Plate Vertical Up	.46
WLD-10361	Butt Joints without Backing Plate Vertical Up	.75
WLD-10362	Welding Blueprint Reading	.17
WLD-10363	Fabricating a Project	.50

Welding Level II Total 4.18

CAD

CAD-10002	Engineering Graphics & CAD	4
CAD-10500	Detail Drafting/CAD	4

COR-20043	Core Education Capstone	2.0
Subtotals		10.0

Certificate of Completion Total 39.30

Students wanting to continue in the program and pursue the associate's degree need to also complete the following requirements.

ASSOCIATE IN APPLIED SCIENCE

Metal Machining Level III

MPT-20366	EDM Fundamentals	.29
MPT-20367	EDM Project	.50
MPT-20368	Universal Indexing Head	.50
MPT-20369	CNC Turning	1.67
MPT-20370	CNC Milling	1.67
Metal Machining Level III Totals		4.63

Metal Machining Level IV

MPT-20371	Precision Vice	2.08
MPT-20372	1-2-3	1.00
MPT-20373	Tool Makers V-Blocks	1.67
Metal Machining Level IV Totals		4.75

Statistical Process Control

MPT-20374	Transformation of American Industry #1	.33
MPT-20375	Deming on Quality & Productivity #2	.33
MPT-20376	Model for Quality/ Productivity Improvement #3	.33
MPT-20377	Project Selection #4	.33
MPT-20378	Data Gathering & Problem Solving #5	.33
MPT-20379	Data Analysis & Interpretation #6	.33
MPT-20380	Process Control - X-Bar & R-Charts #7	.33
MPT-20381	Process Capability #8	.33
MPT-20382	Median & Individual Charts #9	.33
MPT-20383	Attribute Charts #10	.33
MPT-20384	Project Evaluation #11	.33
MPT-20385	Continuing Improvement Strategies #12	.33
Statistical Process Control Totals		3.96

(continued)

MACHINE TOOL TECHNOLOGY
Certificate of Completion (CMTT0)**Associate in Applied Science (DMTT0)****(continuation)****General Education****Course Number Course Title****Cr. Hrs.**

M-TEC

CAR-10300	Career Development Skills	1
CIS-10500	Introduction to Computers	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers	3
MTH-_____	Mathematics elective (excluding MTH- 20500 or MTH-20600)	4
MTH-_____	Mathematics elective (excluding MTH- 20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities	3
Subtotal		22.00

General Education Total	Minimum of 22.00 credits
Certificate Total	Minimum of 39.30 credits
Additional Technical Requirements	Minimum of 13.34 credits
Associate Degree Total	Minimum of 74.64 credits

Students may select additional manufacturing technology electives from the following courses with advisor permission.

Advanced Metal Machining

MPT-20386	Reaming on the Drill Press	.13
MPT-20387	Counterbore/Sink, Spot-Face	.21
MPT-20388	Hand Tap on the Drill Press	.21
MPT-20389	Boring Internal Tapers	.67
MPT-20390	Lathe Project	1.25
MPT-20391	Horizontal Milling/Saw Slot	.17
MPT-20392	5C Collet Holders/Cut Square & Hex	.33
MPT-20393	Make Dove Tails	.67
MPT-20394	Mill Project	1.25
MPT-20395	Complete Two Projects to Print . .	1.58
MPT-20396	Operating the Automatic Grinding .	.42
MPT-20397	Sine Bar Project	.83
MPT-20398	CNC Advanced Programming	2.08
MPT-20399	Sharpen End Mills (Sides)	1.00

WELDING AND FABRICATING

Certificate of Completion (CWAF0)

Associate in Applied Science (DWAF0)

Students with questions about this program should consult a welding and fabricating advisor.

Introduction

A **minimum of 35.89 credit hours** is required to complete the Certificate - Welding and Fabricating. After completing the requirements for the certificate, students may continue on with the Associate in Applied Science - Welding and Fabricating by completing the requirements listed under the General Education portion. A **minimum of 62.85 credit hours** is required for the Associate in Applied Science - Welding and Fabricating degree.

Prerequisites

WorkKeys[®] is used to assess the core competency levels of reading, mathematics, and locating information. Students will be required to take all eight WorkKeys[®] assessments as they proceed to completion of requirements for a certificate and/or degree. Students should consult an advisor for information about how the WorkKeys[®] test can be used to meet prerequisites for general education courses.

CERTIFICATE OF COMPLETION

Welding Level I

Course Number	Course Title	Cr. Hrs.
WLD-10341	Welding Shop Safety Rules	.17
WLD-10342	Identifying Joints, Welds & Position .13	
WLD-10343	Measuring with Rules & Squares . . .13	
WLD-10344	Defining Oxyacetylene Welding Terms	.17
WLD-10345	Setting Up Oxyacetylene Welding Station	.08
WLD-10346	Running Beads with & without Filler	.29
WLD-10347	Welding Basic Joints in Flat Position	1.00
WLD-10348	Oxyacetylene, Plasma, & Carbon Arc Cutting Processes 13	
WLD-10349	Cutting Ferrous Metals with Oxyacetylene Equipment	.33
WLD-10350	Brazing Basic Joints in Flat Position .33	
WLD-10351	Braze Welding V-Groove Butt Joint .21	
WLD-10352	Arc Welding Terms & Definitions . .17	
WLD-10353	Identifying & Selecting Electrode for SMAW	.21
WLD-10354	Striking an Arc & Running Stringer Beads	.67
Welding Level I Totals		4.02

Welding Level II

WLD-10355	Analyzing Good Welding Character .13
WLD-10356	Multipass Fillet Welds - Flat Position .50

WLD-10357	Increasing Weld Size	
	Using Weave Techniques	.50
WLD-10358	V-Groove Butt Joint with Backing Plate	.50
WLD-10359	V-Groove Butt Joint without Backing Plate	.67
WLD-10360	Butt Joints with Backing Plate Vertical Up	.46
WLD-10361	Butt Joints without Backing Plate Vertical Up	.75
WLD-10362	Welding Blueprint Reading	.17
WLD-10363	Fabricating a Project	.50
Welding Level II Totals		4.18

Welding Level III

WLD-20400	Explaining Gas Metal Arc Welding	.29
WLD-20401	Establishing an Arc & Making Beads with GMAW	.17
WLD-20402	Welding Basic Joints in All Positions	1.67
WLD-20403	Welding Basic Joints Using GMAW Aluminum	.67
WLD-20404	Pulse Arc Welding	.25
WLD-20405	Explaining Gas Tungsten Arc Welding	.42
WLD-20406	Starting an Arc & Running Stringer Beads	.42
Welding Level III Totals		3.89

Directed Study in Welding Techniques

WLD-20407	Directed Study in Welding Techniques	4.00
Directed Study Totals		4.00

Metal Machining Level I

MPT-10272	Machine Tool Safety	.17
MPT-10273	Identifying Surface Finishes	.08
MPT-10274	Shop Math - Speeds & Feeds	.21
MPT-10275	Sharpening Drill Bits	.25
MPT-10276	Drilling on a Press	.17
MPT-10277	Power Tap on the Drill Press	.25
MPT-10278	Drill Press Project	.58
MPT-10279	Band Saw Blade Welding	.25
MPT-10280	Vertical Band Saw Project	.25
MPT-10281	Maintaining the Lathe	.17
MPT-10282	Grinding Lathe Tools	.25
MPT-10283	Facing on the Lathe	.21
MPT-10284	Aligning Lathe Centers	.17
MPT-10285	Cutting External Threads	.50
MPT-10286	Dial In Vise/Tram in Head	.21
MPT-10287	Fly Cutter & End Mill/Square Block .21	

M-TEC

MPT-10288	Digital Read/Drill, Tap, & Ream . . .	.25
	Metal Machining Level I Totals	4.18

(continued)

WELDING AND FABRICATING Certificate of Completion (CWAF0)

Associate in Applied Science (DWAF0)

(continuation)

Metallurgy		MPT-20375	Deming on Quality &
MPT-20319	Property of Metals/Physical Metallurgy		
			Productivity #2
MPT-20320	Constitution of Alloys	MPT-20376	Model for Quality/
MPT-20321	Carbon & Alloy Steels		
MPT-20322	Heat & Surface Treat for Steel		Productivity Improvement #3
MPT-20323	Cast Irons		
MPT-20324	Light Metals & Alloys		
MPT-20325	Lead, Tin, & Zinc		
MPT-20326	Introduction to Metallurgy		
MPT-20327	Examining & Identifying Metals . . .		
MPT-20328	Fundamentals of Welding & Brazing/Casting		
MPT-20329	Fundamentals of Welding Stainless Steel		
MPT-20330	Testing Metals		
	Metallurgy Totals		2.22
Electrical Technology			
ELT-10047	Electrical Theory		
ELT-10048	Electrical Theory II		
ELT-10049	Electrical Test Equipment		
ELT-10053	Introduction to Electrical Blueprints . .		
ELT-10056	Alternating Current		
ELT-10058	Grounding		
ELT-20084	Basic Electronic Theory		
ELT-20089	Welding Machines		
	Electricity Totals		3.40
Additional Required Technical and Core Education			
CAD-10002	Engineering Graphics & CAD		4.0
CAD-10500	Detail Drafting/CAD		4.0
COR-20043	CORE Education Capstone		2.0
	Subtotal		10.0
Certificate of Completion Total			35.89

Students wanting to continue in the program and pursue the associate's degree need to also complete the following requirements.

ASSOCIATE OF APPLIED SCIENCE

Welding Level IV

WLD-20419	Complete 10 Welder Qualifications .	4.0
	Welding Level IV Totals	4.0

Statistical Process Control

MPT-20374	Transformation of American Industry #1	.33
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MPT-20377	Project Selection #4	.33
MPT-20378	Data Gathering & Problem Solving #5	.33
MPT-20379	Data Analysis & Interpretation #6 ..	.33
MPT-20380	Process Control - X-Bar & R-Charts #7	.33
MPT-20381	Process Capability #8	.33
MPT-20382	Median & Individual Charts #9	.33
MPT-20383	Attribute Charts #10	.33
MPT-20384	Project Evaluation #11	.33
MPT-20385	Continuing Improvement Strategies #12	.33
Statistical Process Totals		3.96

General Education

CAR-10300	Career Development Skills	1
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition or	
ENG-10303	English Composition I/Computers	3
MTH-12000	Mathematics Elective (or higher excluding MTH-20500 or MTH-20600)	4
MTH-12100	Mathematics Elective (or higher excluding MTH-20500 or MTH-20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1
POL-10500	American Government/Humanities	3

General Education Total	Minimum of 19.00 credits
Certificate Total	Minimum of 35.89 credits
Additional Technical Requirements	Minimum of 7.96 credits

Associate Degree Total	Minimum of 62.85 credits
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Students may select additional welding electives from the following courses with advisor permission.

Welding Level V

WLD-20420	Cutting Ferrous & Non-Ferrous Metals with Plasma	.33
WLD-20421	Cutting Ferrous Metals Using Carbon Arc Gouging	.13
WLD-20422	Silver Brazing Dissimilar Metals ..	.13
WLD-20423	Lead Soldering Seams	.25
WLD-20424	Making a Corner Joint - Flat Position	.67
WLD-20425	Welding Tee Joints - Vertical Up ..	.58
WLD-20426	Welding Tee Joints - Vertical Down	.29

(continued)

WELDING AND FABRICATING

Certificate of Completion (CWAF0)

Associate in Applied Science (DWAF0)

(continuation)

WLD-20427	Butt Joint with Back Plate - Vertical Down	.42
WLD-20428	Butt Joint without Back Plate - Vertical Down	.33
WLD-20429	Butt Joint with Back Plate - Horizontal	.50
WLD-20430	Butt Joint without Back Plate - Horizontal	.50

Welding Level VI

WLD-20431	Weld Tee Joints Overhead	.50
WLD-20432	Butt Joint with Back Plate - Overhead	.58
WLD-20433	Butt Joint without Back Plate - Overhead	.83
WLD-20434	Identifying Pipe Welding	.21
WLD-20435	Cast Iron Repair	.17
WLD-20436	Hardsurfacing	.17
WLD-20437	Tool & Die Welding	.67

Gas Tungsten Arc Welding

WLD-20438	Weld Basic Joints on Aluminum . .	1.25
WLD-20439	Weld Basic Joints on Stainless Steel	1.25
WLD-20440	Weld Basic Joints on Aluminum - Horizontal	1.67

Pipe Welding

WLD-20441	Weld Pipe 2G Fixed Position	.83
WLD-20442	Weld Pipe 5G Fixed Position - Vertical Up	1.25
WLD-20443	Weld Pipe 5G Fixed Position - Vertical Down	1.04
WLD-20444	Weld Pipe 6G Fixed Position	1.04

Pipe Welding Totals 4.16

ADMINISTRATIVE ASSISTANT

Associate in Applied Science (DADA0)

Students with questions about this program should consult an office information systems advisor.

Introduction

The Administrative Assistant program offered at Kirtland is designed to prepare students in both basic and advanced secretarial/clerical duties. This program enables graduates to obtain positions of responsibility in a variety of office situations.

An Associate in Applied Science degree is awarded after completion of a **minimum of 60 credit hours**, and graduates may also be eligible to receive a CPS (Certified Professional Secretary) certification.

Prerequisites

Students should have completed a basic typing course with a grade of C or better prior to enrollment.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required) or OIS advisor-approved elective	1
ENG-10300	English Composition I or ENG-10303 English Composition I/Computers . . .	3
HUM-20500	The Individual & Society	3
MTH-10100	Finite Mathematics	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Administrative Assistant Major

Course Number	Course Title	Cr. Hrs.
BUS-10100	Introduction to Business	3
BUS-21500	Legal Environment of Business	3
CIS-10500	Introduction to Computers	3
CIS-17001	Microsoft Office XP	3
OIS-10500	Business Correspondence	3
OIS-11201	Business Calculations	3
OIS-11401	Keyboarding II-A	1
OIS-11402	Keyboarding II-B	1
OIS-11403	Keyboarding II-C	1
OIS-18201	Word Processing I-Word-A	1
OIS-18202	Word Processing I-Word-B	1
OIS-18203	Word Processing I-Word-C	1
OIS-19001	Machine Transcription-A	1
OIS-19002	Machine Transcription-B	1
OIS-19003	Machine Transcription-C	1
OIS-20501	Records Management-A	1
OIS-20502	Records Management-B	1
OIS-20503	Records Management-C	1
OIS-21000	Office Procedures & Practices	3
OIS-21400	Keyboarding III	3
OIS-21500	Desktop Publishing for the Office	3
OIS-22200	Word Processing II-Word	3
OIS-24101	Externship - Administrative Assistant . . .	3

OFFICE INFORMATION SYSTEMS

ADVANCED WORD PROCESSING SPECIALIST

Associate in Applied Science (DWPS0)

Students with questions about this program should consult an office information systems advisor.

Introduction

To meet the demands of the changing office environment, Kirtland offers the Advanced Word Processing Specialist program to enable students to obtain employment as advanced word processing specialists, word processing supervisors, and secretaries in various business, industrial, governmental and professional firms.

An Associate in Applied Science degree is awarded after completion of a **minimum of 62 credit hours**.

Prerequisites

Students should have completed a basic typing course with a grade of C or better prior to enrollment.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3
HUM-20500	The Individual & Society	3
MTH-10100	Finite Mathematics	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Advanced Word Processing Specialist Major

Course Number	Course Title	Cr. Hrs.
BUS-10100	Introduction to Business	3
BUS-21500	Legal Environment of Business	3
CIS-10500	Introduction to Computers	3
CIS-17001	Microsoft Office XP	3
CIS-_____	CIS elective (with advisor approval) . .	3
OIS-10500	Business Correspondence	3
OIS-11201	Business Calculations	3
OIS-11401	Keyboarding II-A	1
OIS-11402	Keyboarding II-B	1
OIS-11403	Keyboarding II-C	1
OIS-18201	Word Processing I-Word-A	1
OIS-18202	Word Processing I-Word-B	1
OIS-18203	Word Processing I-Word-C	1
OIS-19001	Machine Transcription-A	1
OIS-19002	Machine Transcription-B	1
OIS-19003	Machine Transcription-C	1
OIS-20501	Records Management-A	1
OIS-20502	Records Management-B	1
OIS-20503	Records Management-C	1
OIS-21000	Office Procedures & Practices	3
OIS-21400	Keyboarding III	3
OIS-21500	Desktop Publishing for the Office . . .	3
OIS-22200	Word Processing II-Word	3
OIS-24107	Externship - Advanced Word Processing Specialist	3

WORD PROCESSING SPECIALIST

Certificate of Completion (CWPS0)

Students with questions about this program should consult an office information systems advisor.

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.

A certificate of completion is awarded to the student after a **minimum of 30 credit hours** has been completed. 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.

Prerequisites

Students should have completed a basic typing course with a grade of C or better prior to enrollment.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers	3

Word Processing Specialist Major

Course Number	Course Title	Cr. Hrs.
CIS-10500	Introduction to Computers	3
CIS-17001	Microsoft Office XP	3
OIS-10500	Business Correspondence	3
OIS-11401	Keyboarding II-A	1
OIS-11402	Keyboarding II-B	1
OIS-11403	Keyboarding II-C	1
OIS-18201	Word Processing I-Word-A	1
OIS-18202	Word Processing I-Word-B	1
OIS-18203	Word Processing I-Word-C	1
OIS-20501	Records Management-A	1
OIS-20502	Records Management-B	1
OIS-20503	Records Management-C	1
OIS-21400	Keyboarding III	3
OIS-21500	Desktop Publishing for the Office or	
CIS-_____	CIS credits (with advisor approval)	3
OIS-22200	Word Processing II-Word	3

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Therefore, students in certificate programs should consult with their advisor for additional information.

OFFICE INFORMATION SYSTEMS

LEGAL SECRETARY

Associate in Applied Science (DLES1)

Students with questions about this program should consult an office information systems advisor.

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 a knowledge of legal terminology and procedures is required. An Associate in Applied Science degree is awarded after completion of a **minimum of 61 credit hours**.

Prerequisites

Students should have completed a basic typing course with a grade of C or better prior to enrollment.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3
HUM-20500	The Individual & Society	3
MTH-10100	Finite Mathematics	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Legal Secretary Major

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
BUS-10100	Introduction to Business	3
BUS-21500	Legal Environment of Business	3
CIS-10500	Introduction to Computers	3
CIS-17001	Microsoft Office XP or	
OIS-21500	Desktop Publishing for the Office . .	3
OIS-10500	Business Correspondence	3
OIS-11201	Business Calculations	3
OIS-11401	Keyboarding II-A	1
OIS-11402	Keyboarding II-B	1
OIS-11403	Keyboarding II-C	1
OIS-17000	Legal Terminology &	
	Transcription	3
OIS-18201	Word Processing I-Word-A	1
OIS-18202	Word Processing I-Word-B	1
OIS-18203	Word Processing I-Word-C	1
OIS-19001	Machine Transcription-A	1
OIS-19002	Machine Transcription-B	1
OIS-19003	Machine Transcription-C	1
OIS-20501	Records Management-A	1
OIS-20502	Records Management-B	1
OIS-20503	Records Management-C	1
OIS-21400	Keyboarding III	3
OIS-22200	Word Processing II-Word	3
OIS-22500	Legal Office Procedures	3
OIS-24102	Externship - Legal Secretary	3

MEDICAL BILLING AND CODING

Certificate of Completion (CMBC0)

Students with questions about this program should consult an office information systems advisor.

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.

Upon completion of a **minimum of 31 credit hours**, a certificate of completion is awarded.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3

Medical Billing and Coding Major

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-10801	Pathology	3
BIO-10701	Essentials of Anatomy & Physiology	3
BIO-10702	Essentials of Anatomy & Physiology Lab	1
OIS-10401/02/03	Keyboarding I-A, B, and C	
OR		
OIS-18201/02/03	Word Processing I-Word-A, B, and C	3
OIS-10600	Introduction to Health Information Systems	3
OIS-11300	Medical Coding I	3
OIS-11500	Medical Insurance Billing	3
OIS-21300	Medical Coding II	3
OIS-24109	Externship-Medical Billing/Coding . .	4

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Therefore, students in certificate programs should consult with their advisor for additional information.

OFFICE INFORMATION SYSTEMS

MEDICAL CLERK

Certificate of Completion (CMOA1)

Students with questions about this program should consult an office information systems advisor.

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.

Upon completion of a **minimum of 31 credit hours**, a certificate of completion is awarded. 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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . .	3

Medical Clerk Major

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-11201	Medical Ethics & Law	1
OIS-10500	Business Correspondence	3
OIS-10700	Medical Office Transcription	3
OIS-11201	Business Calculations	3
OIS-11401	Keyboarding II-A	1
OIS-11402	Keyboarding II-B	1
OIS-11403	Keyboarding II-C	1
OIS-18201	Word Processing I-Word-A	1
OIS-18202	Word Processing I-Word-B	1
OIS-18203	Word Processing I-Word-C	1
OIS-20501	Records Management-A	1
OIS-20502	Records Management-B	1
OIS-20503	Records Management-C	1
OIS-20901	Medical Office Administration	2
OIS-20902	Introduction to Medical Billing & Coding	2
OIS-24108	Externship - Medical Clerk	3

NOTE: The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Therefore, students in certificate programs should consult with their advisor for additional information.

MEDICAL SECRETARY

Associate in Applied Science (DMES1)

Students with questions about this program should consult an office information systems advisor.

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.

An Associate in Applied Science degree is awarded after completion of a **minimum of 63 credit hours**.

Prerequisites

Students should have completed a basic typing course with a grade of C or better prior to enrollment.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
BIO-10701	Essentials of Anatomy & Physiology	3
BIO-10702	Essentials of Anatomy & Physiology Lab	1
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
HUM-20500	The Individual & Society	3
MTH-10100	Finite Mathematics	4
PHY-10501	Physical Science	3

PHY-10502 Physical Science Lab 1

OFFICE INFORMATION SYSTEMS

Medical Secretary Major

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-11201	Medical Ethics & Law	1
CIS-10500	Introduction to Computers	3
OIS-10500	Business Correspondence	3
OIS-10600	Introduction to Health Information Systems	3
OIS-10700	Medical Office Transcription	3
OIS-10801	Medical Transcription I-A	1
OIS-10802	Medical Transcription I-B	1
OIS-10803	Medical Transcription I-C	1
OIS-11201	Business Calculations	3
OIS-11401	Keyboarding II-A	1
OIS-11402	Keyboarding II-B	1
OIS-11403	Keyboarding II-C	1
OIS-18201	Word Processing I-Word-A	1
OIS-18202	Word Processing I-Word-B	1
OIS-18203	Word Processing I-Word-C	1
OIS-20501	Records Management-A	1
OIS-20502	Records Management-B	1
OIS-20503	Records Management-C	1
OIS-20601	Medical Transcription II-A	1
OIS-20602	Medical Transcription II-B	1
OIS-20603	Medical Transcription II-C	1
OIS-20800	Medical Keyboarding	3
OIS-20901	Medical Office Administration	2
OIS-20902	Introduction to Medical Billing & Coding	2
OIS-22100	Office Pharmacology	2
OIS-24103	Externship - Medical Secretary	3

MEDICAL TRANSCRIPTION

Associate in Applied Science (DMET0)

Students with questions about this program should consult an office information systems advisor.

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.

An Associate in Applied Science is awarded after completion of a **minimum of 63 credit hours**.

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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all**

OFFICE INFORMATION SYSTEMS

students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.

Course Number	Course Title	Cr. Hrs.
BIO-10701	Essentials of Anatomy & Physiology.	3
BIO-10702	Essentials of Anatomy & Physiology Lab	1
CIS-10500	Introduction to Computers	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3
HUM-20500	The Individual & Society	3
MTH-10100	Finite Mathematics	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

Medical Transcription Major

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-10801	Pathology	3
ALH-11201	Medical Ethics & Law	1
OIS-10500	Business Correspondence	3
OIS-10600	Introduction to Health Information Systems	3
OIS-10700	Medical Office Transcription	3
OIS-10801	Medical Transcription I-A	1
OIS-10802	Medical Transcription I-B	1
OIS-10803	Medical Transcription I-C	1
OIS-11401	Keyboarding II-A	1
OIS-11402	Keyboarding II-B	1
OIS-11403	Keyboarding II-C	1
OIS-18201	Word Processing I-Word-A	1
OIS-18202	Word Processing I-Word-B	1
OIS-18203	Word Processing I-Word-C	1
OIS-20501	Records Management-A	1
OIS-20502	Records Management-B	1
OIS-20503	Records Management-C	1
OIS-20601	Medical Transcription II-A	1
OIS-20602	Medical Transcription II-B	1
OIS-20603	Medical Transcription II-C	1
OIS-20701	Medical Transcription III-A	1
OIS-20702	Medical Transcription III-B	1
OIS-20703	Medical Transcription III-C	1
OIS-20800	Medical Keyboarding	3
OIS-22100	Office Pharmacology	2
OIS-24106	Externship - Medical Transcription . .	4

MEDICAL TRANSCRIPTION

Certificate of Completion (CMET0)

Students with questions about this program should consult an office information systems advisor.

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.

Upon completion of a **minimum of 30 credit hours**, a certificate of completion is awarded.

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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results

show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
BIO-10701	Essentials of Anatomy & Physiology.	3
BIO-10702	Essentials of Anatomy & Physiology Lab	1
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers ..	3

Medical Transcription Major

Course Number	Course Title	Cr. Hrs.
ALH-10101	Medical Terminology	2
ALH-10801	Pathology	3
OIS-10700	Medical Office Transcription	3
OIS-18201	Word Processing I-Word-A	1
OIS-18202	Word Processing I-Word-B	1
OIS-18203	Word Processing I-Word-C	1
OIS-20601	Medical Transcription II-A	1
OIS-20602	Medical Transcription II-B	1
OIS-20603	Medical Transcription II-C	1
OIS-20701	Medical Transcription III-A	1
OIS-20702	Medical Transcription III-B	1
OIS-20703	Medical Transcription III-C	1
OIS-22100	Office Pharmacology	2
OIS-24106	Externship - Medical Transcription	4

OFFICE ASSISTANT

Certificate of Completion (COAS0)

Students with questions about this program should consult an office information systems advisor.

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.

Upon completion of a **minimum of 30 credit hours**, a certificate of completion is awarded. 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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088--, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers . . .	3

Office Assistant Major

Course Number	Course Title	Cr. Hrs.
CIS-10500	Introduction to Computers	3
OIS-10401/02/03	Keyboarding I-A, B and C	
OR		
OIS-11401/02/03	Keyboarding II-A, B, and C	3
OIS-10500	Business Correspondence	3
OIS-11201	Business Calculations	3
OIS-11401/02/03	Keyboarding II-A, B, and C	
OR		
OIS-21400	Keyboarding III	3

...and six or more credit hours of electives from office information systems and six or more credit hours of general electives.

NOTES

1. Appropriate electives will be determined in consultation with advisor.
2. 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.
3. The writing and mathematics requirements for certificate programs may vary according to the specific nature of, and emphasis within, those programs. Students in certificate programs should consult with their advisor for additional information.

PLANT SCIENCE

Associate in Applied Science

Horticulture (DPLS0), Turfgrass (DPLS1) or Landscape/Nursery (DPLS2)

Students with questions about this program should consult a plant science advisor.

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.

An Associate in Applied Science - Plant Science degree will be conferred by Kirtland upon completion of all degree requirements. Students need to select one of the three options available. The Commercial Horticulture Operations option requires a **minimum of 61 credit hours**. The Commercial Turfgrass Operations option requires a **minimum of 61 credit hours**. The Landscape and Nursery option requires a **minimum of 60 credit hours**.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

General Education

Many courses in general education are offered; however, only the courses listed here are required for graduation in this program. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

Course Number	Course Title	Cr. Hrs.
BIO-20200	General Botany	4
CAR-10300	Career Development Skills	1
CHE-10003	Chemical Science	3
CHE-10004	Chemical Science Lab	1
CIS-17001	Microsoft Office XP	3
COM-10000	Written & Oral Communication	3

ECO-20100	Principles of Economics-MACRO	3
ENG-10000	Writing Lab (if required)	0-1
ENG-10300	English Composition I or	
ENG-10303	English Composition I/Computers	3
HUM-20500	The Individual & Society or	
POL-10500	American Government/Humanities	3
MTH-10100	Finite Mathematics (or higher excluding MTH-20500 or 20600)	4
PHY-10501	Physical Science	3
PHY-10502	Physical Science Lab	1

MSU Basic Education Requirements

AT 057	Industry Seminar (MSU)	1
AT 057	Plant Diseases (MSU)	2
AT 075	Entomology (MSU)	2
CSS 210	Basic Soil Science (MSU) or	
/043		3
HRT 066	Landscape Maintenance (MSU)	2
HRT 218	Landscape Irrigation (MSU)	3

Select ONE of the three options listed below:

COMMERCIAL HORTICULTURE OPERATIONS

AT 057	Integrated Pest Management School (MSU)	2
AT 099	Internship/Placement Training (MSU)	1-3
HRT 208	Pruning & Training Systems In Horticulture (MSU)	3
RD 201	Land & Environmental Issues In Law (MSU)	3

...and seven to nine elective credits from the following:

AT 082	Turf & Landscape Business Management (MSU)	2
AT 082/HRT 291	Current Issues in Commercial Horticulture (MSU)	2
CSS 181	Fertilizer/Pesticide Application Technology (MSU)	3
HRT 075	Fruit School/Other TBD (MSU)	1
HRT 211	Landscape Plants I (MSU)	3

COMMERCIAL TURFGRASS OPERATIONS

AT 099	Internship/Placement Training (MSU)	1-3
AT 082	Turf & Landscape Business Management (MSU)	2
CSS 232	Introduction to Turfgrass Management (MSU)	3
RD 201	Land & Environmental Issues	

SCIENCE

In Law (MSU) 3

(continued)

PLANT SCIENCE

Associate in Applied Science

(continuation)

Horticulture (DPLS0), Turfgrass (DPLS1) or Landscape/Nursery (DPLS2)

...and seven to nine elective credits from the following:

AT 082/	
HRT 291	Current Issues in Commercial Horticulture (MSU) 2
CSS 181	Fertilizer/Pesticide Application Technology (MSU) 3
CSS 242	Athletic Field Maintenance (MSU) ... 2
HRT 072	Landscape Planning & Design (MSU) . 3
HRT 211	Landscape Plants I (MSU) 3

...and two to five elective credits from the following:

AT 082	Turf & Landscape Business Management (MSU) 2
CSS 181	Fertilizer/Pesticide Application Technology (MSU) 3
HRT 208	Pruning & Training Systems in Horticulture (MSU) 3
RD 201	Land & Environmental Issues in Law (MSU) 3

LANDSCAPE AND NURSERY

AT 099	Internship/Placement Training (MSU) 1-3
CSS 232	Introduction to Turfgrass Management (MSU) 3
HRT 072	Landscape Planning & Design (MSU) . 3
HRT 211	Landscape Plants I (MSU) 3
HRT 212	Landscape Plants II (MSU) 3

ASSOCIATE IN ARTS DEGREE (DLIB0)

Students with questions about this program should consult an Associate in Arts advisor.

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	Humanities
Anthropology	Journalism
Archaeology	Music
Communications	Political Science
Criminal Justice	Pre-Law
Education - Elementary	Psychology
Education - Secondary	Social Science
Education - Special	Social Work
English	Sociology
Geography	Speech
History	Theatre

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.

A minimum of 60 credit hours completes the Associate in Arts degree. This degree also satisfies the requirements of the MACRAO Transfer Agreement.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Distribution Requirements

In addition to meeting the distribution requirements listed below, students must also meet the general graduation requirements as listed in the college catalog. **Please note that ENG-10000 is required of all students in this program,**

unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.

	Credit Hours
I. Communication	
E. CIS-10500*	3
F. ENG-10000 (if required)	0-1
G. ENG-10300 or ENG-10303*	3
H. ENG-10400 or ENG-10403*	3
E. SPE-10500 or SPE-11400*	3
	12-13
II. Humanities	
(Only two courses per subject area can be used to meet degree requirements in humanities.)	
A. Select one course from Art, Music, or Theatre.*	2-3
B. Select one course from Journalism, Languages, or Literature.*	3
C. PHL-20100 or PHL-21000*	3
D. HIS-10500, HIS-10600, HIS-20100, HIS-20200, or HIS-20300*	3
	11-12
III. Social Science	
(Only two courses per subject area can be used to meet degree requirements in social science.)	
A. POL-10100 or POL-10500*	3
B. GEO-10000, POL-20000, or POL-20100*	3-4
C. ANT-10100, SOC-10100, or PSY-10100*	3
D. Select an additional course from Anthropology, Economics, Geography, Political Science, Psychology, or Sociology	3
	12-13
IV. Mathematics and Science	
(Only two courses per subject area can be used to meet degree requirements in mathematics and science.)	
A. MTH-12000 or higher*	4
B. Select two lecture/lab science courses from BIO, CHE, GEL, or PHY*	8-10
	12-14
V. Electives	
(Three credits in Physical Education courses can be used to meet degree requirements.)	
Select any 10000-level or higher courses	13-15
Minimum Total Credit Hours Required	60

Course Sequence

Since students will select different program majors and universities to attend after Kirtland, there is no one specific order in which they should complete their courses. Therefore, it is extremely important that students meet with their advisor to discuss course selection.

TRANSFER DEGREES

*Courses required to meet General Education Core Competencies

ASSOCIATE IN BUSINESS ADMINISTRATION (DABA1)

Students with questions about this program should consult an Associate in Business Administration advisor.

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.

A **minimum of 60 credit hours** completes the Associate in Business Administration. This degree also satisfies the requirements of the MACRAO Transfer Agreement.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Distribution Requirements

In addition to meeting the distribution requirements listed below, students must also meet the general graduation requirements as listed in the college catalog. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

	Credit Hours
I. Communication	
A. CIS-10500*	3
B. ENG-10000 (if required)	0-1
C. ENG-10300 or ENG-10303*	3
D. ENG-10400 or ENG-10403*	3
E. SPE-10500 or SPE-11400*	<u>3</u>
	12-13
II. Humanities	
(Only two courses per subject area can be used to meet degree requirements in humanities.)	
A. Select one course from Art, Music, or Theatre.*	2-3
B. Select one course from Journalism, Languages, or Literature.*	3
C. PHL-20100 or PHL-21000*	3
D. HIS-10500, HIS-10600, HIS-20100, HIS-20200, or HIS-20300*	<u>3</u>
	11-12
III. Social Science	
(Only two courses per subject area can be used to meet degree requirements in social science.)	
A. POL-10100 or POL-10500*	3
B. GEO-10000, POL-20000, or POL-20100*	3-4
C. ANT-10100, SOC-10100, or PSY-10100*	3
D. ECO-20100 and ECO-20200	<u>6</u>
	15-16
IV. Mathematics and Science	
A. MTH-12100 or higher*	4
B. MTH-20600	4
C. Select one lecture/lab science course from BIO, CHE, GEL, or PHY*	<u>4-5</u>
	12-13
V. Electives	
A. ACC-12100* and ACC-12200 (*Students with little or no accounting background will be required to take ACC-10600 or ACC-10601 before taking ACC-12100.)	8
B. Elective	<u>0-2</u>
	8-10
Minimum Total Credit Hours Required	60

Course Sequence

Since students will select different program majors and universities to attend after Kirtland, there is no one specific order in which they should complete their courses. Therefore, it is extremely important that students meet with their advisor to discuss course selection.

*Courses required to meet General Education Core Competencies

ASSOCIATE IN COMPUTERS

Computer Science (DACP0) or Information Systems (DACP1)

Students with questions about this program should consult an Associate in Computers advisor.

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, systems analysts, network administrators, 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 application programmers, systems programmers, software engineers, and 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.

A **minimum of 60 credit hours** completes the Associate in Computers degree. This degree also satisfies the requirements of the MACRAO Transfer Agreement.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level

courses, they must be completed before a student can register for those college-level courses.

Distribution Requirements

In addition to meeting the distribution requirements listed below, students must also meet the general graduation requirements as listed in the college catalog. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

	Credit Hours
I. Communication	
A. ENG-10000 (if required)	0-1
B. ENG-10300 or ENG-10303*	3
C. ENG-10400 or ENG-10403*	3
D. SPE-10500 or SPE-11400*	3
	9-10
II. Humanities	
(Only two courses per subject area can be used to meet degree requirements in humanities.)	
A. Select one course from Art, Music, or Theatre.*	2-3
B. ANT-10500, HIS-10500, HIS-10600, HIS-20100, HIS-20200, or HIS-20300*	3
C. PHL-20100 or PHL-21000*	3
D. Select one course from Journalism, Languages, or Literature.*	3
	11-12
III. Social Science	
A. POL-10100 or POL-10500*	3
B. GEO-10000, POL-20000, or POL-20100	3-4
C. ANT-10100, PSY-10100, or SOC-10100	3
D. Select one course from Psychology.	3
	12-13
IV. Mathematics and Science	
A. MTH-12000 or higher*	4
(MTH-20500 or MTH-20600 cannot be counted for credit.)	
B. BIO-10100, BIO-20100, BIO-20200, BIO-21000, or BIO-21300	4
C. Select one lab course from Chemistry	4-5
	12-13
V. Computer Major	
A. CIS-10500	3
B. CIS-27001	3
C. CIS-27101	4
	10

TRANSFER DEGREES

(continued)

ASSOCIATE IN COMPUTERS

Computer Science (DACP0) or Information Systems (DACP1)

(continuation)

Select ONE of the options below:

Computer Science Option (Select 3 - 6 credits.)

- A. CIS-17001 (3 credits)
- B. CIS-23501 (3 credits)
- C. CIS-26000 (3 credits)
- D. MTH-12100 (4 credits)
- E. MTH-18001 (4 credits)
- F. MTH-22002 (4 credits)

3-6

Information Systems Option (Select 3 - 6 credits.)

- A. ACC-12100 (4 credits)
- B. ACC-12200 (4 credits)
- C. BUS-10100 (3 credits)
- D. CIS-17001 (3 credits)
- E. CIS-23501 (3 credits)
- F. CIS-26000 (3 credits)
- G. ECO-20100 (3 credits)
- H. ECO-20200 (3 credits)

3-6

Minimum Total Credit Hours Required

60

Course Sequence

Since students will select different program majors and universities to attend after Kirtland, there is no one specific order in which they should complete their courses. Therefore, it is extremely important that students meet with their advisors to discuss course selection.

NOTE: Schools vary in the number of credits over 60 that will transfer. Students should check with their advisors for transferability of additional courses.

*Courses required to meet General Education Core Competencies

ASSOCIATE IN CRIMINAL JUSTICE - GENERALIST (DCJG0)

Students with questions about this program should consult a Criminal Justice advisor.

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.

A **minimum of 61 credit hours** completes the Associate in Criminal Justice - Generalist degree. This degree also satisfies the requirements of the MACRAO Transfer Agreement.

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.

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Distribution Requirements

In addition to meeting the distribution requirements listed below, students must also meet the general graduation requirements as listed in the college catalog. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

	Credit Hours
I. Communication	
A. CIS-10500*	3
B. ENG-10000 (if required)	0-1
C. ENG-10300 or ENG-10303*	3
D. ENG-10400 or ENG-10403*	3
E. SPE-10500 or SPE-11400*	3
	12-13
II. Humanities	
(Only two courses per subject area can be used to meet degree requirements in humanities.)	
A. Select one course from Art, Music, or Theatre.*	2-3
B. Select one course from Journalism, Languages, or Literature.*	3
C. PHL-20100 or PHL-21000*	3
D. HIS-10500, HIS-10600, HIS-20100, HIS-20200, or HIS-20300*	3
	11-12
III. Social Science	
A. POL-10100 or POL-10500*	3
B. GEO-10000, POL-20000, or POL-20100	3-4
C. SOC-10100	3
D. PSY-10100 and PSY-20200*	6
	15-16
IV. Mathematics and Science	
A. MTH-12000 or higher *	4
(MTH-20500 or MTH-20600 cannot be counted for credit.)	
B. Select two lecture/lab science courses from BIO, CHE, GEL, or PHY*	8-10
	12-14

(continued)

TRANSFER DEGREES

ASSOCIATE IN CRIMINAL JUSTICE - GENERALIST (DCJG0) (continuation)

V. Electives		NOTE: Students must maintain a GPA of 2.0 or better, with a C or better in all criminal justice courses.
A. CJS-10000	3	
B. CJS-24000 or SOC-24000 or substitution approved by advisor	3	*Courses required to meet General Education Core Competencies
C. Criminal Justice electives	<u>1-5</u>	
	7-11	
Minimum Total Credit Hours Required	61	

Course Sequence

Since students will select different program majors and universities to attend after Kirtland, there is no one specific order in which they should complete their courses. Therefore, it is mandatory that students meet with their advisor to discuss course selection.

ASSOCIATE IN FINE ARTS

Creative Writing (DAFA0), Studio Art (DAFA1), or Theatre Arts (DAFA2)

Students with questions about this program should consult a Fine Arts advisor.

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.

A minimum of 60 credit hours completes the Associate in Fine Arts degree. This degree also satisfies the requirements of the MACRAO Transfer Agreement.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Distribution Requirements

In addition to meeting the distribution requirements listed below, students must also meet the general graduation requirements as listed in the college catalog. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

	Credit Hours
I. Communication	
A. CIS-10500*	3
B. ENG-10000 (if required)	0-1
C. ENG-10300 or ENG-10303*	3
D. ENG-10400 or ENG-10403*	3
E. SPE-10500 or SPE-11400*	3
	<u>12-13</u>
II. Humanities	
(Only two courses per subject area can be used to meet degree requirements in humanities.)	
A. Select one course from Art, Music, or Theatre.	2-3
B. Select one course from Journalism, Languages, or Literature.*	3
C. HIS-10500, HIS-10600, HIS-20100, HIS-20200, or HIS-20300*	3
D. PHL-20100 or PHL-21000*	3
E. Select a Fine Arts option: Creative Writing Option: ENG-21500. Studio Art Option: Select an art course. Theatre Arts Option: THE-12000.	3
	<u>14-15</u>
III. Social Science	
(Only two courses per subject can be used to meet degree requirements in social science.)	
A. POL-10100 or POL-10500*	3
B. GEO-10000, POL-20000, or POL-20100*	3-4
C. ANT-10100, PSY-10100, or SOC-10100	3
	<u>9-10</u>
IV. Mathematics and Science	
(Only two courses per subject area can be used to meet degree requirements in mathematics and science.)	
A. MTH-12000 or higher*	4
(MTH-20500 or MTH-20600 cannot be counted for credit.)	
B. Select two lecture/lab science courses from BIO, CHE, GEL, or PHY.	8-10
	<u>12-14</u>

(continued)

TRANSFER DEGREES

ASSOCIATE IN FINE ARTS

Creative Writing (DAFA0), Studio Art (DAFA1), or Theatre Arts (DAFA2)

(continuation)

V. Electives

Select ONE of the following options:

Creative Writing Option

- A. ENG-29100 or ENG 29200 3
 - B. Additional courses approved by advisor 6-10
- 9-13**

Studio Art Option

- A. ART-28000 3
 - B. Additional courses approved by advisor 6-10
- 9-13**

Theatre Arts Option

- A. THE-27000 3
 - B. Additional courses approved by advisor 6-10
- 9-13**

Minimum Total Credit Hours Required 60

Course Sequence

Since students will select different program majors and universities to attend after Kirtland, there is no one specific order in which they should complete their courses. Therefore, it is extremely important that students meet with their advisor to discuss course selection.

*Courses required to meet General Education Core Competencies

ASSOCIATE IN SCIENCE DEGREE

Life Science (DASC1) or Physical Science (DASC2)

Students with questions about this program should consult an Associate in Science advisor.

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

A minimum of 60 credit hours completes the Associate in Science degree. This degree also satisfies the requirements of the MACRAO Transfer Agreement.

Prerequisites

A student is required to demonstrate his/her proficiency in basic academic skills before beginning course work at Kirtland Community College (see page 14). If test results show a need for developmental course work in English (DEV-088-, 09000), reading (DEV-08601, 09601), and/or mathematics (DEV-06300), a student is expected to begin these courses during his/her first semester and to finish these courses before completing 30 credit hours.

Because DEV courses are prerequisites to most college-level courses, they must be completed before a student can register for those college-level courses.

Distribution Requirements

In addition to meeting the distribution requirements listed below, students must also meet the general graduation requirements as listed in the college catalog. **Please note that ENG-10000 is required of all students in this program, unless they either demonstrate satisfactory writing mechanics on the placement essay (writing sample) or achieve a grade of SA in DEV-09000 or DEV-09904.**

	Credit Hours
I. Communication	
A. CIS-10500*	3
B. ENG-10000 (if required)	0-1
C. ENG-10300 or ENG-10303*	3
D. ENG-10400 or ENG-10403*	3
E. SPE-10500 or SPE-11400*	3
	<u>12-13</u>

II. Humanities

(Only two courses per subject area can be used to meet degree requirements in humanities.)

A. Select one course from Art, Music, or Theatre.*	2-3
B. Select one course from Journalism, Languages, or Literature.*	3
C. HIS-10500, HIS-10600, HIS-20100, HIS-20200, or HIS-20300*	3
D. PHL-20100 or PHL-21000*	3
	<u>11-12</u>

III. Social Science

(Only two courses per subject area can be used to meet degree requirements in social science.)

A. POL-10100 or POL-10500*	3
B. GEO-10000, POL-20000, or POL-20100*	3-4
C. ANT-10100, PSY-10100, or SOC-10100	3
	<u>9-10</u>

IV. Mathematics and Science - Select ONE of the options below.

Life Science Option

A. Select two of the following mathematics courses: MTH-18001, 20600, 22002, 22102, or 22202	8
B. BIO-10100	4
C. BIO-20100, 20200, 21000, or 21300	4
D. Select either a Chemistry or Physics sequence: CHE-10101/02 and 10201/02 or PHY-20101/02 and 20201/02 or PHY-22101/02 and PHY-22201/02	10
	<u>26</u>

Physical Science Option

A. Select two of the following mathematics courses: MTH-18001, 22002, 22102, or 22202 (MTH-20500 or MTH-20600 cannot be counted for credit.)	8
B. Select either a Chemistry or Physics sequence: CHE-10101/02 and CHE-10201/02 or PHY-20101/02 and PHY-20201/02 or PHY-22101/02 and PHY-22201/02	10

(continued)

TRANSFER DEGREES

ASSOCIATE IN SCIENCE DEGREE

Life Science (DASC1) or Physical Science (DASC2) (continuation)

- C. In addition to courses taken under A and B, select any two of the following courses:

BIO-10100, 20100, 21000, 21300;

CHE-10101/02, 10201/02;

GEL-10500;

MTH-22102, 22202;

PHY-20101/02, PHY-20201/02, PHY-22101/02;

PHY-22201/02

8
26

V. Electives

(Three credits in Physical Education courses can be used to meet degree requirements.)

Select any 10000-level or above courses

0-2
0-2

Minimum Total Credit Hours Required **60**

Course Sequence

Since students will select different program majors and universities to attend after Kirtland, there is no one specific order in which they should complete their courses. Therefore, it is extremely important that students meet with their advisor to discuss course selection.

*Courses required to meet General Education Core Competencies

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COURSE DESCRIPTIONS

This portion of the 2002-2003 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:

C H E - 1 0 0 0 3 1
Chemical Science² (F,W)³ 4⁴(3-2)⁵
Prerequisite: DEV-07300⁷ or
Corequisite: DEV-07300⁸
(Credit Type)⁹

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. **Prerequisite⁷ or corequisite⁸:** DEV-07300.⁶

specific distribution type. The category in which a course may be used is listed in italics.

1. **Course Number:** Composed of three letters and a number. The letters identify a course by subject area. In this case, CHE 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

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-10601 Fundamentals of Accounting with Computers (V) 4(4-0)

This course is identical to ACC-10600 with the exception that all course work is done using a computer and accounting software.

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-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.

ACC-22100 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.

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) 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-12500 EMT I (F) 7(4-6)
This course prepares students to function in emergency medical care within the scope and responsibilities of the Basic Emergency Medical Technician (EMT). Hands-on practical skills training is included.

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-13500 EMT II (W) 4(2-5)
This course is the second part of the EMT certification program. It includes didactic, lab practice, and structured clinical experiences in pre-hospital and hospital settings. **Prerequisite:** ALH-12500.

ALH-15000 Basic Pharmacology (W) 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:** 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-22300 Paramedic I (F) 5(4-2)
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:** BIO-10701 and BIO-10702.

ALH-23300 Paramedic II (W) 5(4-2)
This course is the second part of the paramedic program.

Hands-on practical skills training is included. **Prerequisite:** ALH-22300. **Prerequisite or corequisite:** ALH-15000.

ALH-24300 Paramedic III (S) 3(1-6)
This course is the third part of the paramedic program. It provides structured clinical experience in pre-hospital and hospital settings. **Prerequisite:** ALH-23300.

ALH-25300 Paramedic IV (F) 12(3-23)
This course is the fourth part of the paramedic program. Further theory, hands-on training, and structured clinical experiences are included. **Prerequisite:** ALH-24300.

ALH-25500 Medical Assistant Professional Issues & Externship (S) 4(1-9)
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.

ALH-26300 Paramedic V (W) 4(0-12)
This course is the final part of the paramedic program and includes didactic, lab practice, and clinical experience. **Prerequisite:** ALH-25300.

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. **Prerequisite:** permission of instructor. *(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(2-2)

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(2-2)
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 6.0. 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-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-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-23100 Auto Service Area (W) 8(1-11)

The service area will finalize training in the automotive programs by providing a work situation atmosphere. Students will gain hands-on experience that is imperative to development of skills needed to function as a productive automotive technician. **Prerequisites:** successful completion of semesters one, two, and three of automotive curriculum. **Corequisite:** AUT-16500.

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-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. **Prerequisite:** CHE-10003 and CHE-10004, one year of high school chemistry, PHY-10501 and PHY-10502, or permission of instructor. (*Science Credit*)

BIO-10700 see BIO-10701 and BIO-10702**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, except for Associate 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, the nervous system, sensory system, and endocrine 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 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 or permission of instructor. (*Science Credit, except for 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. **Prerequisite:** BIO-10100 or permission of instructor. (*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 nonspecialists 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 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) 3-8(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-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 (V) 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.

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).

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 AND PERSONAL DEVELOPMENT (CAR)

CAR-10100 Personal Development (V) 3(3-0)
This course will be of value to both sexes. Although it

examines women's issues, emphasis will be placed on the opportunities available to each person to make use of his/her full potential. Examining the influences of social and sexual roles on the development of self-awareness and personal power will provide a basis for enhancing communication skills, relationships, resource management, and personal health.

CAR-10200 College Success & Survival (F,W) 2(2-0)

This course is designed to increase the student's success in college by introducing him/her to study and life skills essential to accomplish the educational objectives and the social expectations of the college community. Topics of discussion and student involvement sessions will include time management, note-taking, critical thinking, interpersonal communications skills, study techniques, test-taking techniques, relaxation techniques, library and other college resource use, financial management, writing skills, personal motivational techniques, and personal health suggestions.

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-10400 Using a College Library (F,W,S) 1(1-0)

This course is designed to teach students the problem-solving skills needed to do research, and to familiarize them with the range and type of resources available in college libraries.

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-11000 Coping with Math Anxiety (F,W) 1(1-0)

This course is designed to explore the psychological connections between math anxiety and a student's ability to do mathematics. The course is designed to enlighten a student to his/her anxiety and to explore techniques to alleviate it. Techniques in relaxation, self-talk exercises, irrational/rational beliefs, and study skills will be used.

CAR-11500 Volunteerism in the Community (V) 3(4-0)

This course gives students the opportunity to examine the role and scope of volunteerism in American society. Students in the course are required to have some significant volunteer experience, or they will be required to do volunteer work during the course. **Prerequisite:** permission of instructor.

CAR-11600 Learning Styles (V) 1(Variable)

This class on learning styles will teach students to take

responsibility for their own learning. **Prerequisite:** permission of instructor.

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-TECSM at Kirtland-Gaylord. For more information, call 989-705-3600 or go to www.kirtland.edu/mtec/.

CHEMISTRY (CHE)

CHE-10000 see CHE-10003 and CHE-10004

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-10100 see CHE-10101 and CHE-10102

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-10200 see CHE-10201 and CHE-10202

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-10002 **before** CAD-10500. Students with some previous drafting and/or CAD experience may enroll in CAD-10001 and CAD-10500 **concurrently with permission of the CAD advisor**. 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 10001 see CAD-10002

CAD-10002 Engineering Graphics & CAD (F,W) 4(3-3)
(Formerly CAD-10001)

This class will introduce students to the manufacturing design language of our industrial world. The class will be a mix of computer assisted and traditional drafting techniques. Topics will include lettering, sketching, instrumentation, orthographics, isometrics, and dimensional layout. Additional topics will include auxiliaries, sections, and notes. Students will learn the basic operation of a computer drafting program.

CAD-10500 Detail Drafting w/CAD (F,W) 4(3-3)

Detail Drafting with CAD will emphasize skills and techniques needed by mechanical and product detail CAD operators. Topics will include datum dimensioning, tolerancing, threads, fasteners, and advanced auxiliary and sectional views. Other topics will include cams, gears, and linkages. Assignments will be completed on a computer drafting program. **Prerequisite:** CAD-10002.

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. Included are floor, foundation, electrical, and plot plans; exterior elevations; door and window schedules; stairway layouts; and standard sections and details. **Prerequisite:** CAD-10002.

CAD-20000 see CAD-20001

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.

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.

CAD-21000 Product Drafting & Design/CAD (F) 4(3-1)
Product Drafting and Design is an advanced study of drafting as it relates to mass production and interchangeability. Emphasis will be placed on the dimensioning and tolerancing patterns of assemble and detail packages, including English and metric units; bill of materials; calculation of fits and stackups; geometric tolerances of form and position; surface quality control; the design process; and product analysis and redesign. **Prerequisite:** 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. Students will solve typical design problems in plastic injection molds, drill jigs, milling fixtures; attribute gauging; and sheet metal die design. The principles learned here can be applied to larger and more complicated transfer, assembly, testing and special machine tools in industry. **Prerequisite:** CAD-10500.

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:** recommendation of an advisor.

COMPUTER INFORMATION SYSTEMS (CIS)

CIS Prerequisites and Demonstrated Competency

The only CIS courses that do not have prerequisites are listed below:

CIS-01000 Basic Computing
CIS-10500 Introduction to Computers
CIS-22302 Windows XP

All other CIS courses have prerequisites. Students who have

not taken the prerequisite course will NOT be allowed entry into class without taking a competency test.

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,S) 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.

CIS-10500 Introduction to Computers (F,W,S) 3(3-0)

The student will become familiar with computer terminology, applications, and basic telecommunication concepts. Specific topics covered in this course include hardware and software terminology/concepts, Windows operating system, word processing, spreadsheet, database management, data communications, and the Internet. Application software used is Office XP (Word 2002, Excel 2002, Access 2002, and PowerPoint 2002) and the Internet Explorer. (*Communication*)

CIS-17001 Microsoft Office XP (F,W) 3(3-0)

This course covers how to utilize and integrate all the applications contained within Microsoft Office XP. Exercises will involve business applications using the word processing, spreadsheet, database management, and presentation software components of Microsoft Office. Application software used is Word 2002, Excel 2002, Access 2002, and PowerPoint 2002.

Prerequisite: CIS-10500 or demonstrated competency.

CIS-17102 PowerPoint 2002 (F,S) 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 XP (or PowerPoint 2002). **Prerequisite:** CIS-10500, CIS-22302, or demonstrated competency.

CIS-17200 Publisher (F,W,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 2002.

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 or CIS-22302.

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 Operating System (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 (V) 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 2002. **Prerequisite:** CIS-10500 or demonstrated competency.

CIS-22702 Microsoft Excel XP (F) 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. **Prerequisite:** CIS-10500, 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 2002. **Prerequisite:** CIS-10500 or demonstrated competency.

CIS-26000 Introduction to Computer Networking (V) 3(3-0)

This course includes the fundamental knowledge of one computer communicating with at least one other computer. Three areas to be examined are microcomputer to mainframe connection, microcomputer to microcomputer connection on a LAN, and using a microcomputer with a modem to communicate with large networks. **Prerequisite:** CIS-10500 or demonstrated competency.

CIS-26100 Internet (F,W,S) 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, CIS-22302, or demonstrated competency.

CIS-26200 Web Pages (F,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, CIS-26100, or demonstrated competency.

CIS-26300 Advanced Web Pages (F,W) 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. **Prerequisite:** 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.

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. **Prerequisites:** CIS-10500 and MTH-10100 or demonstrated competencies.

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:** CIS-27001 or demonstrated competency.

CIS-27200 CGI Programming (W) 2(2-0)
CGI scripts make web pages dynamic and allow users to interact with a web site. Students will learn how to write CGI scripts using the C and Perl languages for a wide variety of applications. Areas of study include generation of dynamic web pages and graphics, creating security for a CGI-activated site, creating interactive forms and image maps, and implementing search facilities. **Prerequisite:** CIS-22400.

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:** recommendation of an advisor.

CONTRACTING WITH BUSINESS AND INDUSTRY - CWB&I (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. **Corequisites:** 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.

COOPERATIVE OCCUPATIONAL EDUCATION (COE)

COE-20001 Cooperative Occupational Education-Business (F,W,S) 3(240-15)
This course is designed to allow students to be placed in a local business while attending college full time. (Students usually work part of the day and attend classes part of the day.) The work experience is evaluated on the students' ability to correlate theory with performance. **Prerequisite:** permission of the advisor.

COE-20002 Cooperative Occupational Education-Business (F,W,S) 4(320-20)
This course is designed to allow students to be placed in a local business while attending college full time. (Students usually work part of the day and attend classes part of the day.) The work experience is evaluated on the students' abilities to correlate theory with performance. **Prerequisite:** permission of the advisor.

COE-20003 Cooperative Occupational Education-Industrial/Technical (F,W,S) 3(240-15)
This course is designed to allow students to be placed in a local industry while attending college full time. (Students usually work part of the day and attend classes part of the day.) The work experience is evaluated on the students' abilities to correlate theory with performance. **Prerequisite:** permission of the advisor.

COE-20004 Cooperative Occupational Education-Industrial/Technical (F,W,S) 4(320-20)
This course is designed to allow students to be placed in a local industry while attending college full time. (Students usually work part of the day and attend classes part of the day.) The work experience is evaluated on the students' abilities to correlate theory with performance. **Prerequisite:** permission of the advisor.

CORE (COR)

Courses beginning with the three-letter COR designation are the core courses offered at M-TECSM at Kirtland-Gaylord. For more information, call 989-705-3600 or go to www.kirtland.edu/mtec/.

COSMETOLOGY (COS)

COS-11200 Manicuring I (F,W,S) 2.5(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
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(1-5)
This course covers the principles and techniques of massage, manicuring, and pedicuring. **Prerequisite:** COS-12900.

COS-13100 Cosmetology XI (F,W,S) 2.5(1-5)
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(1-5)
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(1-5)
This course covers the principles and techniques of light therapy. **Prerequisite:** COS-13200.

COS-13400 Cosmetology XIV (F,W,S) 2.5(1-5)
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(1-5)
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(1-5)
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-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(1-5)

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(1-5)

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(1-5)

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(1-5)

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(1-5)

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(1-5)

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) (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:** demonstrated numeric competency, 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 instruction in basic writing skills. **Prerequisite:** permission of the instructor or the writing center coordinator.

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 through an audio-tutorial program.

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, including ENG-10300/10303. (*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, including ENG-10300/10303. (*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-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.

ELECTRICAL TECHNOLOGY (ELT)

Courses beginning with the three-letter ELT designation are the electrical technology courses offered at M-TECSM at Kirtland-Gaylord. For more information, call 989-705-3600 or go to www.kirtland.edu/mtec/.

ENGLISH and LITERATURE (ENG)

ENG-10000 Writing Lab (F,W,S) 1(1-1)

This course provides personalized, self-paced instruction in writing skills. Students work in small groups or individually with the instructor. Because this is part of the English composition requirement, most students will take this course while enrolled in ENG-10300/10303. (*Communication*)

ENG-10300 English Composition I (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. **Prerequisite:** DEV-09000, DEV-09904, or a satisfactory writing sample. (*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, DEV-09904, or a satisfactory writing sample. (*Communication*)

ENG-10400 English Composition II (F,W,S) 3(3-0)
A continuation of English Composition I, this composition 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. **Prerequisite:** ENG-10300/10303. (*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:** 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:** 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:** 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:** 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:** 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-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:** 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:** 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:** 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:** 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:** 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:** 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:** 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:** 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:** 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:** 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:** 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-TECSM at Kirtland-Gaylord. For more information, call 989-705-3600 or go to www.kirtland.edu/mtec/.

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*)

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 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)

The course is meant to give students an introduction to the basic concepts of the social sciences and the humanities by exploring the relationship between individuals and the society in which they live. The course will begin by examining the language of these disciplines - what is culture? what is the role of the individual in a culture? - and then go on to put a magnifying glass to three different societies to see how these concepts were brought to life. **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-TECSM at Kirtland-Gaylord. For more information, call 989-705-3600 or go to www.kirtland.edu/mtec/.

LANGUAGE

CHN-10100 Chinese I (V) 3(3-0)

This self-instructional course addresses the needs of a beginning student in Chinese. The course concentrates on functional communication. The class involves independent listening to audiotapes and intensive language practice with a native-speaking tutor three hours a week. *(Humanities Credit)*

FRE-10000 French I (V) 3(3-0)
This self-instructional course addresses the needs of a beginning student in French. The course concentrates on functional communication. The class involves independent listening to audiotapes and intensive language practice with a native-speaking tutor three hours a week. *(Humanities Credit)*

FRE-10100 French II (V) 3(3-0)
This course is a continuation of FRE-10000. **Prerequisite:** FRE-10000 or permission of the Self-Instructional Language Program (SILP) coordinator. *(Humanities Credit)*

FRE-20100 French III (V) 3(3-0)
This course is a continuation of FRE-10100. **Prerequisite:** FRE-10100 or permission of the SILP coordinator. *(Humanities Credit)*

FRE-20200 French IV (V) 3(3-0)
This course is a continuation of FRE-20100. **Prerequisite:** FRE-20100 or permission of the SILP coordinator. *(Humanities Credit)*

GER-10100 German I (V) 3(3-0)
This self-instructional course addresses the needs of a beginning student in German. The course concentrates on functional communication. The class involves independent listening to audiotapes and intensive language practice with a native-speaking tutor three hours a week. *(Humanities Credit)*

GER-10200 German II (V) 3(3-0)
This course is a continuation of GER-10100. **Prerequisite:** GER-10100 or permission of the Self-Instructional Language Program (SILP) coordinator. *(Humanities Credit)*

GER-20100 German III (V) 3(3-0)
This course is a continuation of GER-10200. **Prerequisite:** GER-10200 or permission of the SILP coordinator. *(Humanities Credit)*

GER-20200 German IV (V) 3(3-0)
This course is a continuation of GER-20100. **Prerequisite:** GER-20100 or permission of the SILP coordinator. *(Humanities Credit)*

PLH-10000 Polish I (V) 3(3-0)
This self-instructional course addresses the needs of a beginning student in Polish. The course concentrates on functional communication. The class involves independent listening to audiotapes and intensive language practice with a native-speaking tutor three hours a week. *(Humanities*

Credit)

PLH-10100 Polish II (V) 3(3-0)
This course is a continuation of PLH-10000. **Prerequisite:** PLH-10000 or permission of the Self-Instructional Language Program (SILP) coordinator. *(Humanities Credit)*

PLH-20100 Polish III (V) 3(3-0)
This course is a continuation of PLH-10100. **Prerequisite:** PLH-10100 or permission of the SILP coordinator. *(Humanities Credit)*

PLH-20200 Polish IV (V) 3(3-0)
This course is a continuation of PLH-20100. **Prerequisite:** PLH-20100 or permission of the SILP coordinator. *(Humanities Credit)*

RUS-10100 Russian I (V) 3(3-0)
This self-instructional course addresses the needs of a beginning student in Russian. The course concentrates on functional communication. The class involves independent listening to audiotapes and intensive language practice with a native-speaking tutor three hours a week. *(Humanities Credit)*

RUS-10200 Russian II (V) 3(3-0)
This course is a continuation of RUS-10100. **Prerequisite:** RUS-10100 or permission of the Self-Instructional Language Program (SILP) coordinator. *(Humanities Credit)*

RUS-20100 Russian III (V) 3(3-0)
This course is a continuation of RUS-10200. **Prerequisite:** RUS-10200 or permission of the SILP coordinator. *(Humanities Credit)*

RUS-20200 Russian IV (V) 3(3-0)
This course is a continuation of RUS-20100. **Prerequisite:** RUS-20100 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-10100 Spanish I (V) 3(3-0)

This self-instructional course addresses the needs of a beginning student in Spanish. The course concentrates on functional communication. The class involves independent listening to audiotapes and intensive language practice with a native-speaking tutor three hours a week. (*Humanities Credit*)

SPN-10200 Spanish II (V) 3(3-0)

This course is a continuation of SPN-10100. **Prerequisite:** SPN-10100 or permission of the Self-Instructional Language Program (SILP) coordinator. (*Humanities Credit*)

SPN-20100 Spanish III (V) 3(3-0)

This course is a continuation of SPN-10200. **Prerequisite:** SPN-10200 or permission of the SILP coordinator. (*Humanities Credit*)

SPN-20200 Spanish IV (V) 3(3-0)

This course is a continuation of SPN-20100. **Prerequisite:** SPN-20100 or permission of the SILP coordinator. (*Humanities Credit*)

LITERATURE

refer to English and Literature,
pages 158-160.

MANUFACTURING PROCESSES TECHNOLOGY (MPT)

Additional manufacturing processes technology courses are available at M-TECSM at Kirtland-Gaylord. For a complete listing, call 989-705-3600 or go to www.kirtland.edu/mtec/.

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:** recommendation of an advisor.

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-20000 Principles of Marketing (F) 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.

MKT-20100 Principles of Retailing (F) 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-20400 Advertising (V) 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,S) 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 and MAS-13004.

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 and MAS-13004.

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 (V) 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.

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, MAS-12500, and MAS-13005.

MAS-12300 Structural Based Bodywork I (S) 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. **Prerequisite:** 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 (S) 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. **Prerequisite:** 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, BIO-10702, and MAS-10000.

MAS-13004 Topics I (W) 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. **Corequisite:** MAS-10400.

MAS-13005 Topics II (V) 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. **Corequisite:** MAS-12500.

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 sporting events. **Prerequisite:** permission of instructor.

MAS-27500 Directed Study-Massage Therapy I (S) 2(2-0)

This course enables the student to focus on his or her

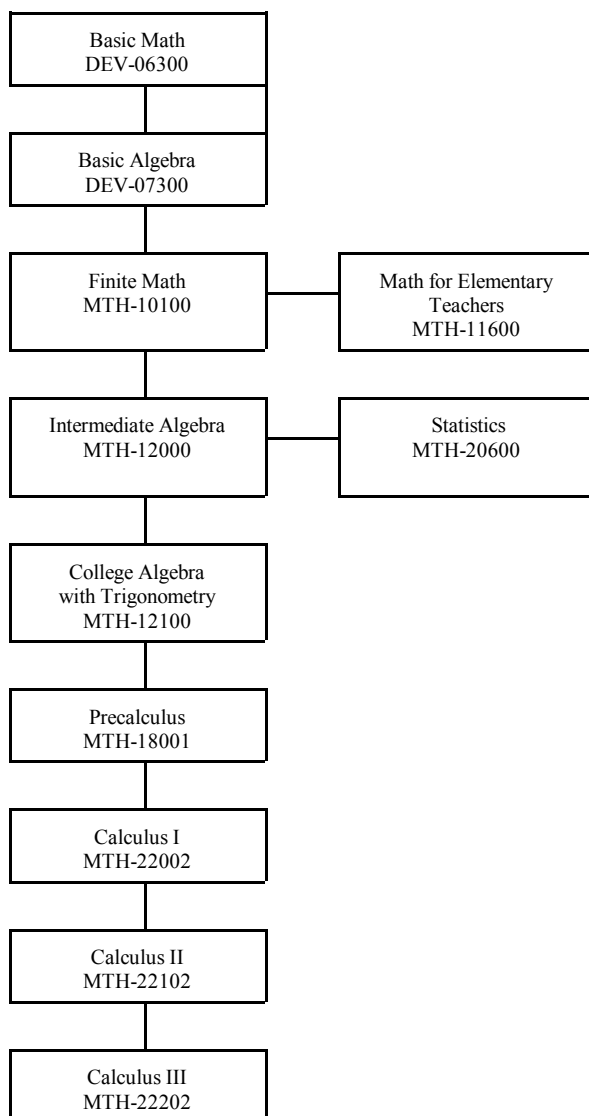
individual area of interest. Specialized areas of study and methods of study must be approved by the instructor. **Prerequisite:** MAS-10300 or permission of instructor.

MATHEMATICS (MTH)

For Basic Mathematics, DEV-06300, and for 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 B or better or successful completion of placement test.



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:** demonstrated algebraic competency or MTH-10100. **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:** demonstrated algebraic competency, 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 Pre-Calculus (F,W) 4(4-0)

This course includes the study of functions, algebraic operations, trigonometry, logarithmic and exponential functions, 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 (W,S) 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 (F) 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 (W) 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 (V) 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 (W) 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 corequisite:** 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-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*)

NURSING (NUR)

NUR-10502 Foundations of Nursing (F) 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) 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-10802 Nursing Skills & Clinical I (F) 5(6-6)

This course consists of guided learning clinical experience in campus lab and 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 a health care facility. **Prerequisite:** admission into the Level I nursing program. **Corequisite:** NUR-10502.

NUR-12302 Nursing Clinical II (W) 6(0-18)

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-10802. **Corequisite:** NUR-12502.

NUR-12502 Nursing Care of Adults (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 (S) 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. **Prerequisite:** NUR-12502. **Corequisite:** NUR-13600.

NUR-12702 Nursing Care of Childbearing Family (S) 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. **Prerequisite:** NUR-12502. **Corequisite:** NUR-13600.

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-13600 Parent/Child Nursing Clinical (S) 1(0-3)

This course is designed to introduce the student to the concepts of pediatric and obstetrical nursing care. The course will include the health concerns confronting children of all ages, childbearing women, families, caretakers, and the community. Application of these concepts will occur in selected hospital and community settings. **Corequisites:** NUR-12602 and NUR-12702.

NUR-20000 Introduction to Complementary Therapies (V) 2(2-0)

This course is designed to introduce the student to the application of nontraditional therapies as nursing interventions. The course content may include art therapy, aromatherapy, music therapy, humor therapy, imagery, spirituality, relaxation, reminiscence therapy, meditation, therapeutic touch, nutrition therapy, acupuncture, and other current therapies.

NUR-21202 Nursing Assessment (F) 2(1-2)

This course is designed to explore the nursing process in depth by introducing methods for eliciting a sound health history and practicing techniques for physical assessment. **Prerequisite:** LPN with experience or permission of instructor.

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-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-21202.

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-21202.

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) 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-21202.

NUR-24300 Community Mental Health Nursing

Clinical (F,W) 2.5(0-7.5)

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-21202.

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-25200 Professional Practice & Leadership (S) 4(4-0)

This course is designed to assist the transition of the student nurse to graduate nurse. Topics include planning and decision-making, directing and delegating, legal and ethical issues, change, stress, and conflict resolution. **Prerequisites:** BIO-21500, NUR-21202, NUR-21400, NUR-22200, and NUR-22300. **Corequisite:** NUR-25300.

NUR-25300 Leadership Clinical (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) 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.

OFFICE INFORMATION SYSTEMS (OIS)

OIS-10100 Basic Keyboarding 1
This course is for those who have not had any previous keyboarding instruction. **Prerequisite:** permission of advisor.

OIS-10400 see OIS-10401-10403

OIS-10401 Keyboarding I-A 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 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 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 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 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-10700 Medical Office Transcription 3
(Formerly MOA-11400)

The course will explore the types of forms and content utilized and required in medical transcription. Guidelines will be introduced for style, grammar, and specific medical transcription mechanics such as editing, spelling, and formatting of medical reports. **Prerequisites:** ALH-10101; OIS-11403, OIS-18203, or equivalent; or permission of advisor.

OIS-10800 see OIS-10801-10803

OIS-10801 Medical Transcription I-A 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:** ALH-10101 with a grade of C or better; ENG-10300/10303; and OIS-11403, OIS-18203, or equivalent; or permission of advisor.

OIS-10802 Medical Transcription I-B 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:** ALH-10101 with a grade of C or better; ENG-10300/10303; and OIS-11403, OIS-18203, or equivalent; or permission of advisor.

OIS-10803 Medical Transcription I-C 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:** ALH-10101 with a grade of C or better; ENG-10300/10303; and OIS-11403, OIS-18203, or equivalent; or permission of advisor.

OIS-11201 Business Calculations 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 3

This course includes the study and practical application of coding medical diagnoses and procedures from medical record documentation using ICD-9-CM 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:** permission of advisor.

OIS-11400 see OIS-11401-11403**OIS-11401 Keyboarding II-A 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, OIS-18203, or equivalent, or permission of advisor.

OIS-11402 Keyboarding II-B 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-10403, OIS-18203, or equivalent, or permission of advisor

OIS-11403 Keyboarding II-C 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-10403, OIS-18203, or equivalent, or permission of advisor.

OIS-11500 Medical Insurance Billing 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:** permission of advisor.

OIS-17000 Legal Terminology & Transcription 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-11403, or permission of advisor.

OIS-18115 see OIS-18201-18203**OIS-18201 Word Processing I - Word-A 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 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-10403 or permission of advisor.

OIS-18203 Word Processing I - Word-C 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-10403 or permission of advisor.

OIS-19000 see OIS-19001-19003**OIS-19001 Machine Transcription-A 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-11403, OIS-18203, or equivalent, or permission of advisor.

OIS-19002 Machine Transcription-B 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:** ENG-10300/10303; OIS-11403, OIS-18203, or equivalent, or permission of advisor.

OIS-19003 Machine Transcription-C 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:** ENG-10300/10303; OIS-11403, OIS-18203, or equivalent, or permission of advisor.

OIS-20500 see OIS-20501-20503**OIS-20501 Records Management-A 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 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:** permission of advisor.

OIS-20503 Records Management-C 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:** permission of advisor.

OIS-20600 see OIS-20601-20603

OIS-20601 Medical Transcription II-A 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 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-10803 or equivalent or permission of advisor.

OIS-20603 Medical Transcription II-C 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-10803 or equivalent or permission of advisor.

OIS-20700 see OIS-20701-20703

OIS-20701 Medical Transcription III-A 1
This course teaches transcription of authentic physician-dictated radiology and pathology reports. Radiology reports such as nuclear medicine, computer tomography, 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 and OIS-22100 or permission of advisor.

OIS-20702 Medical Transcription III-B 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-20603 and OIS-22100 or permission of advisor.

OIS-20703 Medical Transcription III-C 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-20603 and OIS-22100 or permission of advisor.

OIS-20800 Medical Keyboarding 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; OIS-11403, OIS-18302, or equivalent; or permission of advisor.

OIS-20900 see OIS-20901-20902

OIS-20901 Medical Office Administration 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; ENG-10300/10303; and OIS-

11403, OIS-18203, or equivalent; or permission of advisor.

OIS-20902 Introduction to Medical Billing & Coding 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; ENG-10300/10303; and OIS-11403, OIS-18203, or equivalent; or permission of advisor.

OIS-21000 Office Procedures & Practices 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, OIS-18203, or equivalent; or permission of advisor.

OIS-21300 Medical Coding II 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 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 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; OIS-11403; OIS-18203 or equivalent; or permission of advisor.

OIS-22100 Office Pharmacology 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 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 3

This course is designed to provide students with the practical application of previously acquired skills to simulated law office projects. **Prerequisites:** BUS-10100, BUS-21500, OIS-11403, and OIS-17000 with a grade of C or better, or permission of advisor.

OIS-24101 Externship - Administrative Assistant 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, permission of advisor, and a GPA of 2.0 or better.

OIS-24102 Externship - Legal Secretary 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 the program, permission of advisor, and a GPA of 2.0 or better.

OIS-24103 Externship - Medical Secretary 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 the program, permission of advisor, and a GPA of 2.0 or better.

OIS-24106 Externship - Medical Transcription 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 the program, permission of advisor, and a GPA of 2.0 or better.

OIS-24107 Externship - Advanced Word Processing Specialist 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 the program, permission of advisor, and a GPA of 2.0 or better.

OIS-24108 Externship - Medical Clerk 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 the program, permission of advisor, and a GPA of 2.0 or better.

OIS-24109 Externship - Medical Billing/Coding 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 the program, permission of advisor, and a GPA of 2.0 or better.

OIS-275-- Directed Study-Secretarial Science 1-6

This course is designed to meet special occupational needs for individual students. **Prerequisite:** recommendation of an advisor.

PHILOSOPHY (PHL)

PHL-20100 Introduction to Philosophy (V) 3(3-0)

This course is a study of the major historical and contemporary schools of thought and movements in man's search for truth. **Prerequisite or corequisite:** ENG-10300/10303 or permission of instructor. (*Humanities Credit*)

PHL-21000 Introduction to Ethics: Historical and Applied Approach (W) 3(3-0)

This course will explore a variety of philosophical debates and rationales for acting ethically. The first half of the course will look at actual philosophical texts and explore why and how certain decisions regarding courses of action were made. The second half of the class will look at the applied use of ethics in late twentieth-century America: why are certain laws on the books; how should one (or perhaps can one) live a fulfilling life as an individual and as a member of a society; what does it mean to live a "good" life; is it possible to live ethically without religion; how do we make certain choices as individuals, as a community, and as a state? (*Humanities Credit*)

PHYSICAL EDUCATION AND 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.

PHYSICS (PHY)

PHY-10500 see PHY-10501 and PHY-10502**PHY-10501 Physical Science (F,W,S) 3(3-0)**

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-20100 see PHY-20101 and PHY-20102

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 Laboratory (F) 1(0-3)
This is a laboratory course to accompany PHY-20101. **Corequisite:** PHY-20101.

PHY-20200 see PHY-20201 and PHY-20202

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(6-0)
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(6-0)
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 a 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*)

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-11000 Modern Dance I (V) 3(3-0)

Students will study the basics of movement, learning to free their bodies for communication of emotions and ideas. 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.

THE-12000 Introduction to Theatre (W,S) 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. Each student will be required to commit to working 10 or more hours on a production during the semester. *(Humanities Credit)*

THE-121-- Theatre Workshop I (F,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. Each student will be required to commit to working 10 or more hours on a production during the semester. *(Humanities Credit)*

THE-12300 Acting I (F) 3(3-1)

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. Each student will be required to commit to working 10 or more hours on a production during the semester. *(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 (W) 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. 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(3-1)

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. Each student will be required to commit to working 10 or more hours on a production during the semester. **Prerequisite:** THE-12300 or permission of instructor. *(Humanities Credit)*

THE-22400 Directing I (F) 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, and the casting, rehearsal, and performance processes. The student will engage in both traditional and experimental approaches to learning and will have the opportunities 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 following graduation. 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, and 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 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 may involve working in the theatre office, backstage, or as a performer or technician on a main stage performance. Ninety hours of work in the discipline 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 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 90 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)

Additional welding courses are available at M-TECSM at Kirtland-Gaylord. For a complete listing, call 989-705-3600 or go to www.kirtland.edu/mtec/.

WLD-10000 Introduction to Welding

NOTE: This course has been divided into modules WLD-10341 - WLD-10354.

WLD-10200 Advanced Shielded Metal Arc 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 Using
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 Using 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 Hardsurfacing .17

In this module, the student will learn how to hardsurface 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-21000 see WLD-20419

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.

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KIRTLAND COMMUNITY COLLEGE ADMINISTRATION

Charles D. Rorie, President

A . A .
 Texas Junior College
 B . A .
 Sam Houston University
 M . S .
 Texas A&M University
 P h . D .
 University of Texas at Austin

Stacey Barnes, Director of Student Services

B . S .
 Ferris State 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

Edmund Koliba, Chief Business and Financial Officer

B . S .
 Oakland University
 M . B . A .
 Saginaw Valley State University

Doty Latuszek, Associate Dean

B . S .
 Nazareth College
 M . A .
 Western Michigan University

Kathy Marsh, Associate Dean

B . S .
 Lake Superior State College
 M . S .
 George Washington University

Katherine Nemeth, Provost

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

Richard Silverman, Dean of Instruction and Educational

S e r v i c e s

B . A .
 University of Michigan
 M . A .
 Wayne 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

Richard Bonk, Instructor of Automotive Technology

A . A . S .
 Kirtland Community College
 B . A .
 Spring Arbor College

Scott Cochran, Instructor of Science

B . S .
 Michigan State University
 B . S .
 Eastern Michigan University

M	S	Carol Finke, Instructor of English
University of Michigan	B	A
Joseph Donna, Instructor of Art	University of Michigan	
B	F	A
Michigan State University	M	A
M	F	A
Michigan State University		
Donald Dyer, Director of Guidance and Counseling		Eugene Frazier, Instructor of Computer Information Systems
B	A	A
Syracuse University	Palomar College	S
M	B	
State University College at Oneonta	Temple University	A
	M	S
	National University	
	M	S
	University of Southern California	
	Frederic Giacobazzi, Instructor of English	
	B	A
	Wayne State University	
	M	A
	Wayne State University	
	Judith Grenkowicz, Instructor of Business	
	B	S
	Ferris State University	
	M	B
	University of Detroit	A
	E d	
	Northern Illinois University	D
od, Instructor of Manufacturing Technology, M-TEC		
	A	A
	Kirtland Community College	S
	B	
	Ferris State University	
	M	A
	Central Michigan University	
	Wendy Hillman, Instructor of Nursing	
	B	S
	Mercy College of Detroit	N
	M	S
	Wayne State University	N
	Charles Hinman, Instructor of Criminal Justice	
	A	A
	Mid Michigan Community College	S
	B	S
	Saginaw Valley State University	
	Nicholas Holton, Instructor of Mathematics	
	B	S
	Western Michigan University	
	M	A
	Central Michigan University	
	Denise Kemp, Instructor of Science	
	B	S
	Saginaw Valley State University	

M	S	Jason Proust, Instructor of Drafting and Design Technology		
Central Michigan University	B	S		
Gerard LaFemina, Instructor of English	Central Michigan University			
B	A	M	A	
Sarah Lawrence College	Central Michigan University			
M	F	Marcell Romancky, Instructor of Developmental		
Western Michigan University	A	Mathematics/Counselor		
M	A	A	A	S
Western Michigan University		Kirtland Community College		
Douglas Mace, Instructor of Mathematics	B	S		
B	A	Central Michigan University		
Spring Arbor College	M	A		
M	S	Central Michigan University		
University of Vermont				
Leonard Miller, Instructor of Manufacturing Processes		Mary Scott-Rom, Instructor of Cosmetology		
Technology		Robert Shingledecker, Instructor of Automotive		
Beth Mogle, Instructor of Nursing		Technology		
B	S	A	A	S
Oakland University	N	Community College of the Air Force		
M	A	B	S	
Central Michigan University		East Texas State University		
Stephen Oppy, Coordinator/Counselor		Jacqueline Smith, Instructor of Nursing		
B	A	B	S	N
Oakland University		Northern Michigan University		
M	A	M	S	N
Central Michigan University		Wayne State University		
Susan Owens, Instructor of Nursing		Kathryn Taylor, Instructor of Office Information Systems		
B	S	B	S	
Hope College	N	Central Michigan University		
M	S	B	S	
Northern Michigan University	N	Central Michigan University		
Nancy Pamerleau, Instructor of Communications		M	A	
B	S	Central Michigan University		
Western Michigan University		John Thiel, Instructor of History		
M	A	B	A	
Central Michigan University		Michigan State University		
		M	A	
		Michigan State University		
		Jon Thompson, Instructor of English		
		B	A	
		Alma College		
		M	A	
		Central Michigan University		
		Sinan Toprak, Instructor of Political Science		
		B	A	
		University of Bursa		
		M	A	
		Western Michigan University		
		Ginna Wenger, Instructor of Developmental English		
		B	A	

Central Michigan University
M A
Central Michigan University
P h D
Andrews University

FULL-TIME CLASSIFIED STAFF

Mark Allen, Director of Auxiliary Services/Purchasing
A A S
Northwood University
B S
Northwood University

Herbert Atherton, Custodian

Kathleen Barber, Coordinator of Personnel and Business
Services

Kristin Barnhart, Bookkeeper, Payroll
B B A
Western Michigan University

Matthew Biermann, WAN Administrator

Brenda Brager, Printing Technician

Raye Bransdorfer-Polasek, Librarian
B A
Michigan State University
M S L
Western Michigan University

Mark Burger, Instructional Technology Director
A A S
Ferris State University
B B A
Wichita State University

Gary Carton, Managing Director of Kirtland Center for the
Performing Arts
B A
Southwest State University
M A
University of Washington

Shirley Carton, Development Associate

Rick Daugherty, Computer Support Technician, M-TEC

Elizabeth Ehinger, Secretary, Special Populations
A A S
Lake Superior State University

James Enger, Director of Marketing

Anne Essmaker, Coordinator of Health Careers Services
A A S
Macomb Community College
B A
Spring Arbor College

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A A S
Ferris State University

Keith Gave, Public Relations Assistant
B A
Kansas State University

Cindy Gibbs, Coordinator of Criminal Justice Services

Kurt Kiessel, Utility Worker

Kathryn Koch, Administrative Assistant to the President

C Kirtland Community College

A A S

Kirtland Community College

A B A

Kirtland Community College

B B A

Northwood University

Winifred Kolka, Assistant Network Technician

Diane Lane, Bookstore Assistant

Audrey Larkin, Financial Aid Specialist

A A S

Kirtland Community College

B B A

Baker College

Kerry Lashley, Instructional Technology Assistant

A A S

Kirtland Community College

Barbara Latham, Financial Aid Assistant

Susanne Lewis, Student Services Assistant

Jackie Liddle, Conference Services Specialist

C Kirtland Community College

Kirtland Community College

Dale Marie Losee, Admissions Coordinator

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Kirtland Community College

B S

Central Michigan University

Tony Madaj, LAN Administrator

A A S

Kirtland Community College

Scott Marble, Director of Customized Training and
Community Education

B S

Central Michigan University

M B A

Michigan State University

Dawn McGillis, Coordinator of Instructional Services

Gary McPhilimy, Custodian

Cathy Meadows, Food Service Assistant/Catering
Coordinator

Joseph Meadows, Maintenance

Fred Miracle, Maintenance

Larry Miracle, Utility Worker

Dorothy Morris, Assistant Registrar

B A

Oral Roberts University

Mark Nagel, Custodian

Debra Near, Administrative Support Specialist

C Kirtland Community College

A A S

Kirtland Community College

Suzanne Nelson, Bookkeeper, Accounts Payable

Christin Oestrike, Director of Financial Aid

A A S

Kirtland Community College

B B A

Baker College

Joanne Reminder, Director of Administrative Computing

B S

Central Michigan University

Brenda Rinke, Admissions Assistant/Office Coordinator

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

Charlotte Schroeder, Faculty Support Specialist

A A S

Kirtland Community College

Mark Schroeder, Groundskeeper

Karen Sessions, Faculty Support Specialist
A . . . A . . . S .
Kirtland Community College

Ron Sharpe, Maintenance

Daron Shimel, Coordinator of Skilled Trades Labs, -
M-TEC
C . . . C .
Kirtland Community College

Cynthia Sikarskie, Secretary, Business Services

Carol Silverman, Coordinator, Tutorial Services
B . . . A .
University of Michigan

Ilene St. Onge, Director of Accounting

Rodger Steinbrink, Custodian

Robert Wallace, Custodian

Luann Wessels, Office Support Specialist, M-TEC
B . . . S . . . W .
Ferris State University

Gail Westmoreland, Administrative Assistant to the Provost
B . . . A .
National University

Kathleen Wray, Counseling Office Support Specialist/
Transfer Credit Specialist
B . . . S .
Harding University

Helen Yopp, Help Desk
A . . . A . . . S .
Kirtland Community College

Jeani Vermillion, Technical Director, Kirtland Center for the Performing
Arts
A . . . A .
Kirtland Community College
A . . . F . . . A .
Kirtland Community College
B . . . A .
Saginaw Valley State University

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.

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Loretta Hassan, Vice President
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Ron Joyce
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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.

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Dick Coulter	John Kurtz	Betty Spangler
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Dave Clover	Leonard Miller	

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Deb Frank	Sue Mueller	
Mari Golub	Paul Owens	
Jill Howell	Deana Smith	

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Ben Carr	MacKenzie	Whittington
Ken Cramer	Steve Oppy	Bonnie Wichtner-
Patti Duff	Donna Pflum	Zoia
Dave Frederick	Lynn Porritt-	Michael
Carl Kummer	McConnell	Wurtsmith
Kerry Lashley	Tanya Puchkova	
Doty Latuszek	Sallie Ratza	

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Karen Brown	Deb Nolan	Nancy Pavelek
Carolyn Courneya	John Olesnavage	Sr. Jean Umlor

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Cathy Frederick	Suzanne	Dr. David Sharp
Linda Garrett	MacGillivray	Kathy Taylor
Karen Gilbert	Terri Melia	Janet White

Nursing

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Jan Bersted	Cindy Fleming	Meredith
Barbara Biggar	Maureen Hayes	Kay Petrie
Debbie Bills	Glenda Jacobs	Anita Percy
Karen Bloom	Cynde	Lori Robinson
Meg Christy	Kochensparger	Gay Showalter
Suzanne Cleere	Mary Lee Lord	Pam Swantek
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Tim Euler		

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Nyla Blanchard	Lydia (Hiatt)	Brenda Rinke
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Karen Brown	Penny Jenereaux	Louann Rosebrugh
Sarah Bruder	Bonnie Klann	Kathy Schnautz
Elizabeth	Beth Kuczymski	Dawn Sears
Chapman	Lisa Lashley	Sue Smith
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Cunningham	Alishia Lynd	Jill Uhouse
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Phyllis Dale	Betsey Mitchell	Dawn Ward
Mary Dasho	Diane Moerland	Jan Weiler
Betty Ehinger	Bobbie Otwell	Gail
Joann Enboden	Bonnie Owen	Westmoreland
Jan Funkey	Judy Ranney	
	Lori Rau	

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Brenda Dawe	Lyndup	Carol Silverman
Lorraine Downing	Shelly Kammer	Becky Smith
Don Dyer	Doty Latuszek	Jennie Walker
Betty Ehinger	Chuck Nienhuis	Genene Warren
Anne Essmaker	Chris Oestrike	Ginna Wenger
Kelly Fortino	Steve Oppy	

Welding

Dan Beltz	Todd Hancock	Doty Latuszek
Don Duggar	Kerry Harwood	Mark McCully

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