Kirtland Community College

Catalog **2014 - 2015**

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Information in the catalog can change at any time without notification. The catalog cannot be considered as a contract or agreement between the individual student and Kirtland Community College or its administrators.

It is the policy of Kirtland Community College that no person shall, on the basis of race, color, religion, national origin or ancestry, age, sex, disability, physical proportions, sexual orientation, marital status, or genetic information be excluded from participation in, be denied the benefits of, or be subjected to, discrimination during any program, activity, service, or in employment. For information, or to register a grievance, contact the Director of Human Resources, Room 226, ADM Building, 10775 N. St. Helen Rd., Roscommon, MI 48653, 989-275-5000, ext. 271 or 239.

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INTRODUCTION

COLLEGE CATALOG

The college catalog is the official publication issued by the college, and is available online at: www.kirtland.edu/college-catalog. 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 and the college.

CLASS SCHEDULES

Class schedules are no longer printed. To view classes online: https://my.kirtland.edu/ics/academics.

COLLEGE EMAIL STATEMENT

Kirtland Community College has established email as a primary vehicle for official communication with students, faculty and staff. Each registered student and active faculty and staff member is assigned an official Kirtland Community College email address. All official college email communications will be sent to the assigned Kirtland.edu address, including but not limited to communications from faculty to students registered in their classes and from departments on campus to students.

The college expects that students will receive and read email in a timely manner. Failure to receive and read college communications delivered to official email address in a timely manner does not absolve recipients from knowing and complying with the content of such communications.

This policy is motivated by the speed, cost-effectiveness, convenience and environmental awareness.

INFORMATION MONITORS

Monitors that display information that is important to students are stationed in the administration building, the instructional building, the career technology center, library, the student center, and the Gaylord and West Branches extension sites. Information includes registration dates, athletic highlights, scholarship deadlines, commencement details, class cancellations, and other information that is updated regularly.

VISION, MISSION, AND GUIDING PRINCIPLES

KIRTLAND COMMUNITY COLLEGE VISION

Kirtland will be the first choice for learner-centered education guiding students and communities toward success.

KIRTLAND COMMUNITY COLLEGE MISSION

To provide innovative educational opportunities to enhance student lives and build stronger communities.

KIRTLAND COMMUNITY COLLEGE VALUES

- ***Excellence:*** Expectation that all college activities are conducted with attention to quality and the highest levels of academic and professional standards.
- ***Inclusiveness:*** Conducting the activities of the college in a manner that inspires tolerance and welcomes diversity of people and thought.
- ***Innovation:*** Addressing challenges and issues from multiple perspectives to solve problems and advance college processes and knowledge. Supporting progressive and meaningful research, creative activity and teaching.
- ***Reflection:*** Evaluating processes and assessing success through honest conversation and the use of data.
- ***Character:*** Steadfast adherence to the principles of integrity, honesty, reliability, transparency and accountability.
- ***Respect:*** Respect for the rights, differences and dignity of others and their contribution to the overall success of the college.

KIRTLAND COMMUNITY COLLEGE PURPOSES

TO ACCOMPLISH THE MISSION, KIRTLAND:

1. Provides occupational programs that educate learners for the workforce of the future.
2. Provides transfer courses and programs that encourage learners to continue education at other colleges and universities.
3. Offers non-credit community and cultural education that enhance the lives of citizens.
4. Offers education to the incumbent workforce thereby supporting community economic development.
5. Provides supportive services that mentor learners to become successful while enrolled in courses.
6. Provides student activities that encourage the development of community service and leadership skills.
7. Facilitates collaborations with other colleges and schools that enhance the educational services in Kirtland's service area leading to a better educated citizenry.
8. Encourages innovation among employees and community members for the benefit of Kirtland and its communities.

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 Core Competencies**
   Every degree-seeking student completes core competencies that nurture foundations in communication, citizenship, information literacy, problem solving, and other areas.
   - **Communication** – read, write, speak, listen and use nonverbal skills to clearly, concisely, and intelligible communicate with different audiences in a variety of social and professional settings.
   - **Personal Growth and Responsible Citizenship** – act purposefully, effectively, and responsibly to function in social and professional environments as a productive citizen in the community.
   - **Technology, Research, and Information Literacy** – recognize how to acquire and use information through responsible use of technology to understand, evaluate, and synthesize information and data.
   - **Problem Solving** – think critically and creatively to analyze, synthesize, and evaluate to solve real world problems.
   - **Work Productively** – use reasoned judgments and responsible commitments in social and professional settings to contribute to group success.
   - **Systems/Processes** – apply quantitative and qualitative reasoning skills, problem solving, and interpersonal skills to manage systems and processes to adapt to changes in the workplace and global community.
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:

Performing Artists Series, Service Learning Program, Center for the Performing Arts, Student Writing and Art Competitions, Community Education Program, and Kirtland Youth Theatre

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

COLLEGE OVERVIEW

ESTABLISHMENT OF THE COLLEGE

On March 7, 1966, in accordance with provisions of Public Act 188 of the Michigan Public Acts of 1955, Kirtland Community College was created by a vote of the electorate from six local K-12 school districts (Crawford-AuSable, Fairview Area, Roscommon Area, 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 69,000 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 rural location 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
Roscommon…..……..….11 miles
Rose City……..……..…….35 miles
St. Helen……..……..……...8 miles
West Branch…...……..25 miles

ACCREDITATION

Kirtland Community College is accredited by 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 Higher Learning Commission 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 May.

DEGREES AND CERTIFICATES

Kirtland offers over forty-eight 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.

INTERCOLLEGIATE ATHLETICS

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

Kirtland competes in intercollegiate athletics as a member of the Eastern Conference of the Michigan Community College Athletic Association. Kirtland also competes in the National Junior College Athletic Association as a member of Region XII (Michigan, Ohio, and Indiana). The Kirtland Firebirds compete in men's and women's bowling, men's and women's golf, and men's and women's cross-country. For more information, call the Athletic Director's Office at 989- 275-5000, ext 385.

WORKFORCE DEVELOPMENT

Workforce development programs serve specific employers in the region and their current employees who are seeking job skill upgrades and/or personal growth. These educational opportunities are specifically designed to upgrade and enhance the job skills necessary to compete in a local, state, national and global economy. Workforce development courses are custom designed to fill a specific need and include but are not limited to: welding, manufacturing, construction, and information technology; human resources; leadership and supervisory skills; and MIOSHA safety training and business practices. For additional information about workforce development educational opportunities, please call 989-275-5000, ext. 313.

LOCATIONS

KIRTLAND GAYLORD M-TEC℠

Michigan Technical Education Center

The mission of the M-TEC℠ is to provide educational programs and services to individuals in preparation for employment. In addition, through workforce development, business and industry partners in the Northern Michigan region and their employees are provided with educational opportunities specifically designed to upgrade and/or enhance job skills necessary to compete in a local, state, national, and global economy.

PROGRAMS AND SERVICES

Programs and services have been developed in response to locally and regionally defined needs as determined by representatives of business and industry. Emphasis is placed on providing programs that lead to preparation for employment. To ensure that graduates are well prepared for entry into the workforce, special emphasis is placed on the ongoing assessment of student learning as each individual progresses through the various courses within each program.

CORE CURRICULA

The M-TEC℠ serves postsecondary students who are interested in apprenticeship training, postsecondary degree programs, and job skills development. The specific programs at the M-TEC℠ include the following:

Certificate of Completion	Associate in Applied Science
Certified Nursing Assistant (CNA)	Cardiac Sonography
Electrical Technology	Electrical Technology
Heating/Ventilation/AC/Refrigeration	Emergency Services
Welding and Fabricating	Heating/Ventilation/AC/Refrigeration
Vascular Sonography	Mechatronics
	Welding and Fabricating

THE M-TEC℠ FACILITY

Construction of this facility began in July 2000 and was completed in time to begin offering a full complement of programs and services beginning in January 2002. The M-TEC℠ facility has been designed *by* business and industry *for* business and industry. Using the expertise and input of local and regional manufacturing, building trades, and technology professionals, architects and engineers have created a 28,000 square-foot facility capable of supporting the current and future workforce development training needs of the region.

The M-TEC[SM] facility contains both a precision tool and general manufacturing lab, a construction technology lab, a welding lab, a computer- aided drafting and manufacturing design lab, a nursing lab, and a sonography lab as well as classrooms that support general and computerized instruction. A Learning Resource Center is available to students enrolled at the M-TEC[SM] as a result of the partnership with the University Center at Gaylord. For information, contact the Kirtland Gaylord M-TEC[SM] at 989-705-3600.

RESIDENCY RULES
Please see page 18 for more information.

KIRTLAND WEST BRANCH

Our West Branch location is an extension of Kirtland Community College and offers nearly everything available at the main campus. Maybe most well-known for our flagship Surgical Technology program, the West Branch site will now be the flagship location for our Business degree programs as well. In addition to Surgical Technology and Business, our West Branch location also offers a wide range of general ed courses including accounting, English, history, government and math. In fact at the West Branch site, students are able to complete a majority of courses to satisfy the Michigan Transfer Agreement (MTA), an agreement designed to facilitate transfer from community colleges to four-year colleges and universities. The MTA Transfer agreement provides for transferability of up to 30 semester credits to meet many (and in some cases all) of the General Education requirements at participating four-year colleges and universities.

Kirtland Community College in West Branch is located for easy access by students traveling from Iosco County, including the areas of Tawas, Whittemore Prescott and Oscoda and is just a short thirty minute drive from our central campus near Roscommon. Whether you're going after a certificate or associates degree to secure better employment, or gearing up to transfer to a four-year college, completing general education courses in West Branch makes it possible to save money by cutting down on travel expenses because we're bringing access to education closer to where you live.

Kirtland's West Branch extension site is located at 2479 South M-76 between the I-75 Business Loop and M-55. Our goal is to provide higher education designed to meet the changing needs of business and industry while preparing you for a career and personal success.

STUDENT PROFILE (2013 FALL SEMESTER)

TOTAL ENROLLMENT: 1,999

Student Gender:

Males	39%
Females	61%

Student Age Distribution:

24 and under	51%
25 to 39	30%
40 to 59	16%
60 and older	3%
Unknown under	<1%

County of Residence:

Crawford	11%
Ogemaw	17%
Oscoda	9%
Roscommon	22%
Other	41%

Student Credit Hour Load:

Personal Interest	12%
Part-Time: 1-11.99 credit hours	52%
Full-Time: 12 & over credit hours	36%

Student Status:

FTIAC (first time in any college)	14%
Returning to Kirtland	76%
First-time Transfer	4%
Guest	<1%
Dual Enrollment/Direct Credit	6%

Student Program Areas:

Art	3%
Automotive	3%
Business	5%
Computer/Office Information Systems	6%
Construction/Industrial Technologies	4%
Cosmetology	2%
Emergency Services	4%
Health Careers	27%
Transfer	44%
Other	2%

2014-2015 COLLEGE CALENDAR

Approved by Board of Trustees.

FALL 2014 SEMESTER

Fall 2014 Semester Begins	Monday	August 25, 2014
Labor Day Break	Saturday - Tuesday	August 30 – September 2, 2014
Thanksgiving Break	Wednesday - Sunday	November 26 – November 30, 2014
Fall 2014 Semester Ends	Saturday	December 13, 2014

WINTER 2015 SEMESTER

Winter 2015 Semester Begins	Monday	January 12, 2015
Spring Break	Monday - Sunday	March 9 – March 15, 2015
Easter Break	Friday - Sunday	April 3 – April 5, 2015
Commencement	Friday	May 1, 2015
Winter 2014 Semester Ends	Saturday	May 2, 2015

SUMMER 2015 SEMESTER

Summer 2015 Semester Begins	Monday	May 11, 2015
Memorial Day Break	Saturday - Monday	May 23 – May 25, 2015
July 4th Break	Friday	July 3, 2015
Summer 2015 Semester Ends	Monday	July 27, 2015

NOTE: Dates are subject to change.

CAMPUS EXTENSIONS

MAIN NUMBER 989-275-5000

Admissions 284, 259, 258
Allied Health Lab 421
Auditorium 397
Automotive Lab 215

Biology Lab 209
Bookstore 273, 371

Cafeteria (The Grill) 268
Chemistry Prep Room 417
Community Education 279
COOR 434
Cosmetology Lab 274

Emergency-Sheriff's Dept. 911

Faculty Office 279

Health Sciences 281
Honors Program 359
Human Resources 239

Information Technology Service (ITS) 499
Instruction Office 270

Kirtland Foundation 446
Kirtland Gaylord M-TEC 705-3600

Library 246

Nursing 281
Nursing Lab 332

Payroll 244
Performing Arts Center 397, 375
Photo Lab 409
President's Office 253
Print shop 243, 272
Public Safety 283

Registrar's Office 251

Security 355,283, 390
Student Financial Services (cashier & financial aid) 257
Student Food Pantry 289
Student Senate Office 288

Student Success Center (SSC) 280
Academic Advising
Career Counseling
Disability Concerns
Personal Counseling

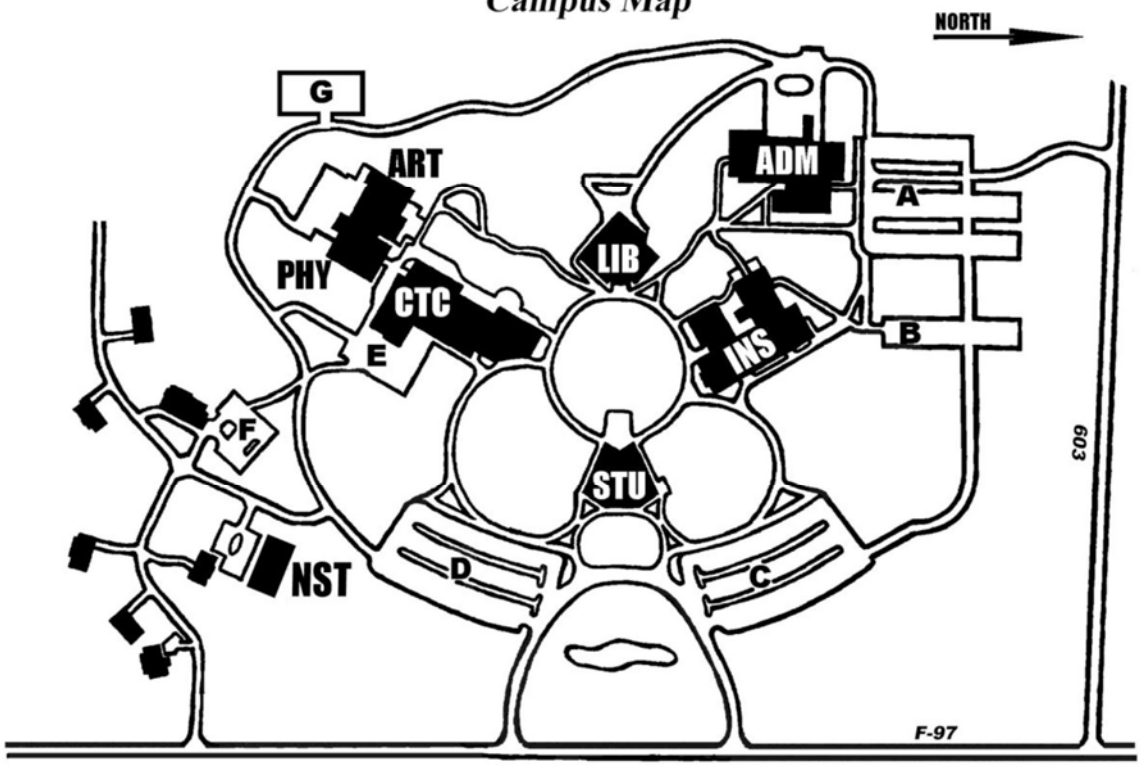
Testing Center 339
Theatre Arts 375
Ticket Office ..... (275-6777) 777
Tutoring 246

Veteran's Office 257

Warbler's Nest (day care) 232

KIRTLAND

Campus Map



A – H - Parking lots.

ADM - Administration Center – Upper Level - Accounting; Admissions; Business Conference Room; Business Office; Classrooms ; Human Resources; President's Conference Room; President's Office; Public Information; Registrar's Office; Student Activities; Student Financial Services; Student Success Center; Testing Center; Webmaster; Vice President of Instructional Services; Vice President of Student Services.
Lower Level - Athletics; Kirtland Foundation; Public Safety; Student Food Pantry; Wellness Room.

ART - Fine Arts Center - Art Department Office; Art Gallery; Art lab; Sculpture lab.

CTC - Career Technology Center - Automotive Technology; Cosmetology; Kirtland Center for the Performing Arts; Ticket Office.

INS - Instructional Center – Upper Level – Health Sciences
Lower Level – Center for Teaching & Learning; Classrooms; Faculty Offices; Biology lab; Chemistry Lab; Instructional Administration; Honors Program & PTK Office; Music lab; Nursing lab; Physics lab.

LIB - Library - Computer Lab; Information Technology; Library, Tutoring Center.

NST- Warbler's Nest

PHY - Physical Plant – Facilities Management; Printshop/Mailroom

STU - Student Center – Boardroom; Bookstore; The Grill (cafeteria); COOR Offices, Student Senate Office, Campus Security.

ADMISSIONS

ADMISSIONS **284**
This office is responsible for admission of all new or transfer students, student recruitment activities, and student orientations.

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. The link to apply at Kirtland: http://www.kirtland.edu/admissions.

Regular Admission

Regular admission will be granted to high school graduates and successful completers of the General Education Development (GED) test.

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

Special Admission

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

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

2. Non-High-School Completer: is a person who has withdrawn from high school and has not earned a GED certificate.

3. High school Certificate of Completion: is a person who completed high school but did not meet the curriculum requirements to receive a diploma.

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 must 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.

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.

NEW STUDENT ORIENTATION

New students, both new to the college experience or transferring from another college, are now required to attend a mandatory orientation. During orientation, students will receive an overview of the many services Kirtland has to offer to ensure their success in college. Please call the Admission Office (989) 275-5000 ext. 284 for more information.

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

- Cardiac Sonography
- Certified Nursing Assistant
- Health Information Technology
- Nursing
- Pharmacy Technology
- Phlebotomy
- Surgical Technology
- Vascular Sonography
- Corrections Administration Jail Administration
- Criminal Justice Pre-Service
- Emergency Medical Services
- Military Police Academy
- Police Academy

Additional information about admissions requirements may be requested from an advisor or from the Admissions Office.

This admission policy will also be applied to returning students, regardless of their past admission status.

TRANSFER OF CREDITS

Students who have attended other colleges must request that an official copy of their academic transcript be sent to Kirtland Community College for evaluation. An official transcript should be mailed directly to Kirtland from each college attended; student copies are not accepted. Credit from regionally accredited colleges and universities is automatically considered for transfer if deemed to be applicable to the student's declared program of study. Credits only, not grades, are transferred for courses in which a "C" or better grade has been earned. Students who were awarded credit by departmental exam may be required to pass a Kirtland examination prior to the awarding of credit. Normally, a "C-" grade will not be accepted for credit, but students may appeal to the vice president of instruction if consideration is sought for a course previously denied for transfer based on the grade received. The vice president will then consider the student's GPA and hours earned at the previous institution as well as the GPA and hours earned at Kirtland (if applicable) when making a determination. Acceptance of the grade is at the instructional vice president's discretion, and his/her decision is final. If elective credits are awarded, it is possible that some may be able to be used to fulfill degree requirements. A student's academic advisor will make that determination and complete the paperwork needed to substitute the elective course for a specific program requirement.

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 Registrar's 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 (AP**)
   College course credit will be granted to students who participate in the AP and pass the Advanced Placement examinations with a score of three, four, or five. Students must submit a College Action Report to the Registrar's Office for evaluation.

2. **College-Level Examination Program (CLEP)**
   College course credit will be granted to students who take a CLEP Examination and achieve the minimum passing score as recommended by the American Council on Education (ACE). Students must submit an official CLEP transcript to the Registrar's Office for evaluation. Additional information regarding CLEP testing is available at www.kirtland.edu/testing-center.

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 Registrar's Office for evaluation. Additional information regarding DSST testing is available at www.kirtland.edu/testing-center.

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 have their official transcripts sent to the Admissions Office for evaluation of military credit. Transcript request forms are available in the Admissions Office.

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 Registrar's Office for evaluation.

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 and a copy of their final high school transcript to the Registrar's Office at Kirtland Community College for evaluation. 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.

   Articulation is an agreement where high school graduates can receive college credit for certain courses they completed while in high school. For further information, students should consult with their high school counselor or contact the Student Success Center.

CLEP/DSST

CLEP and DSST examinations are a great way to earn college credit. Students can learn more about these exams and schedule testing dates by going to http://www.kirtland.edu/testing-center. There are links available under the heading entitled "CLEP and DSST Exams". A form with CLEP and DSST exam names, their minimum scores, and Kirtland equivalencies are also available to view.

Kirtland Community College
CLEP Credit Information

Exam Name	Minimum Score*	Kirtland Equivalent		Credit
Composition/Literature				
American Literature	50	ENG 23000	American Literature before 1865	3
(Optional essay component required at KCC)		ENG 23100	American Literature after 1865	3
Analyzing and Interpreting Literature	50	ENG 21400	Intro to Literature	3
(Optional essay component required at KCC)				
College Composition	50	ENG 10303	English Composition I	3
		ENG 10403	English Composition II	3
College Composition Modular	50	ENG 10303	English Composition I	3
(Optional essay component required at KCC)		ENG 10403	English Composition II	3
English Literature	50	ENG 23300	British Literature I	3
(Optional essay component required at KCC)		ENG 23400	British Literature II	3
Science/Mathematics				
College Mathematics	50		No Credit at KCC	
College Algebra	50	MTH 13000	College Algebra	4
Biology	50		BIO 10100	4
Chemistry	50	CHE 10101	Gen Chemistry I (no lab)	4
Calculus	50	MTH 22002	Calculus I	4
Pre-calculus	50	MTH 18001	Pre-calculus	4
Natural Sciences	50		SCI elective (no lab)	3
Foreign Languages				
French, Level I	50	FRE 11000	French I	4
German, Level I	50	GER 11000	German I	4
Spanish, Level I	50	SPN 11000	Spanish I	4
History/Social Sciences				
American Government	50	POL 10100	Intro to American Government	3
Introduction to Educational Psychology	50		No Credit at KCC	
History of the United States I	50	HIS 20100	US History to 1865	3
History of the United States II	50	HIS 20200	US History since 1865	3
Humanities	50		HUM elective	3
Human Growth and Development	50	PSY 24000	Lifespan Dev. Psychology	3
Principles of Macroeconomics	50	ECO 20100	Prin of Economics - MACRO	3
Principles of Microeconomics	50	ECO 20200	Prin of Economics - MICRO	3
Introductory Psychology	50	PSY 10100	Intro to Psychology	3
Social Sciences and History	50	HUM 20500	The Individual & Society	3
Introductory Sociology	50	SOC 10100	Intro to Sociology	3
Western Civilization I: Ancient Near East to 1648	50		HIS elective	3
Western Civilization II: 1648 to the Present	50		HIS elective	3
Business				
Business Law, Introductory	50	BUS 21500	Business Law	3
Financial Accounting	50	ACC 12100	Accounting Principles I	4
Information Systems & Computer Applications	50	CIS 10500	Intro to Computers	3
Principles of Management	50	BUS 21000	Principles of Management	3
Principles of Marketing	50	MKT 20000	Principles of Marketing	3

*ACE Credit Guidelines

Revised January 2013

Kirtland Community College
DSST Credit Information

Exam Name	Minimum Score*	Kirtland Equivalent		Credit
Mathematics				
Fundamental of College Algebra	400	MTH 12000	Intermediate Algebra	4
Principles of Statistics	400	MTH 20600	Application in Statistics	4
Social Science				
Substance Abuse	400		No Credit at KCC	
Criminal Justice	400		No Credit at KCC	
Art of the Western World	48		Elective	3
Western Europe since 1945	45		HIS elective	3
Introduction to the Modern Middle East	47		POL elective	3
Human/Cultural Geography	48	GEO 10000	World Geography	4
Rise and Fall of the Soviet Union	45		HIS elective	3
A History of the Vietnam War	44		HIS elective	3
The Civil War and Reconstruction	47	HIS 20400	The American Civil War	3
Foundations of Education	46		No Credit at KCC	
Lifespan Developmental Psychology	46	PSY 24000	Dev. Psychology	3
General Anthropology	47		ANT elective	3
Introduction to Law Enforcement	45		No Credit at KCC	
Fundamentals of Counseling	45		Elective	3
Humanities				
Ethics in America (Optional essay component required at KCC)	400	PHL 21000	Introduction to Ethics	3
Introduction to World Religions	400		HUM Elective	3
Principles of Public Speaking	47	SPE 10500	Fund of Speech (Oral testing by a KCC Speech instructor)	3
Business				
Introduction to Computing	400	CIS 10500	Introduction to Computers	3
Personal Finance	400		BUS elective	3
Management Information Systems	400		Elective	3
Principles of Finance	400		BUS elective	3
Principles of Financial Accounting	47	ACC 12100	Accounting Principles I	4
Human Resource Management	46	BUS 24500	Human Resource Management	3
Organizational Behavior	48		No Credit at KCC	
Principles of Supervision	400		No Credit at KCC	
Business Law II	44		No Credit at KCC	
Introduction to Business	400	BUS 10100	Intro to Business	3
Money and Banking	48		Elective	3
Business Mathematics	400	OIS 11201	Business Calc	3
Business Ethics and Society	400		No Credit at KCC	
Physical Science				
Here's to Your Health	400		No Credit at KCC	
Astronomy	48	AST 10201	Astronomy (no lab)	3
Environment and Humanity	46		SCI elective (no lab)	3
Principles of Physical Science I	47	PHY 10501	Physical Science (no lab)	3
Physical Geology	46		GEL elective (no lab)	3
Technology				
Technical Writing	46		No Credit at KCC	

*ACE Credit Guidelines

Revised December 2013

STUDENT FINANCIAL SERVICES

STUDENT FINANCIAL SERVICES **257**
This office provides an array of financial services and information to meet the needs of students and their families when planning for and managing the cost of attendance. Student Financial Services also helps students apply for financial assistance including grants, loans, scholarships and student employment.

TUITION

For current tuition and fee rates please refer to our website at www.kirtland.edu/paying-for-college.

NOTE: Tuition and fees are subject to change without notice.

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 online at: www.kirtland.edu/paying-for-college/payment-due-dates-and-options. When registering in person, each student will be given a statement of account, with his/her class schedule. For students registering via myKirtland, it is the student's responsibility to view and print their charges from the "Account Detail" window on the Student Tab at MyKirtland. Statements will only be mailed upon request. Students with questions concerning their accounts are encouraged to contact the Student Financial Services Office in the administration building at 989-275-5000, extension 257.

Students are encouraged to regularly check their Kirtland email account as payment reminders and refund notices will be sent to this email. **If payment in full is not received by the due date, the student's classes may be dropped.**

Delinquent accounts will be turned over to a collection agency and the cost of such action will be added to the student's account. Students are not allowed to register for classes or receive transcripts until all financial obligations to Kirtland have been met.

METHODS OF PAYMENT

CASH – Payment may be made in person at the Student Financial Services Office located in the administration building on central campus or in the front office at the MTEC-Gaylord site. Cash should not be sent through the mail.

CHECK OR MONEY ORDER – Payments can also be remitted to Kirtland Community College, Student Financial Services Office, 10775 N. St. Helen Road, Roscommon, Michigan 48653. The student ID number needs to be included with the payment. A $25.00 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 257, or online via myKirtland at: my.kirtland.edu. After logging in, click on the student tab. Then go to the account detail window, verify the semester, click submit and follow the payment instructions.

EMPLOYER OR SPONSORING AGENCY - The Student Financial Services 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, an email notification will be sent notifying the student to accept the terms and awards offered. The amount will be credited as an "anticipated award" against the tuition/fee charges. 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 payment due date, the student must be prepared to pay. He/she may be reimbursed after the award has been posted as a "final" award to the account.

e-CASHIER PAYMENT PLAN

Students with a tuition and fee balance of $100.00 or more may be eligible for the e-Cashier Payment Plan offered through Nelnet Business Solutions. This plan enables students to make interest-free payments for tuition and fees via automatic transactions from a checking, savings, or credit/debit card account. The cost to enroll is $30.00 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 Nelnet, an online application must be submitted by the payment due date or on the day of registration. Otherwise, the student's classes may be canceled.** After registering for classes, students can apply online by logging into myKirtland at: my.kirtland.edu. Once you are logged in, click on the student tab. Go to the Account Detail window, verify the semester, and click submit. Then, click the e-Cashier icon at the very bottom of the page and follow the on screen instructions. Once the application is submitted, the student will receive an email notification verifying the agreement. More information is available online on the accounting web pages at: www.kirtland.edu/paying-for-college/e-cashier-automatic-payment-plan.

RESIDENCY

The burden of proof of residency is the student's responsibility and acceptable documentation must be provided to the Admissions Office prior to the first day of the semester in which the residency status is to be applied, otherwise out of-district tuition will be accessed. Retroactive residency adjustments will not be considered.

Acceptable proof: driver's license, verifiable rent receipts (if rent receipts are not available, a notarized letter from the landlord will be accepted), a dated lease agreement, voter's registration card, place of residence property tax receipt, Secretary of State identification card. Verifiable rent receipts must contain all the following information: the address of the property being rented; the date of payment; signature, address and phone number of the landlord.

Kirtland Community College will perform ongoing verification of residency information. Students who have misrepresented information or have falsified documents may have to repay tuition, verify back records, or may be subject to disciplinary action by the College. If a student has mail returned to the college, a hold code will be placed on his/her record and the student must verify his/her residency at the Admissions Office.

IN-DISTRICT RESIDENCY

A new student will be classified as in-district if (s)he can prove that (s)he resides in the Kirtland Community College district prior to the first day of the semester of attendance at Kirtland. New students planning to attend the MTEC-Gaylord site must provide proof that (s)he resided in Otsego County or the Kirtland district prior to the first day of the semester. Otsego County is not part of the college district, therefore, Otsego County residents are considered out-of-district when attending the Roscommon campus or enrolled in online courses.

A returning in-district student will continue to be considered in-district if (s)he can prove (s)he continues to reside in the district.

OTSEGO COUNTY RESIDENTS

Otsego County residents taking courses at the M-TEC Gaylord extension site will be assessed in-district tuition rates. All eligible courses will have a course number ending with "M". Classes taken at the Roscommon Campus or on-line will be charged at the out-of-district rate.

OUT-OF-DISTRICT RESIDENCY

A new student will be considered out-of-district if (s)he can prove residency within Michigan prior to the first day of the semester of attendance at Kirtland, but cannot prove in-district residency.
A student who resides outside the district can be assessed an in-district tuition rate if (s)he 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 continue to be considered out-of-district unless (s)he can prove in-district residency prior to the first day of the semester of attendance.

OUT-OF-STATE RESIDENCY

A student who cannot prove in-district or out-of-district residency will be considered out-of-state if (s)he is a U.S. citizen, or if (s)he is a registered alien (has a green card) who resides in the U.S. or if (s)he resides outside of 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 and assessed the out-of-state rate.

MICHIGAN COMMUNITY COLLEGE VIRTUAL LEARNING COLLABORATIVE (MCCVLC)

Students residing in ANY Michigan community college district will be assessed at the VLC in-district rate. Michigan resident not living within a community college district will be considered out-of-district. Students who cannot prove in-district or out-of-district residency will be considered out-of-state. Proof of residency will be determined according to the policies of the Michigan community college the student has claimed as their home school. Questions about VLC residency can be clarified by the home school. Kirtland's due dates and accepted forms of payment can be located at www.kirtland.edu/paying-for-college/vlc-tuition-rates.

1098-T STATEMENT

The student or the person who can claim the student as a dependent may be eligible for an education tax credit. Students that have out-of-pocket expenses for tuition, fees and textbooks over and above financial aid assistance may qualify for the American Opportunity Credit or Lifetime Learning Credit. The College will need a valid Social Security Number on file in order to provide a 1098-T statement.
Prior to January 31st, the 1098-T statement will be made available to be viewed and printed from the Student Tab after logging on to https://my.kirtland.edu/ics. This form reports tuition charges (not payments) and/or financial aid totals for the previous calendar year. In order to verify proof of payments, please print a statement of account. For further assistance regarding your 1098-T form, please contact your tax advisor or refer to Publication 970, Form 8863, and the Form 1040 or 1040A instructions at www.irs.gov.

REFUNDS

Tuition and fee refunds are based on the following schedule:

FULL-SEMESTER/FLEX AND MODULAR COURSES

- 100 percent refund through and including the census date for the semester.
- Fall and Winter semester – 9th business day after semester start date. (Start date is Monday, refund date is 2nd Friday)
- Summer semester – 6th business day after semester start date. (Start date is Monday, refund is 2nd Wednesday for 11-week classes)

ALL OTHER COURSES

- 100 percent refund through and including the census date specific to the course. Contact Registrar's Office for the census date.

The college will follow any federally mandated refund schedules. Contact the Student Financial Services Office for more information. Exceptions to the refund policy due to hardship may be reviewed by the vice president of student services. Refund requests must be received in the semester in which the withdraw occurred, or the semester immediately following. Students must submit the Tuition Refund Appeal form located in myKirtland under student form central to the Vice President of Student Service's office.

CANCELLED CLASSES

Students registered for a course 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 Reconciliation Act of 2005 (HERA), 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 Direct 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. 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.

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.

Under the HERA, the amount of a grant overpayment due from a student is limited to the amount which the original grant overpayment exceeds half of the total Title IV grant funds received. Students do not have to repay a grant overpayment of less than $50 to the U.S. Department of Education.

NOTE: Kirtland will bill students for any balance owed due to the College's return of funds. 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

Kirtland Community College 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 two out of three 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.

SOURCES OF FINANCIAL AID

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

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

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

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

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

HOW TO APPLY FOR FINANCIAL AID

All students wishing to be considered for federal financial assistance (including student loans and work study) must complete and file the Free Application for Federal Student Aid (FAFSA) available online at www.fafsa.gov. FAFSA's are also available by calling 1-800-4FED-AID. This is not an application for any particular form of aid; rather, it is an application **for needs analysis**, on which many federal and state aid programs are based.

Within 8-10 days after submitting the FAFSA online, 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 Student Financial Services Office. 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 Student Financial Services Office has on file the following documents:
   - Student Aid Report (SAR) from the federal processor and,

   If selected for verification:
   - Verification Worksheet
   - Income documentation: federal income tax transcripts and/or other sources of income
   - Other information as requested such as proof of high school or G.E.D. completion, prior college transcripts or Statement of Educational Purpose.

3. The applicant has been packaged for aid and notified by the Student Financial Services Office listing the award(s) offered.

4. If awarded Direct Stafford loans, the Master Promissory Note must be completed.

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 Student Financial Services 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" (has 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.
- financially support dependent children.
- emancipated minor
- unaccompanied youth/homeless
- legal guardianship until age 18

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 Student Financial Services 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 online at: www.kirtland.edu/paying-for-college/student-refunds. Failure to attend class without officially withdrawing may void financial aid, leaving the student responsible for all charges. Students must advise the Registrar's Office in writing in order to withdraw by the last day to withdraw for the semester.

OVERAGES AND REFUNDS

Overages, or payments due the students from their awards after charges have been deducted, will start to be made available approximately the fifth week of class. Refunds of Pell Grants, Student Loans and other credit balances can be directly deposited into an account of your choice! Signing up is easy. Simply log into our secure site at: https://my.kirtland.edu/ics. Once you are logged in, click on the Student Tab. On the right-hand side in the Account Detail pane, click on the red link Direct Deposit for Student Refunds. From this page, you may also view the dates of when the Student Financial Services Office processes refunds.

STANDARDS OF SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID ELIGIBILITY

To maintain satisfactory academic progress, a student must comply with all three standards of this procedure:

- Standard One: Maintain a career grade point average (GPA) of 2.00 or higher.
  The student must maintain a career 2.0 or higher grade point average calculated at the end of each semester.

- Standard Two: Complete 67 percent of the credits attempted.
  The student must complete, with a passing grade, 67 percent of all credit hours attempted at Kirtland Community College, whether or not financial aid was received for those attempted credits.

- Standard Three: Not exceed 150 percent of attempted credit hours.
  Federal regulations state that a student cannot receive Title IV financial aid funds for more than one and one-half times (150 percent) the required credits needed to complete a specific certificate or degree. For example, if an Associate in Arts degree requires 60 credits to complete, a student cannot attempt more than 90 credit hours toward that degree and still receive aid (60 x 1.50 = 90). The student should review the Kirtland Community College catalog or consult with an academic advisor to find the number of credits required for his/her program. The student will be denied financial aid when he/she has attempted more than 150 percent of the credit hours required for his/her program. Grades of W, I, U, R, AU and E (grade definitions are found in the college catalog) are not considered passing but are considered as attempted credits. Remedial coursework and transfer credits are included in the number of attempted credits. The student may receive financial aid for the repeat of a previously passed course one time.

Satisfactory academic progress will be reviewed prior to the awarding of any federal financial aid. A student who applies for financial aid for the first time and has credits already accumulated at Kirtland must have successfully completed, with a 2.0 career grade point average or above, 67 percent of all credit hours attempted. The student cannot have attempted more than 150 percent of the credit hours required for his/her current program. The student with transfer credits from other institutions will have the total number of transfer credits counted in the total number of attempted credits. All credits, even if paid for from the student's own funds, will be counted as attempted credits. When the student does not complete 67 percent of all career credit hours attempted with a 2.0 career GPA or above, he/she will be placed on warning status. The student can receive financial aid while on warning.

CONSEQUENCES OF FAILING TO MEET ONE OR MORE OF THE PROGRESS STANDARDS

Warning Status

A student who fails to meet Standards One or Two (previously described in this procedure) in a semester will be placed on a warning status for their next semester of enrollment and receive one subsequent term of financial aid. A student remains eligible to receive financial aid while on warning status. If both Standard One and Two are met at the end of the warning semester, the student will be removed from warning status.

Denial Status

A student who does not meet the requirements for maintaining eligibility at the end of the warning semester will have eligibility for financial aid programs denied. A student who reaches the upper limit of attempted credits for their program of study will have their aid eligibility denied.

REINSTATEMENT AFTER INELIGIBILITY

With the exception of the 150 percent rule, a student may be reinstated (after being denied) after meeting one of the following conditions:

- The student has taken, without funding from financial aid, at least six credit hours and has passed those six credit hours with a grade of "C" or better. Classes taken at institutions other than Kirtland are not considered for reinstatement purposes. The student will be given financial aid on a probation status during the next semester the student attends Kirtland, or
- The student has taken, without funding from financial aid enough credits to meet the GPA and completion rate requirements of Standard Three. The student will be reinstated without warning status.

APPEAL PROCESS

Pursuant to federal regulations, a student denied federal financial aid due to unsatisfactory academic progress may appeal for reconsideration of aid eligibility. The student must explain his/her failure to meet satisfactory academic progress, what has changed to allow him/her to regain satisfactory academic progress and must submit documentation from his/her academic advisor indicating the courses the student still must take to complete their program of study. Other appropriate documentation should be submitted if relevant, such as physician's letter, divorce decree, obituary, or academic records. The submission of an appeal does not guarantee a change in eligibility. If the student files a successful appeal, the status will be changed to financial aid probation. The student will be notified in writing of the appeal committee's decision. The decision of the committee is final.

CONFIDENTIALITY OF RECORDS

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

STATEMENT OF COMPLIANCE

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

STUDENT EMPLOYMENT

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

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

STUDENT EMPLOYMENT HANDBOOK

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

GRANTS

CHILDREN OF VETERANS TUITION GRANT
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. Contact the Student Scholarships and Grants at 1-888-447-2687 for details.

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.

FEDERAL PELL GRANT
The Federal Pell Grant is awarded to undergraduate students demonstrating financial need. Students must complete the FAFSA. For the 2014-2015 academic year an annual award of up to $5730 is possible. Awards are pro-rated based on the actual enrollment level of the student each semester. Federal lifetime limit for Pell Grants is 12 full-time semesters or the equivalent.

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 age 20.
If the student is eligible, the state will pay tuition and mandatory fees at Michigan community colleges and some universities. TIP does not cover course fees and coverage is limited to 24 credits per academic year. 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 SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG)
This grant is awarded as a supplement to the PELL Grant to students showing exceptional need. Priority is given to students with the lowest expected family contribution as determined by the FAFSA. The typical award at Kirtland Community College is $400 a year.

MICHIGAN 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. Contact Michigan Department of Civil Rights at 517-241-7748 for application and questions.

SCHOLARSHIPS

MICHIGAN COMPETITIVE SCHOLARSHIP
This is a state scholarship awarded to eligible Michigan high school graduates. Applicants must have a qualifying score from the ACT and have financial need as determined by the FAFSA. The award amount is based on state funding. Contact Student Scholarships and Grants at 1-888-447-2687 for details.

SCHOLARSHIPS/GRANTS OFFERED BY KIRTLAND COMMUNITY COLLEGE

ATHLETIC SCHOLARSHIP
This scholarship is awarded to select students participating in Kirtland's athletic programs. Contact the athletic director for details.

C.O.O.R. INITIATIVE SCHOLARSHIP
Competitive scholarship awarded to at least one graduating high school senior with ACT score of 24 or higher and high school g.p.a. of 3.25. Full tuition and fees.

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

KIRTLAND HONORS SCHOLARSHIP – Contact Honors Program Department at ext. 359.
Students must have been accepted into the Kirtland Honors Program.

MICHIGAN ARMY AND AIR NATIONAL GUARD GRANT
A pro-rated grant is available to eligible members of the Michigan Army or Air National Guard.

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

SENIOR CITIZEN SCHOLARSHIP
Students must be residents of the Kirtland district, age 60 or over. For more details, go to: www.kirtland.edu/paying-for-college.

SCHOLARSHIP SPONSORED BY THE KIRTLAND FOUNDATION

Students may obtain Kirtland Foundation Scholarship information at: http://www.kirtlandfoundation.org/scholarships-kirtland-foundation.

ANNA BIERNAT SCHOLARSHIP
This scholarship is limited to students residing in Lovells Township. Student must have a cumulative GPA of 2.5 or higher and must be a full or part-time student.

ROBERT BOVEE SCHOLARSHIP FOR HEALTH SCIENCES
In-district residency is required with a minimum GPA of 2.8.

ANNE 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. Students must have a GPA of 2.5 or better.

DONALD N. FENTON MEMORIAL SCHOLARSHIP
This scholarship is limited to sophomore level students planning to transfer to a university/college to study environmental science, teaching of environmental sciences or teaching of science. Minimum GPA of 2.5.

F.O.P. AUSABLE LODGE #189
This scholarship is limited to 2nd year criminal justice students. Student must have a cumulative G.P.A. of 2.0 or higher and be enrolled full-time. Preference will be given to students residing in Crawford County and also to those demonstrating financial need.

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

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

PATRICIA HILL NURSING SCHOLARSHIP
This scholarship is limited to Kirtland Level II RN program enrolled students. Minimum 3.25 GPA. Preference may be given to Crawford County residents. Student must be enrolled part-time or full-time.

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.

OTTO AND MARTHA KRAUSS HONORS SCHOLARSHIP
Students must be a member of the Kirtland Honors Program.

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

HERBERT AND EVELYN MILLER SCHOLARSHIP
This scholarship is limited to Level I LPN students with a minimum GPA of 3.0 in their core courses and a minimum of 2.5 GPA for all other courses. Residency must be in the college district with preference given to Oscoda County students.

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. Students must have a 2.8 G.P.A. or higher.

MARGUERITE D. WILTSE MEMORIAL SCHOLARSHIP
This scholarship is limited to students from Crawford, Ogemaw, Oscoda and Roscommon Counties pursuing health careers. Preference is given to those students with financial need.

STUDENT LEADER SCHOLARSHIP
Must be a current Kirtland student (full or part-time) and maintain at least a 2.0 grade point average. Must currently be a leader on campus or in the community. Scholarship is offered in the winter semester only. Students will be notified via Kirtland email with details when scholarship is posted.

HOME SCHOLLED STUDENT DUAL-ENROLLED SCHOLARSHIP
This scholarship is limited to in-district students dual-enrolled into any program of study. Student must maintain a high school G.P.A. of 3.0.

VETERANS HELPING VETERANS AT KIRTLAND
This scholarship is open to all veterans at Kirtland enrolled in any program of study. Student must have cumulative G.P.A. of 2.5 or higher and demonstrate financial need.

GENERAL SCHOLARSHIP
This scholarship is open to all Kirtland students in any program of study

SCHOLARSHIPS 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 Student Financial Services Office.

STUDENT LOANS

NOTE: Loan eligibility criteria are subject to revision. Contact the Student Financial Services Office for current procedures.

FEDERAL DIRECT STAFFORD LOAN PROGRAM
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.

ALTERNATIVE STUDENT LOAN PROGRAMS
Students showing need over and above all other sources of financial aid for which they have been determined eligible may apply for an alternative loan.

OTHER PROGRAMS AVAILABLE AT KIRTLAND

VA EDUCATIONAL BENEFITS

ENTITLEMENT AND ELIGIBILITY
Veterans, dependents, and selected reservists should contact Student Financial Services Office in the administration building 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 33, Montgomery GI Bill Post 9/11

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

6. Chapter 1607, Reservists called to active duty in response to war.

VA APPLICATION PROCESS

VA application forms are available online at www.gibill.va.gov, or from the Student Financial Services Office located in the administration building. The application may be submitted online to the VA or by the Student Financial Services Office.

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.

CERTIFICATION OF ENROLLMENT

Students must request certification of enrollment each semester. The Kirtland Veterans Certification Request form must be fully completed and submitted to the Student Financial Services Office along with a class schedule.

PAY RATE

Monthly rates vary according to which VA program is providing the assistance, the student's course load status and length of semester enrollment.

ADVANCE PAY

Students eligible for VA benefits may request an advance payment if they carry at least a half-time course load and the VA receives the enrollment certification at least 30 days before classes start. The advance check covers the initial month or partial month of the semester, plus the following month. This check is sent to the college. Subsequent checks are mailed to the student's mailing address or can be directly deposited to the student's financial institution. Chapter 33 students cannot receive advance pay.

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 Student Financial Services 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 receiving their education benefits should contact the VA at their toll-free number: 1-888-442-4551.

6. Certain VA programs require monthly verification. 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 and it changes the course load, the drop will be reported to the VA. If a student fails a course, the last date of attendance in the course will be reported. Students are responsible for any overpayment due to their withdrawal (unofficial or official), or class failure.

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.

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. Applications are available from the Student Financial Services Office in the administration building or by mail by calling 989-275-5000, extension 257.

SERVICEMEMBERS OPPORTUNITY COLLEGES (SOC)

Kirtland Community College is designated as an SOC. SOC is a network of more than 1,400 colleges and universities whose policies and programs are designed especially to help meet the higher education needs of service-members. Contact the Student Services Office for more information.

TESTING CENTER

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, preparatory, business seminar(s), and studio art course(s) without being required to test for such placements.

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

6. Taking the COMPASS Test within four years of enrollment at the college. The COMPASS Test consists of tests in English, reading, and mathematics.

Further exceptions to the Proficiency in Basic Academic Skills and Placement Testing policy may be granted by the vice president of instruction.

TEST PROCTORING

The Testing Center provides reliable test administration in a secure environment that facilitates academic success. The Testing Center administers Computer based, Make-up, Competency, and Alternative classroom exams. Guest proctoring services are available for students from other accredited colleges, businesses or companies. The fee for guest proctoring services is $20.00 per exam.

REGIONAL TESTING SERVICES

We offer a variety of tests from **CLEP** and **DSST** exams for college credit, to professional certification exams through **Pearson VUE**, and **Prometric**. These exams are offered for Kirtland courses and for the surrounding communities. For more information regarding regional testing services at Kirtland please go to: http://www.kirtland.edu/testing-center.

PLACEMENT TESTING

Placement testing evaluates the student's basic skill levels in Mathematics, Reading, and Writing. Results are used to make recommendations concerning course placement. A student may retake any portion of the COMPASS placement assessment no more than twice within a four year period. Students will be charged a $5.00 fee to retake any portion of the COMPASS placement assessment. Information regarding placement testing dates and times is located at: http://www.kirtland.edu/testing-center/placement-testing

TESTING CENTER GUIDELINES FOR STUDENTS

- ✓ **Picture ID is required.** A Kirtland student ID, passport and/or driver's license are acceptable forms of pictured ID. Proctors cannot issue exams without proper ID.
- ✓ **Personal Items.** All personal items not intended to be used for test taking, must be securely stored out of the reach of students while in the examination room. Lockers are provided to secure personal items.
- ✓ **Missed Exams.** Students must first contact their instructor prior to coming to the Testing Center to ensure the test will be available.
- ✓ **Placement Testing.** Students should report directly to the Testing Center with photo ID. The Testing Center is located in the Administration Building in room 248.
- ✓ **Unattended Children.** Children are not allowed to accompany individuals into the examination room; nor are unattended children allowed to remain alone in the service area. Child care is available at the Kirtland Warblers Nest. For more information contact: http://www.kirtland.edu/the-warblers-nest
- ✓ **Electronic Devices.** All electronic communication devices such as: Cell phones, pagers, and iPods must be stored in a locker. For further information regarding the Testing Center, visit our Web site at: http://www.kirtland.edu/testing-center

HOURS OF OPERATION

Monday – Thursday
8:30 a.m. – 4:00 p.m.
Closed Fridays **except** on O.A.R. registration days and finals week.
Closed weekends
Contact Us: testingcenter@kirtland.edu

REGISTRATION & ACADEMIC POLICIES

REGISTRAR'S OFFICE.....251
The responsibilities of this office include course registrations, schedule adjustments, program changes, enrollment and graduation verifications, grade reporting, official graduation audits, maintain permanent academic records, issue academic transcripts upon student request, course substitutions, high school articulation, and transfer credit evaluations.

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 Student Success Center Office, completing it, and returning it to that office. The applicant must meet with the college counselor 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 registrar to the student's (petitionee's) transcript, the student will not be permitted to rescind the application of amnesty on his/her academic record. Other conditions include the following:

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

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

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

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

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

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

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

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

ACADEMIC PROBATION AND ACADEMIC DISMISSAL

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

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

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

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

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

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

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

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

If a student is dismissed from the college and wishes to re-enter, he/she must submit an "Academic Reinstatement Request" form to the Student Success Center Office 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 college counselor. Any adjustments to the limited probationary student's schedule must be approved by the counselor.

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 the vice president of student services via their Kirtland email account.

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 is required to officially register, indicate the class is for audit on the registration form, 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 must be properly completed, signed by the instructor, and submitted to the Registrar's Office for processing by the census date.

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

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 Student Success Center 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 of his/her program 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 vice president or 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.

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 the vice president of instructional services or designee. In the instance where the college catalog lists more than 18 hours as a suggested semester load, students may register without additional permission.

COURSE ADJUSTMENTS (ADD, DROP & WITHDRAWAL)

Add/Drop/Withdrawal forms for adding and dropping courses can be secured from the Registrar's Office or in myKirtland in student form central. Withdraws cannot be done online.

ADDING A CLASS

Students are expected to complete their registration during the 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

Exact dates of the drop period are posted online at: www.kirtland.edu/paying-for-college/student-refunds. Students are permitted to drop online any class in which they are enrolled through the 100% drop refund date.

WITHDRAWING FROM A CLASS

Students may withdraw from courses for which they are registered. Withdraw dates are published on the Kirtland Website. Withdrawals cannot be done online. An Add/Drop/Withdraw form must be submitted to the Registrar's Office on or before the last date to withdraw.

FULL SEMESTER COURSES

If a drop is made before or on the census date for the semester, no grade will be recorded. However, for withdrawals made after the census date and through the twelfth week of the semester or through the eighth week of the summer semester, a grade of "W" will automatically be issued.

SHORT COURSES (Courses that are scheduled for less than a full semester)
A withdrawal must be made before the final exam is issued for the course. If a withdrawal is made on or before the census date for the course, no grade will be recorded. However, for withdrawals made after the census date of the course, a grade of "W" will automatically be issued.

FLEX COURSES

A withdrawal must be made before the final exam is issued or before the coursework is completed for the course. If a withdrawal is made before the course begins, no grade will be recorded. However, for withdrawals made after the course begins, a grade of "W" will automatically be issued.

Generally, a 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, following due process, an "administrative withdrawal" may be authorized by the vice president of student services.

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 vice president of instructional services or a dean.

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 Course Substitution Request form must be completed by the student and the advisor. The student's advisor will forward the form to the vice president of instruction for possible approval. If approved, the form will be sent to the Registrar's Office and placed in the student's file.

2. 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.

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 or 11-week summer session.

Students must go online to view or print grades each semester, grade reports are not mailed. Students should log into myKirtland at www.kirtland.edu, click on the student tab, and select "Course History" link. Students can select specific semester grades, or by selecting "All Divisions, All Terms" students can view or print a complete unofficial transcript showing all grades earned, and prerequisites met by placement testing. Students who do not have access to a computer or the Internet can use the computers on the Kirtland campus, or they may request unofficial or official transcripts (see "Transcripts" for ordering information).

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. While the current semester is in session, an WIP designation may appear on the transcript to denote that the course is currently in progress.

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

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.

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:

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

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 and diploma.

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 vice president of instructional services or dean of the student's program.

6. Have filed a Request to Graduate form with the Registrar's Office at the beginning of the semester in which they plan to finish their required course work. Students should also check with their advisor 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 in the Kirtland Bookstore before March 1. For more information about graduation fees, contact the Registrar's Office.

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 below 100-level departmental courses) students whose current/term grade point averages are 3.800 to 4.000 (President's list) , 3.400 to 3.799 (Dean's list) and (part-time student honor list), 3.500 to 4.000 (6 to 11.99 credit hours earned, excluding below 100-level departmental courses) at the time grade reports (see "Grade Reporting System") are processed.

Credits earned in transitional 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.)

HONORS PROGRAM

The Kirtland Community College Honors Program provides enhanced educational opportunities for academically talented students in both general education and occupational programs. Membership in the Kirtland Honors Program brings the honors student significant benefits:

EDUCATIONAL BENEFITS
Honors students at Kirtland pursue an enhanced honors curriculum distinguished, on the whole, from the regular curriculum by an emphasis on the following features:

- ❖ Highly qualified students.
- ❖ Stimulating course design and course work.
- ❖ Emphasis on participatory classroom styles.
- ❖ Challenging work than in comparable classes within the regular curriculum.
- ❖ Team or group teaching.
- ❖ Emphasis on primary, as opposed to secondary, source materials.
- ❖ An interdisciplinary focus.
- ❖ An element of independent study.
- ❖ Transcript recognition of completed honors course work.
- ❖ Honors degree upon completion of requirements.
- ❖ Recognition at graduation ceremonies, including a medallion.
- ❖ Scholarships: Eligible to apply for one 3-credit in-district scholarship per semester, up to 9-credit hours career total.
- ❖ Eligible to apply for the Otto and Martha Krauss Scholarship.

Membership is based on academic achievement. Student must have a cumulative grade point average of 3.5 to apply.

Applications are accepted throughout the year, but students are admitted only at the beginning of the fall and winter semesters.
For more information contact the Honors Program Office at 989-275-5000, ext. 359

INCOMPLETE GRADES – more under "GRADE REPORTING SYSTEM"

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 Registrar's 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 failing grade.

MICHIGAN TRANSFER AGREEMENT

The Michigan Transfer Agreement facilitates the transfer of students from community colleges to four-year colleges and universities in Michigan. By carefully choosing courses, students can earn an associate degree from Kirtland and complete the Michigan Transfer Agreement; however, students do not need to obtain a degree in order to earn the MTA designation. If students want to request the "MTA Satisfied" on their transcript, they should fill out the MTA application form and send it to the Registrar's Office for review.

Requirements for the Michigan Transfer Agreement

- Minimum of 30 credits.
- A grade of "C" or higher is required for each course.
- One course in English composition.
- A second course in English composition or one course in communications.
- One course in mathematics.
- Two courses in social sciences (from two disciplines).
- Two courses in humanities and fine arts (from two disciplines excluding studio and performance classes).
- Two courses in natural science (from two disciplines) including one laboratory experience.

English Composition and Communications (Two courses, one must be Composition).

ENG 10303	English Composition I	3 credits
ENG 10403	English Composition II	3 credits
SPE 10500	Fundamentals of Speech	3 credits
SPE 11400	Interpersonal Communication	3 credits

Quantitative Reasoning (One course).

MTH 13000	College Algebra	4 credits
MTH 18001	Pre-Calculus	4 credits
MTH 20600	Application in Statistics	4 credits
MTH 22002	Calculus I	4 credits
MTH 22102	Calculus II	4 credits

Natural Science (Two courses from two different disciplines. One must be a laboratory science).

Note: All of Kirtland's science courses have a lab component.

AST 10201/10202	Astronomy I Lecture/Lab	4 credits
BIO 10100	General Biology	4 credits
BIO 10700	Essentials of A&P	4 credits
BIO 20100	General Zoology	4 credits
BIO 21000	Microbiology	4 credits
BIO 21300	Nature Study	4 credits
BIO 23500	Anatomy & Physiology I	4 credits
BIO 23600	Anatomy & Physiology II	4 credits
CHE 10000	Chemical Science	4 credits
CHE 10101/10102	General Chemistry I Lecture/Lab	5 credits
CHE 10201/10202	General Chemistry II Lecture/Lab	5 credits
CHE 10400	Chemistry for Health Science	4 credits
GEL 10500	Physical Geology	4 credits
GEL 23000	Prehistoric Life	4 credits
PHY 10501/10502	Physical Science Lecture/Lab	4 credits
PHY 20101/20102	Physics I w/Trig Lecture/Lab	5 credits
PHY 20201/20202	Physics II w/Trig Lecture/Lab	5 credits
PHY 22101/22102	Physics I w/Calculus Lecture/Lab	5 credits
PHY 22201/22202	Physics II w/Calculus Lecture/Lab	5 credits

Social Science (Two courses from two different disciplines).

ECO 20100	Prin. of Economics-MACRO	3 credits
ECO 20200	Prin. of Economics-MICRO	3 credits
GEO 10000	World Geography	4 credits
POL 10100	Intro to American Government	3 credits
POL 20000	International Relations	3 credits
POL 20100	Comparative Government	3 credits
PSY 10100	Intro to Psychology	3 credits
PSY 20200	Abnormal Psychology	3 credits
PSY 24000	Lifespan Develop Psychology	3 credits
PSY 26001	Human Sexuality	3 credits
SOC 10100	Intro to Sociology	3 credits
SOC 23500	Racial, Cultural, Ethnic Diversity	3 credits
SOC 24000	Criminology	3 credits
SOC 24500	Social Deviant Behavior	3 credits

Humanities (Two courses from two different disciplines).

ART 10000	Art History I	3 credits
ART 10103	Art History II	3 credits
ENG 21400	Intro to Literature	3 credits
ENG 22500	Contemporary Literature	3 credits
ENG 22800	Mythology	3 credits
ENG 23000	American Lit Before 1865	3 credits
ENG 23100	American Lit After 1865	3 credits
ENG 23300	British Literature I	3 credits
ENG 23400	British Literature II	3 credits
HIS 10500	History of World Society to 1500	3 credits
HIS 10600	History of World Since 1500	3 credits
HIS 20100	U.S. History to 1865	3 credits
HIS 20200	U.S. History Since 1865	3 credits
HIS 20300	Michigan History	3 credits
HIS 20400	American Civil War	3 credits
HUM 20500	Individual and Society	3 credits
MUS 10100	Music History & Appreciation	3 credits
MUS 12300	Jazz History & Appreciation	3 credits
PHL 20100	Intro to Philosophy	3 credits
PHL 21000	Intro to Ethics	3 credits
THE 12000	Intro to Theatre	3 credits

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. Students will receive their progress report via their Kirtland email account. The progress report is forwarded to the appropriate Student Services offices. An electronic copy will be kept in Student Services.

REGISTRATION PROCEDURES

All students are required to complete admissions requirements and procedures before registration for classes. Students may register online at specified times by using myKirtland at the following web site: www.kirtland.edu.

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 Registrar's Office.

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.

STUDENT RECORDS

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

STUDENT'S RIGHT TO KNOW

Kirtland Community College recognizes the importance of maintaining records for all students in attendance. While a student's educational interests require the collection, retention, and use of information about the student, the student's right to privacy requires careful custodianship and limitations on access to education records. The maintenance and disclosure of student records by this institution are governed by state and federal law, particularly the Family Educational Rights and Privacy Act ("FERPA"), 20 USC 1232g, and its implementing regulations, 34 CFR 99.1 et seq. It is the purpose of this policy to protect the educational and privacy rights of students and to establish procedures for the disclosure of student records in compliance with the law.

The President of Kirtland Community College is responsible for implementing this policy. The President's duties include, but are not limited to: informing students of their rights under this policy, utilizing administrative resources to implement and enforce this policy, developing procedural guidelines for the proper collection, storage and disclosure of student records and informing employees of this policy and the procedures relative to student records.

DEFINITIONS

For the purposes of this policy, Kirtland Community College employs the following definitions:

EDUCATIONAL RECORDS

Any record (whether in print, handwriting, tape, film, computer, electronic, or other medium) maintained by the college, a college employee or agent, or a party acting on the college's behalf, which is directly related to a student. The term does not include the following:

1. Records (including notes and observations) kept by a staff member that are in his/her possession and are not available to another person, except a substitute.

2. Records created and maintained by Kirtland Community College law enforcement and security personnel for law enforcement purposes only.

3. Employment records which are made and used only in relation to a student's employment at Kirtland Community College.

4. Records made and maintained by a physician, psychiatrist, psychologist, or paraprofessional acting in his/her professional capacity, which are made, maintained, or used in connection with treatment of the student (which does not include remedial education) and are disclosed only to individuals providing treatment.

5. Records that only contain information about a student after he/she is no longer in attendance.

STUDENT

Any person who attends or has attended a program of instruction sponsored by Kirtland Community College.

STUDENT RIGHTS

FERPA affords students enrolled in postsecondary institutions certain rights with respect to education records. Those rights include the following:

1. Right to Inspect: A student has the right to inspect and review his/her education records maintained by Kirtland Community College within 45 days of the school's receipt of a written request for access.

2. Right to Request Amendment: A student has the right to request the amendment of his/her education record(s) that are believed to be inaccurate or misleading. This right includes the right to a hearing to present evidence that the record should be revised. If a requested amendment is denied after a hearing, a student also has the right to place a statement in his/her educational record commenting on the challenged information.

3. Right to Consent to Disclosure: A student has the right to consent to disclosures of personally identifiable information contained in his/her education record, except to the extent that FERPA authorizes disclosure without consent.

4. Right to Complain: A student has the right to file a complaint with the U.S. Department of Education concerning alleged failures by Kirtland Community College to comply with FERPA requirements.

5. Right to Obtain Copies of this Policy: A student has the right to obtain copies of this policy upon request.

DISCLOSURE

Kirtland Community College will disclose information from a student's education record only with the written consent of the student, except that disclosures without consent may be made:

1. To school officials who have legitimate educational interest in the records. A school official is a person employed by Kirtland Community College in an administrative, supervisory, academic or research, or support staff position, including law enforcement unit personnel and health staff; a person or company with whom Kirtland Community College has contracted, such as an attorney, auditor, or collection agent; a person serving on the board of trustees, who is empowered by the board; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his/her tasks. A school official has a legitimate educational interest if he/she needs to review an education record to fulfill his/her professional responsibilities.

2. To officials of other schools where a student seeks or intends to enroll. (A student may obtain copies of records transferred).

3. To federal and state officials in connection with their duties to audit or enforce legal conditions relative to federal or state supported programs.

4. In connection with a student's request for or receipt of financial aid, as necessary to determine the eligibility for aid, the amount or conditions of the aid, or to enforce the terms and conditions of aid.

5. To state juvenile justice system officials as permitted by state law.

6. To organizations conducting certain studies for or on behalf of the college for the purposes of predictive testing, student aid, and instructional improvements.

7. To accrediting organizations to carry out their function.

8. To parents who claim the student as a dependent for income tax purposes.

9. To comply with a court order or lawfully-issued subpoena. The college shall make reasonable attempts to notify the student of such disclosure prior to disclosure.

10. To appropriate parties in connection with a health or safety emergency that threatens the health or safety of the student or other individuals. Additionally, Kirtland Community College has the right to include information concerning disciplinary action taken against a student for conduct that poses a significant risk to the safety or well-being of the student, other students, or school community members in the student's education record. Kirtland Community College may also disclose such information to school officials at the college and at other schools who have legitimate educational interests in the behavior of the student.

11. For designated directory information.

12. To the student.

13. To the alleged victim of a crime of violence (as defined by federal law), records of school disciplinary proceedings may be disclosed regarding the particular crime perpetrated against the victim.

SOLOMON AMENDMENT

In addition to FERPA, the Solomon Amendment requires that schools, upon request, provide the military with information on currently enrolled students for military recruiting purposes. For such requests, the following information can be released on students 17 years of age or older: name, address, telephone listing, date and place of birth, level of education, academic program, degrees received and the educational institution in which the student was most recently enrolled. Any future changes to the Family Educational Rights and Privacy Act of 1974 or the Solomon Amendment will be complied with by Kirtland Community College.

STUDENT NOTIFICATION

In order to comply with FERPA, Kirtland Community College shall publish a notice to students explaining their rights under FERPA and designating directory information which may be disclosed without consent. A statement regarding this notice will be published in the college catalog. If a student has a primary language other than English, Kirtland Community College shall endeavor to notify the student of his/her rights in the student's native language.

INSPECTION OF STUDENT RECORDS

A student may inspect and review his/her own education records upon written request submitted to the registrar. This request should precisely as possible identify the education record(s) the student wishes to inspect. If the records are not maintained by the Registrar's Office, the Registrar shall advise the student of the correct official to whom the request should be addressed. The registrar or other school official will make arrangements for access as promptly as possible and notify the student of the time and place where the records may be inspected. Access must be given within 45 days from receipt of the request by the appropriate school official.

When a record contains information about students other than the requesting student, the student may not inspect the portion of the record that pertains to other students. In addition, a student does not have the right to inspect or review the following education records: financial records, including any information those records contain of his/her parents, and confidential letters/statements of recommendation as long as the statements are only used for their intended purposes, the student has waived his/her right to review those materials, and the materials relate to the student's admission to an educational institution, application for employment, or receipt of an honor or honorary recognition.

AMENDMENT OF STUDENT RECORDS

If a student, upon review of his/her record, would like to request or amend a record believed to be inaccurate or misleading, a written request should be submitted to the school official responsible for the record. This request should clearly identify the part of the record that the student wants changed and specify why it is inaccurate, misleading or in violation of the student's privacy rights. The school official may or may not comply with the request. If the record is not amended as requested by the student, Kirtland Community College shall arrange a hearing and shall provide the student with reasonable notice of the date, time and place of the hearing. The hearing will be conducted by a disinterested hearing officer; however, the hearing officer may be a school official. The student shall have the opportunity to offer evidence in support of his/her request for amendment. The student also has the right to be represented at the hearing. The hearing officer will prepare a written decision based solely upon the evidence presented at the hearing, which shall be distributed to the parties. The decision will include a summary of the evidence and a reason for the decision. If Kirtland Community College determines that the student's education record should not be amended, the student must be notified that he/she has the right to place a written statement in his/her education record setting forth objections to the challenged information and/or disagreements with the decision not to amend this record. This statement shall be maintained with the challenged portion of the student's education record and be disclosed with that record. If Kirtland Community College determines that the student's education record must be amended, it shall amend the record and notify the student that the record has been amended.

RELEASE OF INFORMATION

Kirtland Community College may release information from a student's education record to a third party if the student gives prior written consent for the disclosure. All requests for release of such information shall be made in writing. The written consent must include the following information: a specification of the record(s) to be released, the reason for disclosure, the person(s) or organization(s) to whom the disclosure will be made, the student's signature and the date of consent and, if appropriate, the date upon which consent terminates. Kirtland Community College will not disclose personally identifiable information in a student's education record to a third party unless that party agrees to redisclose the information only with the student's prior written consent.

RECORD OF DISCLOSURE

Kirtland Community College shall maintain an accurate record of all requests for access to, and disclosures of, a student's education record and a record of any access or disclosure permitted. The following procedures shall apply: this record will be kept with, but will not be part of, each student's educational record. This record will only be available to the student, college officials, and federal, state or local officials. This record will include the name of the requesting party, additional parties to whom the information may be disclosed, the party's interest in the information, the date of the request, whether the request was granted or denied, and the date of any access or disclosure permitted. This record will be maintained as long as Kirtland Community College maintains the student's education record. This record keeping requirement does not apply to requests by or disclosure to the student, school officials, a party with written consent from the student, a party seeking directory information, or a party seeking information pursuant to a confidential court order or lawfully-issued subpoena.

DIRECTORY INFORMATION

Under FERPA, Kirtland Community College is authorized to designate certain personally identifiable information contained in education records as "directory" information and may disclose such information without prior written consent unless a student objects to such disclosure.

Kirtland Community College designates the following personally identifiable information contained in a student's education record as directory information: student name, address, part-time/full-time status, freshman/sophomore status, program of study, weight and height of athletes, most recent educational institution attended, photographs, date of birth, participation in officially recognized activities and sports including positions held, dates of attendance, date of graduation, and degrees and awards received.

The following procedures apply to the notification and designation of directory information:

1. Kirtland Community College will publish in the college catalog the list of items of personally identifiable information that it designates as directory information.

2. A student may submit a Notification of Non-Disclosure form to the Registrar's Office to indicate that he/she does not want this designated directory information released.

3. School officials shall mark the student's education record indicating that directory information may not be disclosed pursuant to the student's objection.

4. Absent written objection by a student, Kirtland Community College may release designated directory information without prior written consent.

5. The Notification of Non-Disclosure remains in effect only for the current semester and also applies to requests for information as defined under the Solomon Amendment.

In order to comply with the Solomon Amendment, Kirtland Community College will provide the available directory information of currently enrolled students to the military, for which a request should be submitted to the Registrar's Office at least two weeks prior to the end of the requested semester. A fee will be charged for this list and this fee will need to be collected prior to any information being disclosed.

DISCLOSURE INFORMATION

FFEL/Direct Loan Deferments for Peace Corps or Volunteer Service

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

Available Financial Assistance

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

Institutional Information

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

Completion/Graduation Rates

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

Campus Security Report

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

Athletic Program Participation Rates and Financial Support Date

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

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

TRANSCRIPTS

Unofficial transcripts are available online via myKirtland at www.kirtland.edu. Students can print an unofficial transcript by logging into myKirtland, then selecting the blue student tab on the top of the page, then "Course History" link on the left side of the page.

Official transcripts are available from the Registrar's Office 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. Students may also print their own unofficial transcript via myKirtland: Student tab, course history on the left side of the page, view/print unofficial transcript.

A student requesting a transcript must do so in writing, include his/her student identification number and/or date of birth, signature, and to whom and where (including address) the transcript is to be sent. Transcript requests can be sent by fax to (989-275-6727) 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.

WITHDRAWAL FROM COLLEGE

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

STUDENT SUCCESS CENTER

EXPLORING EDUCATIONAL CHOICES

COUNSELING AND CAREER SERVICES

The Counseling and Career Office is located in the Student Success Center. 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 licensed professional counselor is trained to help students deal with the college experience.

Services provided include the following:

- Personal, career, and academic counseling
- 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 Counseling Office. 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.

This office also 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/cover letter writing, interviewing techniques, and employability skills. For individuals seeking employment, numerous job search resources are located on the Internet at www.kirtland.edu/career-counseling. The Job Bulletin Board contains positions that employers have listed with the college. Links to area newspapers and popular job search sites are available. Students may also check the career and employment services bulletin board in the administration building for other job opportunities.

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.

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.

TRANSFERRING CREDIT

Students must submit a written request for an official copy of their Kirtland transcript from the Registrar's Office. This copy must be sent directly from the Registrar's 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.

STUDENT SUPPORT SERVICES

SPECIAL POPULATIONS

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

- Education Development Plan (EDP)
- Referrals to other departments or community agencies
- Attendance costs
- Services for students with disabilities

DISABILITY SERVICES

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 Coordinator of Student Support Services 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 aids or services, academic adjustment or other accommodations are available in the Student Support Services Office. Some examples of services and accommodations follow:

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

STUDENT ASSISTANCE PROGRAM

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

The Student Assistance Program can help by:

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

Information about this program is available in the Student Success Center or by calling 275-5000, ext. 280.

CAMPUS RESOURCES

BOOKSTORE

Located in the Student Center, open Monday through Friday, the Kirtland Community College Bookstore provides new and used textbooks that are only required for your class, so you won't get the wrong edition or miss out on a required access code.

To save gas and time, shop ON-LINE at *Kirtland.edu/bookstore*. The on-line bookstore carries everything the store sells, including all the class supplies you need, along with Kirtland gift items. Apple products are available as well as other tablets and laptops. We have many electronic accessories to go with your new gear also the backpacks and bags to carry it all in style.

The Kirtland Bookstore is the only place to get Kirtland Swag including Under Armour and Nike. Need something for your home office? We carry office supplies. Can't find what you want in the bookstore? Ask us. We are more than happy to place special orders.

Financial Aid use is easy and welcome. To contact the Kirtland Bookstore, please call 275-5000, ext. 273 or email: bookstore@kirtland.edu

CAFETERIA (Kirtland Grill)

Located in the Student Center and is open Monday through Thursday during the Fall and Winter Semester only. The Grill has a large salad bar. Soups and Pizza along with sandwiches, wraps, pretzel breads and ciabattas. There are daily specials. Many varieties of drinks and snacks are available. Most menu items can be made into your own combo meal to save money.

To save even more money, you can purchase a Grill Punch Card for $45 and get $50 worth of food and drinks. You can use your financial aid to purchase the Grill Cards in the Kirtland Bookstore and in the Student Financial Services Office.

CLASS CANCELLATIONS AND COLLEGE CLOSINGS

INDIVIDUAL CLASS CANCELLATION

When an instructor cancels a class it is immediately posted on the website in the Urgent Announcements section. You can view this at www.kirtland.edu and click on "Urgent Announcements + Class Cancellations". Cancellations are also posted on Facebook, Twitter and through RAVE.

EMERGENCY NOTIFICATIONS (RAVE)

Kirtland Community College has an emergency notification system called Rave. This system is used to inform students of major emergencies, snow day school cancellations, and class cancellations. Students and staff can receive these notifications through email, text message, voice calling (robo-call), Kirtland's web site, Twitter, and Kirtland's Facebook page. Registered students are automatically enrolled in Rave to receive emails the week before the semester starts and the following weeks. If you would like to receive text messages or voice calls, you will have to choose into opting in. Instructions on enrolling in these services can be found by going to this web site: http://kirtland.edu/rave-setup/. If you decide to sign up for texting and do not have an unlimited texting plan, understand that Kirtland is not responsible for any extra fees from your cell phone provider. For help setting up Rave you can contact ITS (989-275-5000 x499 or its@kirtland.edu).

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

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

MORNING CANCELLATIONS: In the event of a weather cancellation announcement stating that "The College is closed until noon," classes which begin at noon or later will meet as scheduled. Classes which start before noon will be cancelled.

EVENING CLASSES: Evening classes that begin at 5 p.m. or after, are cancelled both on and off campus.

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 (Roscommon and West Branch.) It does not include MTEC.

KIRTLAND GAYLORD M-TEC℠ CLASSES: Closings and cancellations will also be posted on Facebook, Twitter and through RAVE.

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 check Kirtland's home page at: http://www.kirtland.edu for campus closing announcements.
- Students scheduled for clinical sites will not hear announcements regarding clinical site closings on the radio or television. 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.)

THE CENTER FOR TEACHING AND LEARNING

The Center for Teaching and Learning primary responsibilities include support for distance education and technology in online, hybrid and traditional face-to-face courses. If you have questions, you can email online@kirtland.edu or call 989-275-5000 ext. 500 Monday-Friday, 8 a.m.-4:30 p.m. you can also submit requests from the Help Me link on the top of Kirtland's home page.

The Center for Teaching and Learning (CTL) explores, promotes, and supports excellence in teaching, with diverse technologies, at Kirtland. Our purpose is to promote excellence in teaching and excellence in student learning inside and outside the classroom. Our goal is to see teaching equally valued with research as a professional commitment of faculty and to provide the training and resources to make excellent teaching possible. Effective teaching encompasses more than just the transmission of subject matter, however. Excellent teaching, first of all, gains the students' attention and convinces them of the importance of what is being taught and learned.

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 noted in the class syllabus and posted in the hallway outside the Faculty Office area in the instructional center.

LIBRARY AND TUTORING SERVICES

The library is open to the general community as well as all students. A variety of services are available including reference, assistance with research papers, interlibrary loan, online searching, and student tutoring. Contact the library for hours and more information.

LEARNING RESOURCES

LIBRARY

The library serves 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. Reference services are available in-house, by phone, or email. In-depth reference assistance for research 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 or email the library at library@kirtland.edu.

Resources available in the library:

- a print collection of 34,500 volumes including books and reference materials
- over 100,000 e-books
- 1,100 audio books
- over 130 print magazines, journals, and newspapers
- access to more than 65 electronic databases
- Foundation Center Cooperating Collection & Databases

Information about the library's holdings may be viewed in the Kirtland Library website at www.kirtland.edu/library. Materials not available in the library may be obtained through interlibrary loan. Internet and Wi-Fi connections and a variety of programs are available in the computer lab which is also located in the library.

OPEN HOURS FOR LIBRARY

Fall and Winter Semesters
8 a.m. to 6 p.m., Monday through Thursday
8 a.m. to 4:30 p.m., Friday

SUMMER SESSIONS & BREAKS
8 a.m. to 4:30 p.m. Monday through Friday

TUTORING

Tutoring is free for any Kirtland Community College student. Individual appointments are scheduled at a time convenient to both tutor and tutee.

In addition, the following services are offered:

DROP-IN MATH TUTORING ROOM

Math help is available in the Math Drop-In Lab located in the Library. It is one-on-one personal assistance from a part-time math instructor. Students do homework there so help is available when needed. Check the Tutoring web page for hours open. Math Drop-In Labs are also available at the M-TEC and West Branch locations. Math Drop-In Labs are open during the Fall and Winter semesters.

WRITING CENTER & the OWL

Writing help is available through The Writing Center and OWL. The Writing Center tutors help with anything from brainstorming, drafting and polishing a paper to ideas, letters and resumes. All current Kirtland students, faculty and staff are invited to make use of either service.

The Writing Center is one-on-one, in-person writing assistance with a part-time English instructor. Located in the Kirtland Library and at M-TEC, this service is available by appointment or on a drop-in basis during Fall and Winter semesters. The focus is on helping students with papers and writing projects.

The **OWL** provides online writing assistance with a 24-48 hour response time. If unable to make it to The Writing Center, the OWL is an alternative option for obtaining writing assistance. OWL information and submission guidelines are located at: www.kirtland.edu/tutoring/online-writing-lab. This service is available during the Summer, Fall, and Winter semesters.

NEED FOR TUTORS
Any student who has a minimum GPA of 3.0, has received an A/B+ in the class(es) they wish to tutor, can communicate well and relate sensitively to other students, and has the recommendation of an instructor may apply to be a paid tutor. Stop in the Library for an application or more information.

ONLINE LEARNING

Forward your education without going anywhere! Online courses at Kirtland make it possible. Get an online degree or certificate from Kirtland! Our online students love the flexibility and the freedom of doing their coursework after work and after the kids have gone to bed.

Currently we offer the following complete online degrees and online certificates. Please note that we are rapidly expanding our online degree and online certificate offerings, so please check the following link for the most current list: http://www.kirtland.edu/online-learning/online-degrees-and-certificates

Associates Degrees:

- Associate in Arts
- Associate in Business Administration
- Business Management
- Health Information Technology

Certificates:

- Accounting Clerk
- Small Business Management & Entrepreneurship
- Vascular Sonography

Hybrid Certificates:

- Pharmacy Technology

NOTE: Online degree programs may be completed by taking a combination of classes through Kirtland Community College and the Michigan Community College Virtual Learning Collaborative, allowing students to get their degree completely online from Kirtland Community College while paying Kirtland's very affordable tuition rates.

Students who register for an online or hybrid course for the first time are required to complete the MANDATORY Introduction to Canvas.

The Introduction to Canvas course is "free" and you are automatically enrolled in the course once you register. You must complete the course prior to the start of your online/hybrid academic courses(s). The Online Orientation courses takes about 2-3 days to complete.

STUDENT FOOD PANTRY

Students are finding it harder and harder to concentrate on getting an education when working on empty stomachs. Sometimes it comes down to feeding their families or buying gas to get out to campus. We are here to help. Kirtland established its Student Food Pantry in the Winter 2012 semester. We cannot solve every problem, but we might make it a just a little bit easier for students to continue their education. Without a degree, there is no escape from these tough economic problems.

To apply for food pantry assistance, students must be currently enrolled at Kirtland and must show a Kirtland ID card at every visit. There will be no exceptions. Students will be required to fill out a brief intake form with basic information on the first visit to the pantry; however, all visits to the pantry are tracked only by Student ID and anonymity is always protected. Students are able take advantage of the pantry once a month to obtain various non-perishable food items. The food selection is dependent on what has been donated at any given time. For more detailed information and to apply online: http://www.kirtland.edu/food-pantry.

WARBLER'S NEST

The Warbler's Nest is an on campus early childhood learning center designed to provide quality, affordable child care and developmentally appropriate educational experiences for young children ages birth to five years old. We also provide after school and summer programming for children through the age of twelve.

At the Warbler's Nest we believe that all children are creative thinkers who thrive when they are free to explore, take risks, and use their imaginations. In order to foster this creativity and enhance each child's social, emotional, cognitive, language, and physical development we provide:

- A warm, caring atmosphere where children can feel safe and loved.
- High quality programs for children ages birth to five years old designed with The Creative Curriculum by Teaching Strategies, Inc
- Specialized lessons and abundant opportunities for children to enhance their ability to express their emotions verbally, utilize self -control, show empathy, and engage in positive peer interactions.
- A professionally designed environment that invites participation promotes independence and inquiry and stimulates intellectual thought.
- Teachers that encourage exploration, facilitate social interactions, and scaffold learning at each child's individual level of development.
- Nutritious meals and snacks compliant with the USDA Child and Adult Food Program

Hours of operation for the Warbler's Nest are 7:30 am to 6:30 pm, Monday – Friday. Please call to confirm availability. After Hours Care is also provided in conjunction with campus special events and will be individually advertised accordingly. (i.e.: Kirtland Performing Arts Center) For more information visit our web page at www.kirtland.edu/the-warblers-nest/ or contact the Warbler's Nest Director at 989-275-5000, ext. 233.

SAFETY, SECURITY, AND EMERGENCIES

ACCIDENT REPORTING

Students having an accident or needing medical assistance while on campus should call Public Safety Office at ext 355.

BIT (Behavioral Invention Team)

Kirtland Community College strives to maintain a healthy and safe environment of all students, staff and faculty. The mission of the Behavioral Intervention Team (BIT) is to coordinate the support services of Kirtland Community College in order to assist persons who have reportedly displayed troublesome or concerning behaviors on campus to in increase student success and campus safety.

BIT works directly with students, faculty, and staff to respond to student behaviors and to identify students that may pose a danger to self, others or the college community. To learn more about BIT or to submit a referral visit http://www.kirtland.edu/bit.

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	**2010**	**2011**	**2012**
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
Arson	0	0	0
Any other crime involving Bodily injury	0	0	0

ARRESTS	**2010**	**2011**	**2012**
Liquor Law Violations	0	0	0
Drug Abuse Violations	0	0	0
Weapons Possessions	0	0	0
Hate Crimes	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 public safety.

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 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 Service Office regarding incidents reported.

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 building can provide more information about the ways Kirtland works toward this goal.

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.

EMERGENCIES

Sometimes emergencies arise on campus that requires 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 officers and campus security.

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.

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 besides walking paths, on grass, 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.

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

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.

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.

PUBLIC SAFETY SERVICES

The Department of Public Safety is located in room 127 in the administration building. The Public Safety Department maintains staff during the normal operation of the College to ensure the safety of students, staff and visitors. 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.)
- Confidential evaluation of threatening statements or behavior.

GETTING INVOLVED

KIRTLAND CENTER FOR THE PERFORMING ARTS

Kirtland Center for the Performing Arts exists as the cultural and entertainment establishment at Kirtland Community College.

Performing Artists Series 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. The Performing Artists series annually 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 live performing arts including Theatre, Music and Dance in a theatre setting.

Kirtland Community Theatre annually produces plays/dinner theatres using Kirtland Community College area citizens. Performances are taken into the communities and/or performed in the Performing Arts Center.

The Kirtland Center for the Performing Arts Offices including Ticket Office is located in the Career Technical Center (CTC) building on campus, room 110.

For more information on scheduled events, tickets and/or becoming a Kirtland Center volunteer, please call 989-275-6777.

PHI THETA KAPPA, ALPHA OMICRON GAMMA CHAPTER

Phi Theta Kappa is the official 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, U.S. territories, Canada and Germany.

The members of Kirtland Community College's chapter, Alpha Omicron Gamma, engage in projects and services which provide opportunities for individual growth and development. Membership allows for regional, national and transfer scholarship opportunities; transcript and diploma recognition; and distinguished regalia at graduation.

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

For more information about membership in Kirtland Community College's local chapter, Alpha Omicron Gamma, contact Terry Geary at 989-275-5000, ext. 359, or email at terry.geary@kirtland.edu. Additional information about Phi Theta Kappa can be obtained at the following web site address www.ptk.org.

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: 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 298.

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.

STUDENT CLUBS AND ORGANIZATIONS

There are 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.

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 senate at 989-275-5000, extension 288.

STUDENT I.D. CARD

Identification cards are required for all registered Kirtland students. The Public Safety Office in the administration building will issue cards upon request to all students who register for classes. The identification cards are nontransferable and are valid for one college year. The card permits the student's entry to many college or student-senate-sponsored functions at no charge or at a reduced rate.

STUDENT SENATE

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

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

VETERANS HELPING VETERANS

The mission of the *Veterans Helping Veterans at Kirtland Community College* is to assist veterans from all eras of the military to more easily adjust from military to civilian life and to be a successful student at Kirtland Community College. Our mission includes serving those veterans (men and women) who are currently serving or who have ever served in the United States military to establish a network of lifelong friendships and to help them be aware of all related benefits and services for which he or she may qualify.

This organization was started in October 2012 and meetings are held monthly. Meetings are intended to encourage the formation of camaraderie of members to offer support to one another. Members meet to plan and organize fundraising activities for the purpose of an annual scholarship exclusively for veterans. Other fundraising activities include sending boxes of useful items to troops in Afghanistan.

POLICIES

NONDISCRIMINATION

It is the policy of Kirtland Community College that no person shall, on the basis of race, color, religion, national origin or ancestry, age, sex, disability, physical proportions, sexual orientation, marital status, or genetic information be excluded from participation in, be denied the benefits of, or be subjected to, discrimination during any program, activity, service, or in employment. For information, or to register a grievance, contact the Director of Human Resources, Room 226 ADM Building, 10775 N St Helen Rd, Roscommon, MI 48653, 989-275-5000 x 271 or 239.

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 building, or call 989-275-5000, extensions 239 or 271.

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

PROCEDURE FOR REPORTING DISCRIMINATION

Option 1: Informal

The College encourages informal resolution of complaints. If appropriate, you may first discuss the complaint directly with the individual against whom the complaint is made. If the alleged discrimination involves a department or unit rather than an individual, you may discuss the complaint with a representative of that department/unit. If the complaint is not resolved as a result of this discussion, or if you do not wish to proceed informally, you should proceed to Option 2.

Option 2: Formal

File a complaint with Kirtland Community College's Office of Human Resources. If this office includes the person alleged to have discriminated, the complaint may be filed directly with the president of the college. The complaint must be in writing and include your name and address, the nature of the alleged violation, names of persons responsible for the alleged violation (where known), requested relief or corrective action, and any background information you believe to be relevant (e.g. witnesses to the alleged violation, name or groups of other persons who may be affected, etc.).

A complaint should be filed in a timely manner following an alleged violation. The college will take affirmative steps to comply with non-discrimination policies at any time a violation becomes known, but may not be able to address a specific instance of alleged violation if the passage of time has rendered memories unclear and relevant documentation is lacking. If you believe you have been improperly discriminated against, you are urged to initiate either option within a week.

Upon receipt of the complaint, the college will immediately conduct an investigation. All parties related to the complaint will be afforded the opportunity to submit evidence (including statements from witnesses) relevant to the complaint. The investigation will be completed within 20 working days and a statement of findings will be issued to you and to the individual or department/unit against whom the complaint is made.

If the college determines that the allegations of discrimination have merit, a proposed resolution according to law and college policy will be submitted to the parties involved. If the proposed recommendations are acceptable to you and the solutions are implemented, the complaint is considered resolved.

You may request a reconsideration of the case (an appeal) in instances where you are dissatisfied with the resolution. The request for consideration should be filed in the President's Office within 10 working days of receipt of the resolution, or as soon as possible following evidence the accepted solution has not been implemented. The president will review the request and issue a final resolution in a timely manner. The decision of the president is final.

Anyone at any time may contact the following:

Office for Civil Rights United States Department of Education 400 Maryland Avenue, S.W. Washington, D.C. 20202-1100 (202) 245-6800	**Or**	Office for Civil Rights United States Department of Education 600 Superior Avenue East Cleveland, OH 44114-2614 (216) 522-4970

Complaints of discrimination will be treated as confidentially as possible, recognizing the potential need to notify the alleged perpetrator of the facts relative to the alleged violation, contact and interview witnesses and other knowledgeable parties, inform key staff of issues required for compliance, and reply to any state or federal agencies who may have been informed of the alleged violation.

TOBACCO-FREE POLICY

In compliance with state and federal law, and to promote a healthy learning and work environment, Kirtland Community College will reduce student, guest and employee exposure to tobacco products.

- Smoking, distribution, or use of any tobacco products is prohibited in all leased or owned college facilities.
- Smoking or use of any tobacco products is prohibited in college vehicles.
- Smoking or use of any tobacco products on leased or owned college grounds may occur only in personal vehicles.
- The sale of tobacco products is prohibited in and on all leased or owned college facilities and grounds.

DRUG-FREE LEARNING ENVIRONMENT

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

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 Registrar's Office located in the Student Service Office in the administration building, or call 989-275-5000, extension 291. For details of the rights, please refer to "Student's Right to Know" (page 37).

SOCIAL SECURITY NUMBER

The college asks for the student's Social Security number at time of admission to verify identification. The college shall obtain social security numbers from individuals for a valid business purpose only, and shall ensure to the extent practicable the confidentiality of social security numbers in its possession. The college prohibits unlawful disclosure of social security numbers and prescribes limits on who has access to information or documents that contain social security numbers. Documents containing social security numbers shall be properly disposed of, and the college provides penalties for violation of the privacy policy.

For identification purposes, a college-wide unique identification number (UIN) will be individually assigned to all students, employees, and other associated individuals, such as contractors or consultants. The UIN will be considered a public piece of information. This UIN will be assigned at the earliest possible point of contact between the individual and the college. The UIN will be used in all electronic and paper data systems to identify, track, and service individuals associated with the college. It will be permanently and uniquely associated with the individual to whom it is originally assigned.

RIGHTS AND RESPONSIBILITIES OF STUDENTS

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

Academic Freedom

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

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

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

Freedom of Assembly

No person or persons shall assemble in a manner which obstructs the free movements of persons about the college or the free normal use of the college buildings and facilities, or prevent or obstruct the normal 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 the 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 the Committee's recommendation to the appropriate vice president.

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

H. To waive the right of a formal hearing before the Committee and to have the case heard by the appropriate vice president.

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 to 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

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.

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 which govern the community, as well as for 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 which 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 vice president of student services or the appropriate instructional vice president will determine whether jurisdiction should be asserted to address the adverse effects of an off-campus activity.

A. Disciplinary Actions

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

1. Warning: A "WARNING" is an official reprimand which expresses college dissatisfaction with the student's conduct and which clarifies expected behavior in the future. Such action is in effect for the duration of the semester in which the warning was issued. Normally, a warning 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 period of 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 Classes" 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 with 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" is an action which may stand alone or be issued with another sanction. Specific orders may include, but are not limited to, performance or non-performance 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 Service Office. A disciplinary action cannot be recorded on a student's transcript.

B. Forms of Non-Academic Misconduct: The following forms of misconduct will not be tolerated by the college. Minimum sanctions, disciplinary actions, normally taken by the college are indicated in parenthesis following each violation. Note: 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 on the basis of 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-Larsen Civil Rights Act. (Suspension)

   Note: The Elliott-Larsen 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-prong 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 in 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. Initiate 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"), 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/procedures 3.015, Community Use of College Facilities.) (Warning)

12. Manufacture, possession, control, sale, transmission or use:

    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 non-smoking areas. First offense (Warning), second offense (Suspension)

16. Gambling with money or anything else of value on campus or 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. 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)

21. 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)

22. 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 normal operation of the college's computing system.

    g. Use of computing facilities in a manner which violates state or federal copyright laws, e.g., unauthorized duplication of copyrighted or licensed software. (Suspension)

23. 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)

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

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

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

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

C. Academic Misconduct

1. Kirtland Community College considers academic dishonesty to be a serious offense. It is the policy of the college that determination of and appropriate action in respect to academic dishonesty by a student shall be a matter of individual judgment by the instructor, with departmental guidelines.

2. 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. (An instructor may administer a penalty up to and including failure in a particular course. In some cases, such as in nursing and criminal justice programs, the student handbook outlines the appropriate action. If a student fails two classes as a result of academic dishonesty, he or she is dismissed from the college for the remainder of the semester in which the second violation occurs and the following academic semester that is required for that student's program of study, i.e. some programs require students to take classes during the summer semester, most programs do not.)

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.

Plagiarism is representing the work of other persons as one's own, including but not limited to the use of work by others and information downloaded from the Internet. The use of another person's words, ideas, or information without proper acknowledgement, whether done intentionally or through carelessness, is also plagiarism. The student should seek guidance from the instructor about acceptable methods to be used t acknowledge the work and ideas of others.

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)

The vice presidents will decide whether the conduct will be considered academic (section C) or non-academic (section B) and will follow the appropriate procedure.

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.

RIGHTS AND RESPONSIBILITIES OF STUDENTS

At Kirtland Community College, two procedural forms of due process exist; Academic Due Process and Non-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 vice president, or his/her designee, may impose a suspension prior to the hearing before the committee.

A. Interim suspension may be imposed only:

1. To ensure the safety and well-being of members of the college community or 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 or interference to the normal 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 s/he might otherwise be eligible as the vice president 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 vice president's actions as soon as practicable.

Procedure for Non-Academic 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 "B.I.T. Referral form". The form is available @ www.kirtland.edu/bit.
Once charges have been formally filed, the following procedure for Non-Academic Due Process must be observed:

A. The vice president of student services will notify the student (in writing) of the charges filed against him/her and the college's policy regarding due process.

B. If the student does not waive their rights, then the vice president of student services will appoint a student judiciary committee composed of three full-time college employees and two students. An employee will be appointed to chair the hearing. The members of this committee must have no vested interest in the matter. The vice president 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 ten 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 vice president of student services.

E. The vice president of student services will render a decision on the case, which may include sanctions imposed on the student. The vice president 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 vice president of student services' decision, s/he may appeal to the President within three working days following notification of the vice president's decision (refer to "Appeal Process"). The President's decision will be final.

Procedure for Academic Due Process:

A. If an instructor fails a student in a course for academic dishonesty, the instructor must immediately notify, in writing (Academic Student Conduct Complaint Form), the student and the vice president of instruction. The vice president of instruction shall maintain a record of all such notifications.

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

C. If the student and faculty member do not come to a satisfactory agreement, or if charged with academic misconduct, the student may appeal to the appropriate dean. If the problem is not resolved at this level, the student may appeal to the vice president of instruction.

D. If the student chooses to appeal to the vice president of instruction, a written request (which includes a brief summary of the grievance) must be submitted. The vice president will review the appeal. Within three working days after receiving the appeal, the vice president shall render a decision.

E. Should the student wish to pursue the matter further, the vice president will refer the complaint to the academic appeals committee. The instructional vice president will appoint an academic appeals committee composed of three full-time faculty members and two students. The vice president will appoint one of the faculty members to chair the hearing. The members of this committee must have no vested interest in the matter. The vice president cannot serve on this committee.

F. The academic appeals committee has the responsibility of hearing the grievance and reviewing the evidence. The hearing will take place within ten 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 vice president.

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

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

Appeal Process(es):

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., were 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 which the student was found to have committed.

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

SUBSTANCE ABUSE INFORMATION ON ALCOHOL AND DRUGS

Information regarding the misuse and abuse of alcohol and drugs can be found by contacting the Counseling Office located in the Student Success Center.

STATEMENT/GUIDELINES REGARDING AIDS

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

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

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

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

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

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

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

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

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.

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 awarded 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.) Tuition is charged per contact hour.

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

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

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

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

Humanities Elective - A course from the following subject areas: art, creative writing, history, humanities, literature, music, philosophy, and theatre.

Hybrid Course: A hybrid class combines classroom learning with online learning. In a hybrid course, a significant portion of the class learning activities are online, which reduces the amount of time spent in a traditional, face-to-face classroom. The class meets 50% online with the other 50% on campus.

Learning Community – Kirtland Community College Learning Cohorts are defined as two sets of linked classes designed to encourage connections and support networks between students, faculty and staff; to assist students to learn how to identify and access sources of support; to help students become responsible and engaged learners; and, ultimately, to retain the students. The first cohort will be for students who place into the lowest transitional English (reading and writing) and mathematics courses. The second cohort will be for students who place into the higher level transitional English and mathematics courses. Both levels will also have a one-credit course designed to encourage the development of skills needed by college students to be successful.

Online Course: An online course is defined as one for which all regularly scheduled classroom time is replaced by required activities completed at distance and managed online. An online class meets fully online with the exception of some test/exams where students may be required to go to an approved proctored site to take the test/exam.

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.

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

Science Elective - A course from the following subject areas: astronomy, biology, chemistry, geology, or physics.

Social Science Elective - A course from the following subject areas: anthropology, economics, geography, political science, psychology, and sociology.

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

KIRTLAND COMMUNITY COLLEGE

PROGRAMS OF STUDY

2014-2015

Kirtland Community College reserves the right to change or correct any information contained in this document at any time without notification. Students alone are responsible for the successful completion of the requirements for the degree selected. While advisors are available to assist with course selection, it remains the student's responsibility to ensure that all degree and grade requirements are met for graduation.

PROGRAMS OF STUDY

Key: **AAS**=Associate in Applied Science; **CC**=Certificate of Completion; **SC**=Special Certificate; **TR**=Degree design to facilitate transfer to another college.

ART—Pages 65-72
Animation & Game Design, AAS
Associate in Fine Arts-Studio Art, TR
Foundations in Fine Art, AAS
Graphic Design, CC and AAS
Photography, AAS
Three-Dimensional Product Design, AAS

AUTOMOTIVE—Pages 73-77
Automotive Diesel Service Specialist, CC
Automotive Technology, AAS
Automotive Technology (Master Certification), CC
Automotive Technology Management, AAS, TR

BUSINESS—Pages 79-83
Accounting Clerk, CC
Associate in Business Administration, TR
Business Management, AAS
Small Business Management & Entrepreneurship, CC
with concentrations in:
Studio Art
Business
Computer Information Systems
Cosmetology

COMPUTER INFORMATION SYSTEMS—Pages 85-89
Associate in Computers-Computer Science, TR
Associate in Computers-Computer Information Systems, TR
Information Technology, AAS
Web Design & Internet Development, AAS

CONSTRUCTION TECHNOLOGY—Pages 91-99
M-TEC[SM]/Gaylord
Electrical Technology—CC, AAS
Heating/Ventilation/AC/Refrigeration—CC, AAS

COSMETOLOGY—Pages 101-103
Cosmetology—CC, AAS
Esthetician—SC

HEALTH SCIENCES—Pages 105-116
Cardiac Sonography, AAS (M-TEC[SM]/Gaylord)
Health Information Technology, AAS
Nursing, CC, AAS
Pharmacy Technology, CC
Surgical Technology, CC
Vascular Sonography, Advanced CC

HONORS PROGRAM—Page 64

INDUSTRIAL TECHNOLOGIES—Pages 117-124
M-TEC[SM]/Gaylord
Mechatronics Facilities Technician, AAS
Mechatronics Industrial Technician, AAS
Welding & Fabricating, CC, AAS

OFFICE INFORMATION SYSTEMS—Pages 125-129
Administrative Assistant, AAS
Medical Billing & Coding, CC
Medical Clerk, CC
Medical Secretary, AAS

PUBLIC SAFETY—Pages 131-136
Corrections Administration/Jail Administration, AAS
Criminal Justice Pre-Service, AAS
Emergency Medical Services, AAS
Military Police Academy, SC
Police Academy, CC

TECHNOLOGY MANAGEMENT—Pages 137-138
Technology Management, AAS

TRANSFER DEGREES—Pages 139-151
Associate in Arts (AA)
Associate in Business Administration
Associate in Computers-Computer Science
Associate in Computers-Computer Information Systems
Associate in Fine Arts-Studio Art
Associate in Science, AS, with concentrations in:
Health Science
Life Science
Physical Science

What is the MTA?

MTA refers to the **Michigan Transfer Agreement**. This endorsement on a transfer degree assures that the student has satisfied the requirements of the agreement by completing **30 credits with at least a "C" in each course:**
--English Composition I and either English Composition II or a Communications course
--two humanities classes from two disciplines* (Studio classes are not allowed.)
--two social science classes from two disciplines**
--College Algebra or Statistics or higher***
--two lab science classes from two disciplines****

Kirtland Community College has determined that the following courses meet the requirements:
*Humanities—ART-10000 & 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 & 12300, any PHL or THE-12000
**Social Science—any ECO, GEO, POL, PSY or SOC
***Math—MTH-13000, 18001, 20600, 22002 or 22102
****Science –any AST, BIO, CHE, GEL or PHY course w/lab

Guide to Understanding the Program Pages

Type of degree or certificate and the program code

Program Name

Minimum number of credits required for this program

BUSINESS MANAGEMENT
Associate in Applied Science (DBSM0)

Minimum Credits: 60
Contact Hours: 62-67

Introduction

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

Introductory program information

Tuition is charged by contact hour. This number represents the range of contact hours for which a student will be billed if every course for this program is taken at Kirtland Community College.

Program Requirements			
Course	**Title**		
ACC-12100	Accounting Principles I		
ACC-12200	Accounting Principles II		
BUS-10100	Introduction to Business	3	
BUS-21000	Principles of Management	3	
BUS-21500	Business Law	3	3
BUS-24500	Human Resource Management		3
ECO-20100	Principles of Economics-MACRO	3	
ECO-202	CRO	3	
MKT-200		3	3
OIS-1040		3	
OIS-10500	Business Correspondence	3	
	Up to 2 credits from below, if needed		
ACC-_____			
BUS-_____			
CIS-_____			
MKT-_____			
OIS-_____			

Elective choices

Specific program requirements

General Education			
ENG-10303	English Composition I	3	
ENG-10403	English Composition II	3	
11400	Fundamentals of Speech *or* Into to Interpersonal & Public Comm	3	
0100	Introduction to American Government	3	
PSY-10100	Introduction to Psychology	3	
Humanities	Select from ART, ENG-21400 or higher, HIS, HUM, MUS, PHL, THE	2-4	2-4
MTH-12000	Intermediate Algebra or higher	4	4
Science	Any science course with a lab	4-5	5-7

General Education Requirements

Number of hours assigned to Kirtland courses. Transfer credits may have fewer hours and still meet the requirement. Students may find that they need to "make up" hours lost in transfer if fewer hours are brought in than are assigned to the equivalent Kirtland course in order to satisfy the minimum number of credits required in a certificate or degree.

This page is for informational purposes only. Please refer to the BUSINESS program pages for information on the current Business Management Degree.

HONORS PROGRAM

INTRODUCTION

The Honors Program provides enhanced educational opportunities for academically talented students in both general education and occupational programs. Students pursue honors studies in parallel with their regular academic programs, and, if they complete the requirements, will receive an honors associate degree. Admission to the Honors Program offers significant benefits such as a tuition scholarship and opportunity for the Otto and Martha Krauss Honors Scholarship, a competitive award that will provide one honors student up to $2,000 per academic year for two years. (The amount is determined by credit hours per semester.)

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

HONORS PROGRAM REQUIREMENTS

Candidates for admission to the Honors Program must:
1) Be enrolled at Kirtland.
2) Submit a completed application and transcript release form.
3) Submit two letters of recommendation from either college faculty or high school teachers.
4) Submit an original essay.
5) Have completed twelve (12) college-level credit hours (at Kirtland or elsewhere) with a cumulative grade point average of at least 3.50 or be a high school graduate with a minimum high school grade point average of 3.50.
6) Transcripts must be submitted.

Applications are accepted throughout the year, but students are admitted only twice each academic year. Upon completion, honors courses and the honors associate degree will be noted on the student's transcript. The student will also receive academic regalia at graduation.

Students interested in earning an honors degree should contact the Honors Program Office at 989-275-5000, ext. 359.

HONORS CLASSES*

ACC-12599	Computer Accounting w/QuickBooks
ART-10599	Intro to Design
ART-10899	Ceramics I
ART-11099	Watercolors
ART-21499	Sculpture I
ART-21599	Photography II
ART-22599	Intro to Color Photography
ART-23199	Advanced Black & White Photography
ART-27599	Computer Generated Images I
ART-27699	Digital Darkroom
ART-27905	Advanced Drawing
ART-27931	Rendering I
ART-28000	Portfolio I
BIO-10199	General Biology
BIO-21300	Nature Study
BIO-23600	Anatomy & Physiology II
BUS-10100	Intro to Business
CHE-10191/92	General Chemistry I & Lab
CHE-10291/92	General Chemistry II & Lab
COS-12599-13599	Cosmetology V-XV
ENG-10399	English Composition I
ENG-10499	English Composition II
ENG-10699	Technical Writing
ENG-21400	Intro to Literature
ENG-22899	Mythology
GEL-10599	Physical Geology
HIS-10599	History of World Societies to 1500
HIS-10699	History of World Societies Since 1500
HIS-20199	US History to 1865
HIS-20299	US History since 1865
HIS-20399	Michigan History
MKT-11599	Customer Relations
MKT-20099	Principles of Marketing
MTH-12099	Intermediate Algebra
MTH-13099	College Algebra
MTH-18099	Pre-Calculus
MTH-20699	Applications in Statistics
MTH-22099	Calculus I
MTH-22199	Calculus II
NUR-24299	Community Mental Health Nursing
OIS-10599	Business Correspondence
OIS-17099	Legal Terminology & Transcription
OIS-21099	Office Procedures
OIS-21599	Desktop Publishing
OIS-22299	Word Processing II-WORD
PHL-20199	Intro to Philosophy
PHL-21099	Intro to Ethics
PHY-22191/92	Physics I w/Calculus Lecture & Lab
POL-10199	Intro to American Government
POL-20199	Comparative Government
PSY-10199	Intro to Psychology
PSY-20299	Abnormal Psychology
SPE-10599	Fundamentals of Speech
SPE-11499	Interpersonal & Public Communication

**Other classes may be available upon request*

ART DEGREES

Certificates (CC)

- *Graphic Design*

Associate in Applied Science (AAS)

- *Animation & Game Design*
- *Foundations in Fine Art*
- *Graphic Design*
- *Photography*
- *Three-Dimensional Product Design*

Associate in Fine Arts (AFA)

- *Studio Art*

Partnership Programs

- *College for Creative Studies*
- *Kendall College of Art & Design of Ferris State University*

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

ART DEGREE PARTNERSHIPS

There has never been a better time to be an art school graduate. There are a remarkable number of occupations that require people with artistic talents. Many of the things that lead to improving our quality of life have input from artists. The physical things in our lives—the art that inspires us, the products that we use, the things we see on our screen, the materials we read—all of these affect our sense of what it is to be a complete human being, and all of them are touched by artists. You know it…there are artists all around us. Many of them are called designers. Their influence may be invisible to the typical person, but it's there and it's real and it's growing all the time.

Students in Kirtland Community College's art programs now have some of the best opportunities to continue to further their education once they build their portfolios while attending Kirtland. Working with the College for Creative Studies (CCS) and Kendall College of Art and Design, past Kirtland Art students have won significant tuition awards at these colleges based on their portfolios in the annual student merit scholarship competitions, with some even receiving full-ride scholarships.

Kirtland art students have experienced excellent transferability of credits to both colleges. Students should contact those listed for specific program information. Students wanting additional information on the various Bachelor of Fine Art programs should contact the respective institutions at the addresses listed below.

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

GRAPHIC DESIGN
Certificate of Completion (CGRA0)

Minimum Credits: 36
Contact Hours: 47

Introduction
The Certificate in 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.

PROGRAM REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
ART-10500	Introduction to Design	3	4
ART-10600	Fundamentals of Drawing I	3	4
ART-11500	Photography I	3	4
ART-17000	Graphic Studio	3	4
ART-19000	Digital Communications	3	4
ART-20600	Drawing II	3	4
ART-21500	Photography II	3	4
ART-25000	Illustration I	3	4
ART-27545	Computer Generated Images I	3	4
ART-27546	Computer Generated Images II	3	4
ART-28000	Portfolio I	3	4
CIS-10500	Introduction to Computers	3	3
Minimum Program Credits/Contact Hours:		**36**	**47**

Suggested sequencing of courses:

Year 1 (Fall Semester) 12 credits ART-10600—Fundamentals of Drawing I ART-19000—Digital Communications ART-27545—Computer Generated Images I CIS-10500—Intro to Computers	**Year 1 (Winter Semester) 12 credits** ART-11500—Photography I ART-17000—Graphic Studio ART courses from required list (2 courses)
Year 2 (Fall Semester) 12 credits ART courses from required list (3 courses) ART-28000--Portfolio	

ANIMATION AND GAME DESIGN

Minimum Credits: 61

Associate in Applied Science (DAGD0)

Contact Hours: 73-77

Introduction

The AAS in Animation and Game Design is designed to provide specialized instruction that is necessary for entry and success in the animation and gaming industry. The curriculum is based upon solid academic, computer operation 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.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
ENG-10303	English Composition I	3	3
SPE-10500	Fundamentals of Speech	3	3
Select one humanities course Current KCC offerings include any ART, ENG-21400 or higher, any HIS, HUM-20500, any MUS, any PHL and THE-12000.			
		3	4
Select Intermediate Algebra (MTH-12000) or higher or any lab science course:			
		3-5	4-7
Select one social science course from ECO, GEO, POL, PSY, or SOC:			
		3-4	3-4
	General Education Credits/Contact Hours:	**15-18**	**17-21**
ART & CIS REQUIREMENTS			
ART-10500	Introduction to Design	3	4
ART-10600	Fundamentals of Drawing I	3	4
ART-11500	Photography I	3	4
ART-19000	Digital Communications	3	4
ART-20600	Drawing II	3	4
ART-27545	Computer Generated Images I	3	4
ART-27565	Comic Book Illustration	3	4
ART-27571	Computer Animation I	3	4
ART-27573 *or* ART-11400	Computer Animation II *or* Sculpture I	3	4
ART-28000	Portfolio I	3	4
CIS-10500	Introduction to Computers	3	3
CIS-21000	Internet & Web Page Development	3	3
CIS-21500	Web Animation & Multimedia	3	3
CIS-27001	Programming I	3	3
CIS-27101	Programming II	4	4
	ART & CIS Credits/Contact Hours:	**46**	**56**
	Minimum Program Credits/Contact Hours:	**61-64**	**73-77**
ADDITIONAL REQUIREMENTS FOR A SECOND AAS IN ART DEGREE *See note below			
ART-21100	3-Dimensional Design	3	4
ART-25000	Illustration I	3	4
ART-26000	Illustration II	3	4
ART-27573 *or* ART-11400	Computer Animation *or* Sculpture I	3	4
ART-20600	Drawing II	3	4

*Students who wish to complete the Animation & Game Design degree as a second Art Associate in Applied Science degree must complete all of the above requirements as well as the five additional requirements listed below. An advisor should be consulted for assistance in scheduling the additional courses.

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 1 (Winter Semester) 16-17 credits**
ART courses from required list (3 courses)	ART courses from required list (3 courses)
ART-19000—Digital Communications	Math *or* lab science course
CIS-10500—Intro to Computers	Social science course
ENG-10303—English Composition I	
Year 2 (Fall Semester) 15 credits	**Year 2 (Winter Semester) 15-16 credits**
ART courses from required list (3 courses)	ART-28000—Portfolio
CIS-21000—Internet/Web Page Development	CIS-21500—Web Animation & Multimedia
CIS-27001—Programming I	CIS-27101—Programming II
	SPE-10500—Fundamentals of Speech
	Humanities course

FOUNDATIONS IN FINE ART

Associate in Applied Science (DFFA0)

Minimum Credits: 60

Contact Hours: 74-78

Introduction

The Associate in Applied Science--Foundations in Fine Art degree is designed to provide specialized instruction for those students who wish to transfer to Kendall College of Art and Design or to the College of Creative Studies. 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.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ENG-10303	English Composition I	3	3
SPE-10500	Fundamentals of Speech	3	3
Select Intermediate Algebra (MTH-12000) or higher or any lab science course:			
		3-5	4-7
Select one social science course from ECO, GEO, POL, PSY or SOC:			
		3-4	3-4
	General Education Credits/Contact Hours:	**15-18**	**16-20**
PROGRAM REQUIREMENTS			
ART-10000	Art History I	3	3
ART-10103	Art History II	3	3
ART-10500	Introduction to Design	3	4
ART-10600	Fundamentals of Drawing I	3	4
ART-10700	Painting I	3	4
ART-11400	Sculpture I	3	4
ART-11500	Photography I	3	4
ART-20600	Drawing II	3	4
ART-20700	Painting II	3	4
ART-21400 *or* ART-21500	Sculpture II *or* Photography II	3	4
ART-27531	Rendering I	3	4
ART-27545 *or* ART-27550	Computer Generated Images I *or* Digital Darkroom	3	4
ART-28000	Portfolio I	3	4
Select two studio art electives:			
		3	4
		3	4
	Art Credits/Contact Hours:	**45**	**58**
	Minimum Program Credits/Contact Hours:	**60-63**	**74-78**
ADDITIONAL REQUIREMENTS FOR A SECOND AAS IN ART DEGREE *See note below			
ART-19000	Digital Communications	3	4
ART-21100	3-Dimensional Design	3	4
ART-27543	Abstract Painting	3	4
ART-27611	Rendering II	3	4
ART-27598	Portfolio II	3	4

*Students who wish to complete the Foundations in Fine Art degree as a second Art Associate in Applied Science degree must complete all of the above requirements as well as the five additional requirements listed below. An advisor should be consulted for assistance in scheduling the additional courses.

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 1 (Winter Semester) 15 credits**
ART-Art History I	ART-10103—Art History II
ART courses from required list (3 courses)	ART courses from required list (3 courses)
ENG-10303—English Composition I	SPE-10500—Fundamentals of Speech
Year 2 (Fall Semester) 16 credits	**Year 2 (Winter Semester) 15 credits**
ART courses from required list (3 courses)	ART course from required list
ART elective	ART elective
Math or lab science course	ART-28000—Portfolio
	CIS-10500—Introduction to Computers
	Social science course

GRAPHIC DESIGN

Minimum Credits: 60

Associate in Applied Science (DGRA0)

Contact Hours: 73-78

Introduction

The AAS in 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.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ENG-10303	English Composition I	3	3
SPE-10500	Fundamentals of Speech	3	3
Select Intermediate Algebra or higher or any lab science course:			
		3-5	4-7
Select one social science course from ECO, GEO, POL, PSY or SOC:			
		3-4	3-4
	General Education Credits/Contact Hours:	**15-18**	**16-20**
ART/CIS COURSES			
ART-10000	Art History I	3	3
ART-10103	Art History II	3	3
ART-10500	Introduction to Design	3	4
ART-10600	Fundamentals of Drawing I	3	4
ART-11500	Photography I	3	4
ART-17000 *or* ART-26000	Graphic Studio *or* Illustration II	3	4
ART-19000	Digital Communications	3	4
ART-20600	Drawing II	3	4
ART-21500	Photography II	3	4
ART-25000	Illustration I	3	4
ART-27545	Computer Generated Images I	3	4
ART-27546 *or* ART-27550	Computer Generated Images II *or* Digital Darkroom	3	4
ART-27571 *or* CIS-21000 *or* CIS-21500	Computer Animation I *or* Internet and Web Development (F) *or* Web Animation and Multimedia (W)	3	3-4
ART-28000	Portfolio I	3	4
Select one studio art elective:			
		3	4
	ART/CIS Credits/Contact Hours:	**45**	**57-58**
	Minimum Program Credits/Contact Hours:	**60-63**	**73-78**
ADDITIONAL REQUIREMENTS FOR A SECOND AAS IN ART DEGREE *See note below			
ART-20500	Design II	3	4
ART-21100	3-Dimensional Design	3	4
ART-26000 *or* ART-17000	Illustration II *or* Graphic Studio	3	4
ART-27546 or ART-27550	Computer Generated Images II or Digital Darkroom	3	4
ART-27598	Portfolio II	3	4

*Students who wish to complete the Graphic Design degree as a second Art Associate in Applied Science degree must complete all of the above requirements as well as the five additional requirements listed below. An advisor should be consulted for assistance in scheduling the additional courses.

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 1 (Winter Semester) 15 credits**
ART-10000—Art History I	ART-10103—Art History II
ART-19000—Digital Communications	ART courses from required list (3 courses)
ART courses from required list (2 courses)	CIS-10500—Intro to Computers
ENG-10303—English Composition I	
Year 2 (Fall Semester) 16-17 credits	**Year 2 (Winter Semester) 15 credits**
ART courses from required list (2 courses)	ART-17000—Graphic Studio *or* ART-26000—Illustration II
ART elective *or* ART-27571—Computer Animation I	ART course from required list
or CIS-21000—Internet/Web Page Development (F)	ART elective *or* ART-27571—Computer Animation I
or CIS-21500—Web Animation/Multimedia (W)	*or* CIS-21000—Internet/Web Page Development (F)
Math *or* lab science course	*or* CIS-21500—Web Animation/Multimedia (W)
Social science course	ART-28000—Portfolio
	SPE-10500—Fundamentals of Speech

PHOTOGRAPHY

Minimum Credits: 60

Associate in Applied Science (DPHO0)

Contact Hours: 74-78

Introduction

Kirtland's AAS in Photography is designed to help turn a student's passion for photography into a career by fostering creative development while teaching the technical, business and marketing skills needed for a career in photography. The program provides students with comprehensive aesthetic, technical and theoretical training within a wide range of photographic practices and imaging technologies. Students develop entry-level skills for the editorial, advertising, fine art and photo technology fields. 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.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ENG-10303	English Composition I	3	3
SPE-10500	Fundamentals of Speech	3	3
Select Intermediate Algebra or higher (MTH-12000) or any lab science course:			
		3-5	4-7
Select one social science course from ECO, GEO, POL, PSY or SOC:			
		3-4	3-4
	General Education Credits/Contact Hours:	**15-18**	**16-20**
ART COURSES			
ART-10000	Art History I	3	3
ART-10103	Art History II	3	3
ART-10500	Introduction to Design	3	4
ART-10600	Fundamentals of Drawing I	3	4
ART-11500	Photography I	3	4
ART-20600	Drawing II	3	4
ART-21500	Photography II	3	4
ART-27532	Photo Studio Problems	3	4
ART-27545	Computer Generated Images I	3	4
ART-27550	Digital Darkroom	3	4
ART-27553	Advanced Black & White Photography	3	4
ART-27606	Digital Darkroom II	3	4
ART-28000	Portfolio I	3	4
Select two studio art electives:			
		3	4
		3	4
	ART Credits/Contact Hours:	**45**	**58**
	Minimum Program Credits/Contact Hours:	**60-63**	**74-78**
ADDITIONAL REQUIREMENTS FOR A SECOND AAS IN ART DEGREE *See note below			
ART-17000	Graphic Studio	3	4
ART-19000	Digital Communications	3	4
ART-21100	3-Dimensional Design	3	4
ART-27546	Computer Generated Images II	3	4
ART-27598	Portfolio II	3	4

*Students who wish to complete the Graphic Design degree as a second Art Associate in Applied Science degree must complete all of the above requirements as well as the five additional requirements listed below. An advisor should be consulted for assistance in scheduling the additional courses.

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 1 (Winter Semester) 15 credits**
ART-10000—Art History I	ART-10103—Art History II
ART courses from required list (3 courses)	ART courses from required list (3 courses)
ENG-10303—English Composition I	SPE-10500—Fundamentals of Speech
Year 2 (Fall Semester) 16 credits	**Year 2 (Winter Semester) 15 credits**
ART courses from required list (3 courses)	ART course from required list
ART elective	ART-28000—Portfolio
Math *or* lab science course	ART elective
	CIS-10500—Intro to Computers
	Social science course

3-DIMENSIONAL PRODUCT DESIGN

Minimum Credits: 60

Associate in Applied Science (DPRD0)

Contact Hours: 74-78

Introduction

Efficiency. Functionality. Beauty. The 3-Dimentional/Product Design program will teach you how to combine creative innovation with an ability to meet the needs of the product users. Students are trained in numerous courses to strengthen their skills and obtain marketable experience that can be used in the product design, transportation design, crafts or functional art or furniture design fields.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ENG-10303	English Composition I	3	3
SPE-10500	Fundamentals of Speech	3	3
Select Intermediate Algebra (MTH-12000) or higher or any lab science course:			
		3-5	4-7
Select one social science course from ECO, GEO, POL, PSY or SOC:			
		3-4	3-4
	General Education Credits/Contact Hours:	**15-18**	**16-20**
ART COURSES			
ART-10000	Art History I	3	3
ART-10103	Art History II	3	3
ART-10500	Introduction to Design	3	4
ART-10600	Fundamentals of Drawing I	3	4
ART-10800	Ceramics I	3	4
ART-11400	Sculpture I	3	4
ART-20600	Drawing II	3	4
ART-20800 *or* ART-27571	Ceramics II *or* Computer Animation I	3	4
ART-21400	Sculpture II	3	4
ART-22400	Advanced Sculpture	3	4
ART-25000	Illustration I	3	4
ART-27514	Welded Sculpture	3	4
ART-28000	Portfolio I	3	4
Select two studio art electives:			
		3	4
		3	4
	ART Credits/Contact Hours:	**45**	**58**
	Minimum Program Credits/Contact Hours:	**60-63**	**74-78**
ADDITIONAL REQUIREMENTS FOR A SECOND AAS IN ART DEGREE *See note below			
ART-11500	Photography I	3	4
ART-21100	3-Dimensional Design	3	4
ART-26000	Illustration II	3	4
ART-27571 *or* ART-20800	Computer Animation *or* Ceramics II	3	4
ART-27598	Portfolio II	3	4

*Students who wish to complete the Graphic Design degree as a second Art Associate in Applied Science degree must complete all of the above requirements as well as the five additional requirements listed below. An advisor should be consulted for assistance in scheduling the additional courses.

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 1 (Winter Semester) 15 credits**
ART-10000—Art History I	ART-10103—Art History II
ART courses from required list (3 courses)	ART courses from required list (3 courses)
ENG-10303—English Composition I	SPE-10500—Fundamentals of Speech
Year 2 (Fall Semester) 16 credits	**Year 2 (Winter Semester) 15 credits**
ART courses from required list (3 courses)	ART course from required list
ART elective	ART elective
Math *or Lab*- Science course	ART-28000—Portfolio
	CIS-10500—Introduction to Computers
	Social science course

ASSOCIATE IN FINE ARTS

Minimum Credits: 62

Studio Art (DAFA1)

Contact Hours: 71-78

Introduction

The Associate in Fine Arts: Studio Art degree is designed for students with an interest in studio arts such as sculpture or painting. This degree program works to give students both practical experience in the art form of their choice, and the critical and academic background necessary for further study of the fine arts while helping develop a personal sense of aesthetic and artistic criteria. Because the artist's association with the world is stressed, a strong academic schedule is affiliated with the creative discipline.

Students planning to transfer to a four-year college or university must consult with their advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with approval of the appropriate dean or associate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e., psychology elective, biology elective, etc.) where deemed appropriate. This degree satisfies the requirements of the Michigan Transfer Agreement (MTA) as defined in the handbook section of this catalog.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Intro to Computers	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
SPE-10500	Fundamentals of Speech	3	3
Select one non-ART humanities course. Current KCC offerings which meet this requirement include: ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 and 12300, any PHL and THE-12000.			
		3	3
Select College Algebra (MTH-13000) or Statistics (MTH-20600) or higher:			
		3-4	4
Select two lab science courses from two disciplines.			
		3-5	5-7
		3-5	5-7
Select two social science courses from two different disciplines. Choose from: ECO, GEO, POL, PSY or SOC.			
		3	3
		3-4	3-4
	General Education Credits/Contact Hours:	**30-36**	**35-40**
PROGRAM REQUIREMENTS			
ART-10000	Art History I	3	3
ART-10103	Art History II	3	3
ART-28000	Portfolio I	3	4
Select studio art electives (7 classes, 21 credits/28 contact hours):			
		3	4
		3	4
		3	4
		3	4
		3	4
		3	4
		3	4
	ART Credits/Contact Hours:	**30**	**38**
	Minimum Program Credits/Contact Hours:	**62**	**73-78**

AUTOMOTIVE

Certificates (CC)

- *Automotive Technology Diesel Service Specialist*
- *Automotive Technology Master Certification*

Associate in Applied Science (AAS)

- *Automotive Technology*
- *Automotive Technology Management (also Transfer)*

Partnership Programs

- *Davenport University*
- *Ferris State University*
- *Franklin University*
- *Northwood University*

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

AUTOMOTIVE TECHNOLOGY MASTER CERTIFICATION

Minimum Credits: 53

Certificate of Completion (CAUT1)

Contact Hours: 74

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). Graduates of this program will be prepared for the Michigan Bureau of Automotive Regulation Mechanic Certification and the National Institute for Automotive Service Excellence (ASE) Technician Certification tests. 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) gasoline & diesel engine performance. Students wanting to continue in this program may pursue the Associate in Applied Science – Automotive Technology.

AUTOMOTIVE COURSE REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
AUT-16100	Engine Fund & Overhaul	4	6
AUT-16201	Fuel Systems & Emission Control	4	6
AUT-16302	Automotive Fundamentals	4	5
AUT-16401	Basic Electricity	3	4
AUT-16801	Automotive Electrical Systems	4	6
AUT-17703	Automotive Braking Systems	4	6
AUT-20402	Intro to Auto Service Management	2	2
AUT-21800	Automatic Transmissions	4	6
AUT-26500	Steering, Suspension & Alignment	4	6
AUT-26601	Gas Engine Performance/Diagnostics	4	6
AUT-26700	Diesel Engine Performance & Diagnostic	4	6
AUT-27000	Heating & Air Conditioning	3	4
AUT-27900	Manual Transmission/ Drivelines/ Axles	4	6
AUT-29900	Automotive Internship	5	5
	Minimum Program Credits/Contact Hours:	**53**	**74**

Suggested sequencing of courses:

Year 1 (Fall Semester) 13 credits	**Year 1 (Winter Semester) 15 credits**
AUT-16302—Automotive Fundamentals	AUT-16100—Engine Fund & Overhaul
AUT-16401—Basic Electricity	AUT-16201—Fuel Systems & Emission Control
AUT-17703—Automotive Braking Systems	AUT-16801—Automotive Electrical Systems
AUT-20402—Intro Auto Service Management	AUT-27000—Heating & Air Conditioning
Year 2 (Fall Semester) 12 credits	**Year 2 (Winter Semester) 13 credits**
AUT-21800—Automatic Transmissions	AUT-26700—Diesel Engine Performance & Diagnostic
AUT-26500—Steering, Suspension & Alignment	AUT-27900—Manual Trans/Drivelines/Axles
AUT-26601—Gas Engine Performance/Diagnostics	AUT-29900—Automotive Internship

For assistance with course selection, sequencing and arranging your schedule, please consult with your advisor.

AUTOMOTIVE TECHNOLOGY

Associate in Applied Science (DAUT0)

Minimum Credits: 67
Contact Hours: 89-91

Introduction

Kirtland's program in Automotive Technology is designed to provide instruction in manipulative skills, technical knowledge and related trade information. Students are given the opportunity to prepare for employment in the automotive industry as certified technicians, service salesmen, or service managers.

This program is certified by the National Automotive Technicians Education Foundation (NATEF). Graduates of this program will be prepared for the Michigan Bureau of Automotive Regulation Mechanic Certification and the National Institute for Automotive Service Excellence (ASE) Technician Certification tests. 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) gasoline and diesel engine performance.

AUTOMOTIVE COURSE REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
AUT-16100	Engine Fund & Overhaul	4	6
AUT-16201	Fuel Systems & Emission Control	4	6
AUT-16302	Automotive Fundamentals	4	5
AUT-16401	Basic Electricity	3	4
AUT-16801	Automotive Electrical Systems	4	6
AUT-17703	Automotive Braking Systems	4	6
AUT-20402	Intro to Auto Service Management	2	2
AUT-21800	Automatic Transmissions	4	6
AUT-26500	Steering, Suspension & Alignment	4	6
AUT-26601	Gas Engine Performance /Diagnostics	4	6
AUT-26700	Diesel Engine Performance & Diagnostic	4	6
AUT-27000	Heating & Air Conditioning	3	4
AUT-27900	Manual Transmission/ Drivelines/ Rear Axles	4	6
AUT-29900	Automotive Internship	5	5
	Automotive Credits/Contact Hours:	**53**	**74**
GENERAL EDUCATION REQUIREMENTS			
ENG-10303 *or* ENG-11800	English Composition I *or* Intro to Technical & Professional Writing	3	3
MTH-12000	Intermediate Algebra *or higher*	3-4	4
POL-10100	Introduction to American Government	3	3
Select one humanities course. Current KCC offerings include any ART, ENG-21400 or higher, any HIS, HUM-20500, any MUS, any PHL, or THE-12000.			
		2-3	3-4
Select any speech course:			
		3	3
	General Education Credits/Contact Hours:	**14-16**	**16-17**
	Minimum Program Credits/Contact Hours:	**67**	**89-91**

Suggested sequencing of automotive courses. See your advisor for assistance in sequencing and scheduling general education courses:

Year 1 (Fall Semester) 16+ credits	**Year 1 (Winter Semester) 17+ Credits**
AUT-16302—Automotive Fundamentals	AUT-16100—Engine Fundamentals & Overhaul
AUT-16401—Basic Electricity	AUT-16201—Fuel Systems & Emission Control
AUT-17703—Automotive Braking Systems	AUT-16801—Automotive Electrical Systems
AUT-20402—Intro Auto Service Management	AUT-27000—Heating & Air Conditioning
General Education course(s)	General Education course(s)
Year 2 (Fall Semester) 16+ credits	**Year 2 (Winter Semester) 16+ credits**
AUT-21800—Automatic Transmissions	AUT-26700—Diesel Engine Performance & Diagnostic
AUT-26500—Steering, Suspension & Alignment	AUT-27900—Manual Trans/Drivelines/Rear Axles
AUT-26601—Gas Engine Performance/Diagnostics	AUT-29900—Automotive Internship
General Education course(s)	General Education course(s)

AUTOMOTIVE TECHNOLOGY MANAGEMENT

Minimum Credits: 65

Associate in Applied Science (DATM0)

Contact Hours: 76-79

Introduction

The Automotive Technology Management degree is specifically designed for students who want to combine their automotive skills with business courses in order to work in and/or manage a small repair business. It will also transfer smoothly to Northwood University in order to complete a Bachelor of Business Administration degree in Automotive Marketing & Management or in Automotive Aftermarket Management--degrees which provide outstanding employment opportunities in automotive supply chain management, aftermarket field sales management, aftermarket manufacturing management, or automotive wholesale/retail management. *Students who wish to meet MTA transfer guidelines should plan to complete an additional science course from a second discipline.*

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Intro to Computers	3	3
ECO-20100	Principles of Economics—MACRO	3	3
ECO-20200	Principles of Economics—MICRO	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
MTH-13000 *or* MTH-20600	College Algebra *or* Application in Statistics	3-4	4
PHL-21000	Intro to Ethics	3	3
POL-10100	Intro to American Government	3	3
SPE-10500 *or* SPE-11400	Fundamentals of Speech *or* Intro to Interpersonal & Public Communication	3	3
Select any history course:			
		3	3
Select one additional humanities course. Current KCC offerings include any ART, ENG-21400 or higher, any HIS, HUM-20500, any MUS, any PHL, and THE-12000.			
		2-3	2-3
Select an lab science course:			
		3-5	5-7
	General Education Credits/Contact Hours:	**35-39**	**38-41**
BUSINESS CORE REQUIREMENTS			
ACC-12100	Accounting Principles I	3-4	4
ACC-12200	Accounting Principles II	3-4	4
BUS-21000	Principles of Management	3	3
BUS-21500	Business Law	3	3
MKT-20000	Principles of Marketing	3	3
	Business Core Credits/Contact Hours:	**15-17**	**17**
AUTOMOTIVE REQUIREMENTS			
AUT-16302	Automotive Fundamentals	4	5
AUT-16401	Basic Electricity	3	4
Choose at least eight credits from below:			
AUT-16100	Engine Fundamentals & Overhaul	4	6
AUT-16201	Fuel Systems & Emission Control	4	6
AUT-16801	Automotive Electrical Systems	4	6
AUT-17703	Automotive Braking Systems	4	6
AUT-21800	Automatic Transmissions	4	6
AUT-26500	Steering, Suspension & Alignment	4	6
AUT-27000	Heating & Air Conditioning	3	4
AUT-27900	Manual Transmissions/Drivelines/Axles	4	6
AUT-29900	Automotive Internship	5	5
	Automotive Credits/Contact Hours:	**15**	**21**
	Minimum Program Credits/Contact Hours:	**65-71**	**76-79**

AUTOMOTIVE TECHNOLOGY DIESEL SERVICE SPECIALIST

Minimum Credits: 37

Certificate of Completion (CDSS0)

Contact Hours: 50

Introduction

Kirtland's Automotive Technology Diesel Service Specialist program is designed to provide instruction in manipulative skills and technical knowledge required for employment as a diesel service specialist. Graduates of this program will be prepared for the Michigan Bureau of Automotive Regulation Mechanic Certification and the National Institute for Automotive Service Excellence (ASE) Technician Certification tests. Graduates will demonstrate competence in the following areas: 1) electrical & electronic systems, 2) fundamentals of diesel technology, diesel engine performance & diagnostics, and 3) one semester of automotive internship. Students wanting to continue in this program may pursue the Associate in Applied Science--Automotive Technology.

AUTOMOTIVE COURSE REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
AUT-16100	Engine Fundamentals & Overhaul	4	6
AUT-16201	Fuel Systems & Emission Control	4	6
AUT-16302	Automotive Fundamentals	4	5
AUT-16401	Basic Electricity	3	4
AUT-16801	Automotive Electrical Systems	4	6
AUT-20402	Intro to Auto Service Management	2	2
AUT-26601	Gas Engine Performance /Diagnostics	4	6
AUT-26700	Diesel Engine Performance & Diagnostic	4	6
AUT-27000	Heating & Air Conditioning	3	4
AUT-29900	Automotive Internship	5	5
Minimum Program Credits/Contact Hours:		**37**	**50**

Suggested sequencing of courses:

Year 1 (Fall Semester) 9 credits	**Year 1 (Winter Semester) 15 credits**
AUT-16302—Automotive Fundamentals	AUT-16100—Engine Fundamentals & Overhaul
AUT-16401—Basic Electricity	AUT-16201—Fuel Systems & Emission Control
AUT-20402—Intro Auto Service Management	AUT-16801—Automotive Electrical Systems
	AUT-27000—Heating & Air Conditioning
Year 2 (Fall Semester) 4-9 credits	**Year 2 (Winter Semester) 4-9 credits**
AUT-26601—Gas Engine Performance/Diagnostics	AUT-26700—Diesel Engine Performance & Diagnostic
AUT-29900—Auto Internship (option)**	AUT-29900—Auto Internship (option)**

** Internship must be completed after successful completion of two semesters and before conclusion of the certificate.

For assistance with course selection, sequencing and arranging your schedule, please consult with your advisor.

BUSINESS

Certificates (CC)

- *Accounting Clerk*
- *Small Business Management & Entrepreneurship*

Associate in Applied Science (AAS)

- *Business Management*

Associate (Transfer)

- *Business Administration*

Partnership Programs

- *Central Michigan University (Off-Campus & Online)*
- *Davenport University*
- *Franklin University*
- *Kaplan University*
- *Lake Superior State University*
- *Northwood University*

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

ACCOUNTING CLERK

Certificate of Completion (CACLO)

Minimum Credits: 30
Contact Hours: 30

Introduction

Kirtland's Accounting Clerk certificate offers a completely online program of study that will prepare a student to be a financial record keeper for a business. It will prepare students for entry-level positions in accounts receivable and accounts payable departments, payroll units, income tax firms, and financial service organizations. Students learn the theory of double-entry bookkeeping, the practice of journals and ledgers, preparing payroll documents, and reconciling banking statements. With a certificate as an Accounting Clerk, jobs are available in just about every small to medium size business and non-profit organization, including government services, business and consulting firms, retail and wholesale trade, health and social services, finance, insurance, real estate and the service industry. This certificate provides basic training and practical applications needed to analyze and prepare financial documents and handle recordkeeping functions for small to medium size businesses. This is an ideal certificate for someone who wants to operate the accounting books and functions of a self-owned business, i.e. Joe's Trucking or Sally's Salon. This program is ideal for self-motivated individuals who are comfortable working with numbers and detailed information in an office setting.

ACCOUNTING CLERK PROGRAM COURSES			
Course	**Title**	**Credits**	**Contact Hours**
ACC-12100	Accounting Principles I	4	4
ACC-12200	Accounting Principles II	4	4
ACC-12500	Computer Accounting w/QuickBooks	4	4
BUS-10700	Entrepreneurship	3	3
BUS-21500	Business Law	3	3
BUS-29900	Internship	3	3
CIS-17001	Microsoft Office	3	3
MKT-11500	Customer Relations	3	3
OIS-10500	Business Correspondence	3	3
Minimum Program Credits/Contact Hours:		**30**	**30**

Suggested sequencing of courses:

Year 1 (Fall Semester) 13 credits	**Year 1 (Winter Semester) 14 credits**	**Year 1 (Summer) 3 credits**
ACC-12100—Accounting Principles I	ACC-12200—Accounting Principles II	BUS-29900--Internship
BUS-10700—Entrepreneurship	ACC-12500—Comp Accounting w/QuickBooks	
CIS-17001—Microsoft Office	BUS-21500—Business Law	
OIS-10500—Business Correspondence	MKT-11500—Customer Relations	

SMALL BUSINESS MANAGEMENT & ENTREPRENEURSHIP

Minimum Credits: 35

Certificate of Completion (CENT1)

Contact Hours: 35

Introduction

Kirtland's unique program in Small Business Management & Entrepreneurship is designed to offer discipline-specific course work in Art, Business, Marketing, Accounting and Computers along with business and accounting course work designed to provide background in running or managing a business. 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 want courses in art or technical areas and want to incorporate knowledge of business with their technical expertise. Students may also elect to pursue the Associate of Applied Science—Business Management or the Associate in Applied Science—Technology Management degrees at any point in this program.

CORE PROGRAM REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
ACC-12100	Accounting Principles I	4	4
ACC-12500	Computer Accounting/QuickBooks	4	4
BUS-10100 *or* BUS-10700	Introduction to Business *or* Entrepreneurship	3	3
BUS 10800	Personal Financial Planning	3	3
BUS-21500	Business Law	3	3
MKT-11500	Customer Relations	3	3
OIS-10500	Business Correspondence	3	3
CORE Credits/Contact Hours:		**23**	**23**
CHOOSE 12-12.5 CREDITS *FROM ONE CONCENTRATION* LISTED BELOW			
ART CONCENTRATION:			
Studio art electives:			
		3	4
		3	4
		3	4
		3	4
ACCOUNTING/BUSINESS/MARKETING CONCENTRATION:			
Select electives from ACC/BUS/MKT:			
		3	3
		3	3
		3	3
		3-4	3-4
COMPUTER INFORMATION SYSTEMS CONCENTRATION:			
Select electives from CIS:			
		3	3
		3	3
		3	3
		3	3
COSMETOLOGY CONCENTRATION:			
Cosmetology courses or license:			
		2.5	4
		2.5	4
		2.5	4
		2.5	4
		2.5	4
Minimum Program Credits/Contact Hours:		**35**	**35-55**

BUSINESS MANAGEMENT

Minimum Credits: 60

Associate in Applied Science (DBSM0)

Contact Hours: 60-61

Introduction

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

GENERAL EDUCATION CORE			
Course	**Title**	**Credits**	**Contact Hours**
ENG-10303	English Composition I	3	3
MTH-12000	Intermediate Algebra *or higher*	3-4	4
Select one social science course from ECO, GEO, POL, PSY or SOC:			
		3-4	3-4
Select a speech course:			
		3	3
	General Education Credits/Contact Hours:	**12-14**	**13-14**
BUSINESS CORE			
ACC-12100	Accounting Principles I	3-4	4
ACC-12200	Accounting Principles II	3-4	4
BUS-10100 *or* BUS-10700	Introduction to Business *or* Entrepreneurship	3	3
BUS-21000	Principles of Management	3	3
BUS-21500	Business Law	3	3
BUS-24500	Human Resource Management	3	3
ECO-20100	Principles of Economics-MACRO	3	3
ECO-20200	Principles of Economics-MICRO	3	3
ENG-10602 *or* OIS-10500	Technical Writing *or* Business Correspondence	3	3
MKT-20000	Principles of Marketing	3	3
	Core Business Credits/Contact Hours:	**30-32**	**32**
MANAGEMENT & MARKETING COURSES			
From the list below, select courses from BUS/ACC/MKT/HSP until 60 credits are earned.			
	Management & Marketing Credits/Contact Hours from list (below):	**15-18**	**15-18**
	Minimum Program Credits/Contact Hours:	**60**	**60-61**

HOSPITALITY MANAGEMENT CORE				**MARKETING CORE**			
Course	**Title**	**Credits**	**Contact Hours**	**Course**	**Title**	**Credits**	**Contact Hours**
HSP-10000	Intro to Hospitality	3	3	BUS-21100	E-Commerce Management	3	3
HSP-10100	Sanitation	2	2	BUS-29900	Business Internship	3	3
HSP-10200	Housekeeping Management	3	3	MKT-11000	Principles of Selling	3	3
HSP-20100	Food & Beverage Management	3	3	MKT-20200	Internet Marketing	3	3
HSP-20300	Hospitality Human Resource Management	3	3	MKT-20400	Principles of Advertising	3	3
HSP-29900	Hospitality Internship	3	3				

Suggested sequencing of courses:

Year 1 (Fall Semester) 13 credits	**Year 1 (Winter Semester) 13-14 credits**
ACC-12100—Accounting Principles I	BUS-21000—Principles of Management
ENG-10303—English Composition I	BUS-21500—Business Law
ENG-10602—Technical Writing	MTH-12000—Intermediate Algebra
or OIS-10500—Business Correspondence	Social science course
Speech course	
Year 2 (Fall Semester) 15-18 credits	**Year 2 (Winter Semester) 16-19 credits**
BUS-24500—Human Resource Management	ACC-12200—Accounting Principles II
ECO-20100—Principles of Econ-MACRO	ECO-20200—Principles of Econ-MICRO
MKT-20000—Principles of Marketing	BUS/HSP/MKT Electives
BUS/HSP/MKT Electives	

ASSOCIATE IN BUSINESS ADMINISTRATION

Minimum Credits: 60

(DABA1)

Contact Hours: 62-64

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. Some of the majors pursued by students following this program include Accounting, Advertising, Economics, Finance, General Business, Marketing, Personnel/Industrial Relations, and 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. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500 *or* CIS-17000	Introduction to Computers *or* Microsoft Office	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
MTH-13000	College Algebra *or higher*	3-4	4
MTH-20600	Application in Statistics	3-4	4
SPE-10500 *or* SPE-11400	Fundamentals of Speech *or* Into to Interpersonal & Public Communication	3	3
Select two humanities courses from different disciplines. Current KCC offerings which meet this requirement include ART-10000 or 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 or 12300, any PHL and THE-12000.			
		3	3
		3	3
Select one course from GEO, POL, PSY or SOC (not ECO):			
		3-4	3-4
Select one lab science courses from different disciplines from AST, BIO, CHE, GEL or PHY.			
		3-5	5-7
If the MTA endorsement is desired, select one additional lab science course from a difference discipline than what was chosen above.			
		3-5	5-7
	General Education Credits/Contact Hours:	**30-40**	**39-44**
BUSINESS CORE CLASSES			
ACC-12100	Accounting Principles I	3-4	4
ACC-12200	Accounting Principles II	3-4	4
BUS-21000	Principles of Management	3	3
BUS-21500	Business Law	3	3
BUS-24500	Human Resource Management	3	3
ECO-20100	Principles of Economics-MACRO	3	3
ECO-20200	Principles of Economics-MICRO	3	3
MKT-20000	Principles of Marketing	3	3
	Business Core Credits/Contact Hours:	**24-26**	**26**
	Minimum Program Credits/Contact Hours:	**60**	**65-70**

Suggested sequencing of courses:

Year 1 (Fall Semester)—16 credits	**Year 1 (Winter Semester)—17-18 credits**
ACC-12100—Accounting Principles I	ACC-12200—Accounting Principles II
CIS-10500—Introduction to Computers	BUS-21000—Principles of Management
or CIS-17000—Microsoft Office	ENG-10403—English Composition II
ENG-10303—English Composition I	Humanities course
Speech course	Lab science course
Humanities course	
Year 2 (Fall Semester)—16-17 credits	**Year 2 (Winter Semester)—14-15 credits**
BUS-24500—Human Resource Management	BUS-21500—Business Law
ECO-20100—Principles of Econ-MACRO	ECO-20200—Principles of Econ-MICRO
MKT-20000—Principles of Marketing	MTH-20600—Application in Statistics
MTH-13000—College Algebra	Lab science course
Social science course	

Since it is not possible to list all recommendations and requirements for all senior colleges, it is imperative that the student who expects to transfer work closely with an academic advisor at both the senior institution and at Kirtland to plan a successful program.

COMPUTER INFORMATION SYSTEMS

Associate in Applied Science (AAS)

- *Information Technology*
- *Web Design & Internet Development*

Associate in Computers (Transfer Degrees)

- *Computer Science*
- *Computer Information Systems*

Partnership Programs

- *Central Michigan University*
- *Davenport University*
- *Ferris State University*
- *Franklin University*
- *Saginaw Valley State University*

See information on our partnership programs on the web at http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

ASSOCIATE IN COMPUTERS

Computer Science (DACP0)

Minimum Credits: 60
Contact Hours: 64-69

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. Program requirements at four-year institutions vary. It is imperative that students choose the electives that will transfer to their select four-year college and for the program in which they wish to earn a degree. This degree satisfies the requirements of the Michigan Transfer Agreement (MTA) as defined in the handbook section of the college catalog. **Computer Science** degrees have a math and engineering orientation. Upon completion of a four-year degree, career choices include: computer programming, systems programming, software engineering, systems engineering, database administration, network administration, systems analysis and systems administration. Degrees in this area include the following: Software Engineering, Computer Science, Computer Engineering or Computer Networking. **Note: Transfer colleges may require specific courses, so students should consult with their advisor when making selections.**

GENERAL EDUCATION COURSES REQUIRED FOR EACH DEGREE			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ECO-20100	Principles of Economics-MACRO	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
SPE-10500 *or* SPE-11400	Fundamentals of Speech *or* Intro to Interpersonal & Public Communication	3	3
Select two humanities courses from different disciplines. Current KCC offerings which meet this requirement include: ART-10000 and 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 and 12300, any PHL and THE-12000.			
		3	3
		3	3
Select two lab science courses from different disciplines.			
		3-5	5-7
		3-5	5-7
Select one additional social science course from GEO, POL, PSY or SOC (not ECO).			
		3-4	3-4
	General Education Credits/Contact Hours:	**30-35**	**34-39**
COMPUTER SCIENCE DEGREE REQUIREMENTS			
CIS-22400	UNIX	2	2
CIS-27001	Programming I	3	3
CIS-27101	Programming II	4	4
MTH-22002	Calculus I *or higher*	4	4
APPROVED ELECTIVES (12-17 credits required)			
CIS-11700	Visual Basic	3	3
CIS-21000	Internet & Web Page Development	3	3
CIS-21500	Web Animation & Multimedia	3	3
CIS-23501	Database Design	3	3
CIS-26000	Intro to Computer Networking	3	3
CIS-26400	Client-Side Web Programming w/JavaScript	3	3
CIS-27201	Server-Side Web Programming	3	3
MTH-12000	Intermediate Algebra	4	4
MTH-13000	College Algebra	4	4
MTH-18001	Pre-Calculus	4	4
MTH-20600	Applications in Statistics	4	4
MTH-22102	Calculus II	4	4
	Computer Science Credits/Contact Hours:	**25-30**	**25-30**
	Minimum Program Credits/Contact Hours:	**60**	**64-69**

Suggested sequencing of courses for Computer Science (DACP0):

Year 1 (Fall Semester) 15-16 credits	**Year 1 (Winter Semester) 15-16 credits**
CIS-10500—Intro to Computers	CIS-22400—UNIX
CIS-27001—Programming I	CIS-27101—Programming II
ENG-10303—English Composition I	ENG-10403—English Composition II
CIS elective or Speech course	MTH-13000 *or* higher *or* CIS approved elective
Humanities course	CIS elective or Speech course
Year 2 (Fall Semester) 16-19 credits	**Year 2 (Winter Semester) 14-17 credits**
CIS-approved elective (if needed)	MTH-22002—Calculus I or higher
ECO-20100—Principles of Economics-MACRO	Humanities course
MTH-18001 *or* CIS approved elective	Lab science course
Lab science course	Social science course

ASSOCIATE IN COMPUTERS

Computer Information Systems (DACP1)

Minimum Credits: 60

Contact Hours: 64-69

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. Program requirements at four-year institutions vary. It is imperative that students choose the electives that will transfer to their select four-year college and for the program in which they wish to earn a degree. **Computer Information Systems** degrees are business oriented. Positions of employment include computer and application programming, systems analysis, network, database and systems administration, web development or microcomputer specialist. Degrees in these areas include the following: Management Information Systems (MIS), Computer Information Systems (CIS) or Information Systems (IS).

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ECO-20100	Principles of Economics-MACRO	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
SPE-10500 *or* SPE-11400	Fundamentals of Speech *or* Intro to Interpersonal & Public Communication	3	3
Select two humanities courses from different disciplines. Current KCC offerings which meet this requirement include: ART-10000 or 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 or 12300, any PHL and THE-12000.			
		3	3
		3	3
Select two lab science courses. Students must select from two disciplines.			
		3-5	5-7
		3-5	5-7
Select a social science course from GEO, POL, PSY or SOC (not ECO).			
		3-4	3-4
	General Education Credits/Contact Hours:	**30-35**	**34-39**
COMPUTER INFORMATION SYSTEMS DEGREE REQUIREMENTS			
CIS-22400	UNIX	2	2
CIS-27001	Programming I	3	3
CIS-27101	Programming II	4	4
MTH-13000	College Algebra	4	4
MTH-20600	Applications in Statistics	4	4
APPROVED ELECTIVES (8-13 credits required)			
ACC-12100	Accounting Principles I	4	4
ACC-12200	Accounting Principles II	4	4
BUS-10100	Introduction to Business	3	3
CIS-11700	Visual Basic	3	3
CIS-17001	Microsoft Office	3	3
CIS-21000	Internet & Web Page Development	3	3
CIS-21500	Web Animation & Multimedia	3	3
CIS-23501	Database Design	3	3
CIS-26000	Intro to Computer Networking	3	3
CIS-26400	Client-Side Web Programming w/JavaScript	3	3
CIS-27201	Server-Side Web Programming	3	3
ECO-20200	Principles of Economics-MICRO	3	3
MTH-12000	Intermediate Algebra	4	4
MTH-18001	Pre-Calculus	4	4
MTH-22002	Calculus I	4	4
	Computer Information Systems Credits/Contact Hours:	**25-30**	**25-30**
	Minimum Program Credits/Contact Hours:	**60**	**64-69**

Suggested sequencing of courses for Computer Information Systems (DACP1):

Year 1 (Fall Semester) 16 credits	**Year 1 (Winter Semester) 14-15 credits**
CIS 10500—Intro to Computers	CIS-27101—Programming II
CIS-27001—Programming I	ENG-10403—English Composition II
ENG-10303—English Composition I	MTH-20600—Application in Statistics
MTH-13000—College Algebra	Elective from approved list
Social science course	
Year 2 (Fall Semester) 15-17 credits	**Year 2 (Winter Semester) 12-16 credits**
ECO-20100—Principles of Economics-MACRO	CIS-22400—UNIX
Elective from approved list	Elective from approved list (if needed)
Elective from approved list (if needed)	Humanities course
Humanities course	Lab science course
Lab science course	Speech course

INFORMATION TECHNOLOGY

Associate in Applied Science (DITG0)

Minimum Credits: 60

Contact Hours: 68-72

Introduction

Kirtland's Associate in Applied Science—Information Technology (IT) degree—is designed to provide specialized instruction that is necessary for entry into the technical support field. Students will acquire skills that will allow them to analyze hardware and software related problems, assess solutions, implement the best solution, and evaluate the results. The program is intended to lay a foundation for a large variety of entry-level positions in the information technology field.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ENG-10303 *or* ENG-11800	English Composition I *or* Intro to Technical & Professional Writing	3	3
MTH-12000	Intermediate Algebra	3-4	4
Select one social science course from ECO, GEO, POL, PSY or SOC.			
		3-4	3-4
Select any speech course.			
		3	3
	General Education Credits/Contact Hours:	**15-17**	**16-17**
INFORMATION TECHNOLOGY CORE			
CIS-11700	Visual Basic	3	3
CIS-17001	Microsoft Office	3	3
CIS-19600	Hardware Certification	3	3
CIS-19700	OS Certification	3	3
CIS-21000	Internet & Web Page Development	3	3
CIS-22400	UNIX	2	2
CIS-23501	Database Design	3	3
CIS-24500	Project Management	3	3
CIS-26000	Intro to Computer Networking	3	3
CIS-26500	Networking II	3	3
CIS-29900	Internship/Computer Information Systems	3	3
	IT CORE Credits/Contact Hours:	**32**	**32**
ELECTIVES (11-13 credits)			
CIS-21500	Web Animation & Multimedia	3	3
CIS-22500	Spreadsheets	3	3
CIS-26400	Client-Side Web Programming w/JavaScript	3	3
CIS-27001	Programming I	3	3
CIS-27101	Programming II	4	4
CIS-27200	Server-Side Web Programming	3	3
CIS-29900	Internship/Computer Information Systems	3-6	3-6
	CIS Elective Credits/Contact Hours:	**11-13**	**11-13**
	Minimum Program Credits/Contact Hours:	**60**	**68-72**

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 1 (Winter Semester) 15 credits**
CIS-10500—Introduction to Computers	CIS-19600—Hardware Certification
CIS-21000—Internet & Web Page Development	CIS-22400—UNIX
CIS-24500—Project Management	CIS-26000—Intro to Computer Networking
CIS elective or Speech course	CIS elective
ENG-10303—English Composition I	MTH-12000—Intermediate Algebra
or ENG-11800—Intro/Technical & Professional Writing	
Year 2 (Fall Semester) 15 credits	**Year 2 (Winter Semester) 15 credits**
CIS-11700—Visual Basic	CIS-23501—Database Design
CIS-17001—Microsoft Office	CIS-29900—Internship
CIS-19700—OS Certification	CIS elective
CIS-26500—Networking II	CIS elective or Speech course
CIS elective	Social science course

WEB DESIGN & INTERNET DEVELOPMENT

Associate in Applied Science (DWDI0)

Minimum Credits: 60
Contact Hours: 68-72

Introduction

Kirtland's Associate in Applied Science—Web Design & Internet Development—is designed to provide specialized instruction that is necessary for entry and success in the web development, graphic design and Internet sale/marketing industries. The curriculum is based upon solid academic, computer, business 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.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ENG-10303 *or* ENG-11800	English Composition I *or* Intro to Technical & Professional Writing	3	3
SPE-10500	Fundamentals of Speech	3	3
Intermediate Algebra (MTH-12000) or higher or any lab science course.			
		3-4	4-7
Select a social science course from ECO, GEO, POL, PSY or SOC.			
		3-4	3-4
	General Education Credits/Contact Hours:	**15-17**	**16-20**
WEB DESIGN/INTERNET DEVELOPMENT MAJOR REQUIREMENTS			
ART-10500	Introduction to Design	3	4
ART-10600	Fundamentals of Drawing I	3	4
ART-11500 *or* ART-27550	Photography I *or* Digital Darkroom	3	4
ART-17000	Graphic Studio	3	4
ART-19000	Digital Communications	3	4
ART-27545	Computer Generated Images I	3	4
ART-28000	Portfolio I	3	4
BUS-10100	Introduction to Business	3	3
CIS-21000	Internet & Web Page Development	3	3
CIS-21500	Web Animation & Multimedia	3	3
CIS-26400	Client-Side Web Programming w/JavaScript	3	3
CIS-27001	Programming I	3	3
CIS-27201	Server-Side Web Programming	3	3
MKT-11500	Customer Relations	3	3
MKT-20000	Principles of Marketing	3	3
	ART/BUS/CIS/MKT Credits/Contact Hours:	**45**	**52**
	Minimum Program Credits/Contact Hours:	**60**	**68-72**

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 2 (Winter Semester) 16-17 credits**
ART-10500—Intro to Design	ART-10600—Fund of Drawing I
CIS-10500—Intro to Computers	ART-19000—Digital Communications
CIS-21000—Internet & Web Page Development	ART-27545—Computer Generated Images I
CIS-27001—Programming I	CIS-21500—Web Animation & Multimedia
ENG-10303—English Composition I	MTH-12000—Intermediate Algebra
or ENG-11800—Intro to Technical & Professional Writing	*or* lab science course
Year 2 (Fall Semester) 15 credits	**Year 2 (Winter Semester) 15-16 credits**
ART-11500—Photography I	ART-17000—Graphic Studio
or ART-27550—Digital Darkroom	ART-28000—Portfolio I
BUS-10100—Intro to Business	MKT-11500—Customer Relations
CIS-26400—Client-Side Web Programming w/JavaScript	SPE-10500—Fund of Speech
CIS-27201—Server-Side Web Programming	Social science Course
MKT-20000—Principles of Marketing	

CONSTRUCTION TECHNOLOGIES

The following programs of study are available only at the Kirtland M-TEC[SM] in Gaylord.

Certificates (CC)

- *Electrical Technology*
- *Heating/Ventilation/Air Conditioning/Refrigeration*

Associate in Applied Science (AAS)

- *Electrical Technology*
- *Heating/Ventilation/Air Conditioning/Refrigeration*

Partnership Programs

- *Davenport University*
- *Ferris State University*
- *Franklin University*

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

For more information or advising, please contact the M-TEC[SM].
989-705-3600
mtec.kirtland.edu

ELECTRICAL TECHNOLOGY

Certificate of Completion (CELC2)

Minimum Credits: 30

Contact Hours: 46.88

CORE COURSES			
Course	**Title**	**Credits**	**Classroom Hours**
COR-10001	Basic Safety	0.5	12.5
COR-10002	Introduction to Construction Math	0.4	10
COR-10003	Introduction to Hand Tools	0.4	10
COR-10004	Introduction to Power Tools	0.4	10
COR-10005	Introduction to Construction Drawings	0.4	10
COR-10006	Basic Rigging	0.6	15
COR-10007	Basic Communication Skills	0.3	7.5
COR-10008	Employability Skills	0.3	7.5
COR-10009	Intro to Materials Handling	0.2	5
	Core Course Credits/Classroom Hours:	**3.5**	**87.5**
ELECTRICAL LEVEL 1			
ELT-10101	Orientation to the Electrical Trade	0.1	2.5
ELT-10102	Electrical Safety	0.4	10
ELT-10103	Introduction to Electrical Circuits	0.3	7.5
ELT-10104	Electrical Theory	0.3	7.5
ELT-10105	Intro to the NEC	0.3	7.5
ELT-10106	Device Boxes	0.4	10
ELT-10107	Hand Bending	0.4	10
ELT-10108	Raceways & Fittings	0.8	20
ELT-10109	Conductors & Cables	0.4	10
ELT-10110	Basic Electrical Construction Drawings	0.3	7.5
ELT-10111	Residential Electric Services	0.6	15
ELT-10112	Electrical Test Equipment	0.2	5
	Electrical Level 1 Credits/Classroom Hours:	**4.5**	**112.5**
ELECTRICAL LEVEL 2			
ELT-10202	Alternating Current	0.7	17.5
ELT-10203	Motors: Theory & Application	0.8	20
ELT-10204	Electrical Lighting	0.6	15
ELT-10205	Conduit Bending	0.6	15
ELT-10206	Pull & Junction Boxes	0.5	12.5
ELT-10207	Conductor Installations	0.4	10
ELT-10208	Cable Tray	0.3	7.5
ELT-10209	Conductor Terminations & Splices	0.3	7.5
ELT-10210	Grounding & Bonding	0.6	15
ELT-10211	Circuit Breakers & Fuses	0.5	12.5
ELT-10212	Control System/Fundamental Concepts	0.5	12.5
	Electrical Level 2 Credits/Classroom Hours:	**5.8**	**145**
ELECTRICAL LEVEL 3			
ELT-20303	Load Calculations – Branch & Feeder Circuits	0.7	17.5
ELT-20304	Conductor Selection & Calculations	0.6	15
ELT-20305	Practical Applications of Lighting	0.5	12.5
ELT-20306	Hazardous Locations	0.6	15
ELT-20307	Overcurrent Protection	1	25
ELT-20308	Distribution Equipment	0.5	12.5
ELT-20309	Transformers	0.5	12.5
ELT-20310	Commercial Electrical Services	0.4	10
ELT 20311	Motor Calculations	0.5	12.5
ELT-20312	Voice, Data, & Video	0.4	10
ELT-20313	Motor Controls	0.5	12.5
	Electrical Level II Credits/Classroom Hours:	**6.2**	**155**

Continued on following page…

ELECTRICAL LEVEL 4			
ELT-20404	Load Calculations – Feeder & Services	0.8	20
ELT-20405	Health Care Facilities	0.4	10
ELT-20406	Standby & Emergency Systems	0.4	10
ELT-20407	Basic Electronic Theory	0.4	10
ELT-20408	Fire Alarm Systems	0.6	15
ELT-20409	Specialty Transformers	0.4	10
ELT-20410	Advanced Motor Controls	0.8	20
ELT-20411	HVAC Controls	0.6	15
ELT-20412	Heat Tracing & Freeze Protection	0.4	10
ELT-20413	Motor Operation & Maintenance	0.4	10
ELT-20414	Medium Voltage Termination & Splices	0.4	10
ELT-20415	Special Locations	0.8	20
ELT-20416	Introductory Skills for the Crew Leader	0.6	15
	Electrical Level 4 Credits/Classroom Hours:	**7**	**175**
TECHNICAL ELECTIVES: Choose from the following options. 3 credits required.			
CAP-29903	Internship/Service Learning	3.0	72
COR-12000	Green Building and Weatherization	2.0	32
ELT-14000	Solar/Wind Energy Systems	3.0	64
ELT-20418	Michigan Laws and Rules	0.6	15
MEC-20100	Programmable Logic Controllers	3.0	64
Or select up to 3 hours of technical electives from CAP-29901 through 29904, CPT, ELT, HVC, IND, MEC, MPT, PLB, WLD or other advisor-approved technical elective(s):			
		0-3	0-72
	Technical Elective Credits/Class Hours:	**3**	**64-72**
	Minimum Program Credits/Contact Hours:	**30**	**46.88**

Suggested sequence of courses:

Year 1 (Fall Semester) EDT-11000—Detailing with AutoCAD ENG-11800—Intro to Technical/Professional Writing Core/Electrical Modules	**Year 1 (Winter Semester)** COR-12000—Green Building & Weatherization EDT-14000—Architectural Drawing/CAD MTH-12000—Intermediate Algebra 2 credits of Electrical Modules
Year 2 (Fall Semester) ELT-14000—Solar/Wind Energy Systems Electrical Modules Lab science course	**Year 2 (Winter Semester)** CAP-29903—Internship/Service Learning MEC-20100—Programmable Logic Controllers Electrical Modules Speech course

ELECTRICAL TECHNOLOGY

Associate in Applied Science (DELC2)

Minimum Credits: 60

Contact Hours: 81.38-84.38

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Classroom Hours**
ENG-11800	Intro to Technical & Professional Writing	3	48
Select Intermediate Algebra (MTH-12000) or higher, excluding Statistics (MTH-20600.			
		3-4	64
Select any lab science course.			
		3-5	80-112
Select any speech course.			
		3	48
	General Education Credits/Classroom Hours:	**12-15**	**240-272**
CORE COURSES			
COR-10001	Basic Safety	0.5	12.5
COR-10002	Introduction to Construction Math	0.4	10
COR-10003	Introduction to Hand Tools	0.4	10
COR-10004	Introduction to Power Tools	0.4	10
COR-10005	Introduction to Construction Drawings	0.4	10
COR-10006	Basic Rigging	0.6	15
COR-10007	Basic Communication Skills	0.3	7.5
COR-10008	Employability Skills	0.3	7.5
COR-10009	Intro to Materials Handling	0.2	5
	Core Course Credits/Classroom Hours:	**3.5**	**87.5**
ELECTRICAL LEVEL 1			
ELT-10101	Orientation to the Electrical Trade	0.1	2.5
ELT-10102	Electrical Safety	0.4	10
ELT-10103	Introduction to Electrical Circuits	0.3	7.5
ELT-10104	Electrical Theory	0.3	7.5
ELT-10105	Intro to the NEC	0.3	7.5
ELT-10106	Device Boxes	0.4	10
ELT-10107	Hand Bending	0.4	10
ELT-10108	Raceways & Fittings	0.8	20
ELT-10109	Conductors & Cables	0.4	10
ELT-10110	Basic Electrical Construction Drawings	0.3	7.5
ELT-10111	Residential Electric Services	0.6	15
ELT-10112	Electrical Test Equipment	0.2	5
	Electrical Level 1 Credits/Classroom Hours:	**4.5**	**112.5**
ELECTRICAL LEVEL 2			
ELT-10202	Alternating Current	0.7	17.5
ELT-10203	Motors: Theory & Application	0.8	20
ELT-10204	Electrical Lighting	0.6	15
ELT-10205	Conduit Bending	0.6	15
ELT-10205	Pull & Junction Boxes	0.5	12.5
ELT-10207	Conductor Installations	0.4	10
ELT-10208	Cable Tray	0.3	7.5
ELT-10209	Conductor Terminations & Splices	0.3	7.5
ELT-10210	Grounding & Bonding	0.6	15
ELT-10211	Circuit Breakers & Fuses	0.5	12.5
ELT-10212	Control System/Fundamental Concepts	0.5	12.5
	Electrical Level 2 Credits/Classroom Hours:	**5.8**	**145**

Continued on following page…

ELECTRICAL LEVEL 3			
ELT-20303	Load Calculation – Branch & Feeder Circuits	0.7	17.5
ELT-20304	Conductor Selection & Calculations	0.6	15
ELT-20305	Practical Applications of Lighting	0.5	12.5
ELT-20306	Hazardous Locations	0.6	15
ELT-20307	Overcurrent Protection	1	25
ELT-20308	Distribution Equipment	0.5	12.5
ELT-20309	Transformers	0.5	12.5
ELT-20310	Commercial Electrical Services	0.4	10
ELT 20311	Motor Calculations	0.5	12.5
ELT-20312	Voice, Data, & Video	0.4	10
ELT-20313	Motor Controls	0.5	12.5
	Electrical Level II Credits/Classroom Hours:	**6.2**	**155**
ELECTRICAL LEVEL 4			
ELT-20404	Load Calculations – Feeder & Services	0.8	20
ELT-20405	Health Care Facilities	0.4	10
ELT-20406	Standby & Emergency Systems	0.4	10
ELT-20407	Basic Electronic Theory	0.4	10
ELT-20408	Fire Alarm Systems	0.6	15
ELT-20409	Specialty Transformers	0.4	10
ELT-20410	Advanced Motor Controls	0.8	20
ELT-20411	HVAC Controls	0.6	15
ELT-20412	Heat Tracing & Freeze Protection	0.4	10
ELT-20413	Motor Operation & Maintenance	0.4	10
ELT-20414	Medium Voltage Termination & Splices	0.4	10
ELT-20415	Special Locations	0.8	20
ELT-20416	Introductory Skills for the Crew Leader	0.6	15
	Electrical Level 4 Credits/Classroom Hours:	**7**	**175**
ENGINEERING DESIGN TECHNOLOGIES			
EDT-11000	Detailing w/AutoCAD	3	64
EDT-14000	Architectural Drawing/CAD	4	64
	EDT Credits/Classroom Hours:	**7**	**128**
TECHNICAL EDUCATION			
CAP-29903	Internship/Service Learning	3.0	72
COR-12000	Green Building and Weatherization	2.0	32
ELT-14000	Solar/Wind Energy Systems	3.0	64
MEC-20100	Programmable Logic Controllers	3.0	64
Select technical electives if needed for total hours for the degree from HVC, MEC, MPT or WLD. (0-3 credits)			
	Technical Education Credits/Class Hours:	**11-14**	**232-296**
	Minimum Program Credits/Contact Hours:	**60**	**81.38-84.38**

Suggested sequence of courses:

Year 1 (Fall Semester) EDT-11000—Detailing with AutoCAD ENG-11800—Intro to Technical/Professional Writing Core/Electrical Modules	**Year 1 (Winter Semester)** COR-12000—Green Building & Weatherization EDT-14000—Architectural Drawing/CAD MTH-12000—Intermediate Algebra 2 credits of Electrical Modules
Year 2 (Fall Semester) ELT-14000—Solar/Wind Energy Systems Electrical Modules Lab science course	**Year 2 (Winter Semester)** CAP-29903—Internship/Service Learning MEC-20100—Programmable Logic Controllers Electrical Modules Speech course

HEATING/VENTILATION/AC/REFRIGERATION

Certificate of Completion (CHVC2)

Minimum Credits: 30

Contact Hours: 46.88

CORE COURSES			
Course	**Title**	**Credits**	**Classroom Hours**
COR-10001	Basic Safety	0.5	12.5
COR-10002	Introduction to Construction Math	0.4	10
COR-10003	Introduction to Hand Tools	0.4	10
COR-10004	Introduction to Power Tools	0.4	10
COR-10005	Introduction to Construction Drawings	0.4	10
COR-10006	Basic Rigging	0.6	15
COR-10007	Basic Communication Skills	0.3	7.5
COR-10008	Employability Skills	0.3	7.5
COR-10009	Intro to Materials Handling	0.2	5
	Core Credits/Classroom Hours:	**3.5**	**87.5**
HVAC LEVEL 1			
HVC-11000	Intro to HVAC	0.3	7.5
HVC-11001	Trade Mathematics	0.4	10
HVC-11002	Copper & Plastic Piping Practices	0.2	5
HVC-11003	Soldering & Brazing	0.3	7.5
HVC-11004	Ferrous Metal Piping Practices	0.2	5
HVC-11005	Basic Electricity	0.5	12.5
HVC-11006	Intro to Cooling	1.2	30
HVC-11007	Intro to Heating	0.6	15
HVC-11008	Air Distribution Systems	0.4	10
	HVAC Level 1 Credits/Classroom Hours:	**4.1**	**102.5**
HVAC LEVEL 2			
HVC-10200	Commercial Air Side Systems	0.5	12.5
HVC-10201	Chimneys, Vents, & Flues	0.2	5
HVC-10202	Intro to Hydronic Systems	0.4	10
HVC-10203	Air Quality Equipment	0.2	5
HVC-10204	Leak Detect/Evacuate/Recover/Charge	0.8	20
HVC-10205	Alternating Current	0.3	7.5
HVC-10206	Basic Electronics	0.2	5
HVC-10207	Control Circuit Troubleshooting	1.2	30
HVC-10208	Troubleshooting Gas Heating	0.5	12.5
HVC-10209	Troubleshooting Cooling	0.8	20
HVC-10210	Heat Pumps	0.8	20
HVC-10211	Installation/Maintenance Practices	0.7	17.5
HVC-10212	Sheet Metal Duct Systems	0.2	5
HVC-10213	Fiberglass/Flex Duct Systems	0.2	5
	HVAC Level 2 Credits/Classroom Hours:	**7**	**175**
HVAC LEVEL 3			
HVC-20300	Refrigerants & Oils	0.4	10
HVC-20301	Compressors	0.6	15
HVC-20302	Metering Devices	0.3	7.5
HVC-20303	Retail Refrigeration	0.8	20
HVC-20304	Commercial Hydronic Systems	0.5	12.5
HVC-20305	Steam Systems	0.4	10
HVC-20306	Planned Maintenance	0.8	20
HVC-20307	Water Treatment	0.4	10
HVC-20308	Troubleshooting Electronic Controls	0.3	7.5
HVC-20309	Troubleshooting Oil Heating	0.4	10
HVC-20310	Troubleshooting Heat Pumps	0.5	12.5
HVC-20311	Troubleshooting Accessories	0.4	10
	HVAC Level 3 Credits/Classroom Hours:	**5.8**	**145**

Continued on following page…

HVAC LEVEL 4			
HVC-20400	Construction Drawing/Specification	1	25
HVC-20401	Air Properties & Air System Balancing	0.8	20
HVC-20402	Indoor Air Quality	0.6	15
HVC-20403	Energy Conservation Equipment	0.4	10
HVC-20404	Building Management Systems	0.7	17.5
HVC-20405	System Start-Up & Shut-Down	0.9	22.5
HVC-20406	Heating & Cooling System Design	1	25
HVC-20407	Commercial & Industrial Refrigeration	0.9	22.5
HVC-20408	Alternative Heating & Cooling Equipment	0.4	10
HVC-20409	Introduction to Supervisory Skills	0.5	12.5
	HVAC Level 4 Credits/Classroom Hours:	**7.2**	**180**
TECHNICAL ELECTIVES: Choose from the following options. 2.4 credits required.			
HVC-14000	Geothermal Heat Pump Systems	3	64
Or select technical electives from CAP-29901 through 29904, CPT, ELT, HVC, IND, MEC, MPT, PLB, WLD or technical electives approved by advisor:			
		2.4	60
	Technical Elective Credits/Class Hours:	**2.4-3**	**60-64**
	Total Certificate Credits/Class Hours:	**30**	**750**

HEATING/VENTILATION/AC/REFRIGERATION

Associate in Applied Science (DHVC2)

Minimum Credits: 60

Contact Hours: 82-85

GENERAL EDUCATION			
Course	**Title**	**Credits**	**Classroom Hours**
ENG-11800	Intro to Technical & Professional Writing	3	48
Select Intermediate Algebra (MTH-12000) or higher, excluding Statistics (MTH-20600).			
		3-4	64
Select any lab science course.			
		4-5	80-112
Select any speech course.			
		3	48
	General Education Credits/Class Hours:	**12-15**	**240-272**
CORE CLASSES			
COR-10001	Basic Safety	0.5	12.5
COR-10002	Introduction to Construction Math	0.4	10
COR-10003	Introduction to Hand Tools	0.4	10
COR-10004	Introduction to Power Tools	0.4	10
COR-10005	Introduction to Construction Drawings	0.4	10
COR-10006	Basic Rigging	0.6	15
COR-10007	Basic Communication Skills	0.3	7.5
COR-10008	Employability Skills	0.3	7.5
COR-10009	Intro to Materials Handling	0.2	5
	Core Credits/Classroom Hours:	**3.5**	**87.5**
HVAC LEVEL 1			
HVC-11000	Intro to HVAC	0.3	7.5
HVC-11001	Trade Mathematics	0.4	10
HVC-11002	Copper & Plastic Piping Practices	0.2	5
HVC-11003	Soldering & Brazing	0.3	7.5
HVC-11004	Ferrous Metal Piping Practices	0.2	5
HVC-11005	Basic Electricity	0.5	12.5
HVC-11006	Intro to Cooling	1.2	30
HVC-11007	Intro to Heating	0.6	15
HVC-11008	Air Distribution Systems	0.4	10
	HVAC Level 1 Credits/Classroom Hours:	**4.1**	**102.5**
HVAC LEVEL 2			
HVC-10200	Commercial Air Side Systems	0.5	12.5
HVC-10201	Chimneys, Vents, & Flues	0.2	5
HVC-10202	Intro to Hydronic Systems	0.4	10
HVC-10203	Air Quality Equipment	0.2	5
HVC-10204	Leak Detect/Evacuate/Recover/Charge	0.8	20
HVC-10205	Alternating Current	0.3	7.5
HVC-10206	Basic Electronics	0.2	5
HVC-10207	Control Circuit Troubleshooting	1.2	30
HVC-10208	Troubleshooting Gas Heating	0.5	12.5
HVC-10209	Troubleshooting Cooling	0.8	20
HVC-10210	Heat Pumps	0.8	20
HVC-10211	Installation/Maintenance Practices	0.7	17.5
HVC-10212	Sheet Metal Duct Systems	0.2	5
HVC-10213	Fiberglass/Flex Duct Systems	0.2	5
	HVAC Level 2 Credits/Classroom Hours:	**7**	**175**

Continued on following page…

HVAC LEVEL 3			
HVC-20300	Refrigerants & Oils	0.4	10
HVC-20301	Compressors	0.6	15
HVC-20302	Metering Devices	0.3	7.5
HVC-20303	Retail Refrigeration	0.8	20
HVC-20304	Commercial Hydronic Systems	0.5	12.5
HVC-20305	Steam Systems	0.4	10
HVC-20306	Planned Maintenance	0.8	20
HVC-20307	Water Treatment	0.4	10
HVC-20308	Troubleshooting Electronic Controls	0.3	7.5
HVC-20309	Troubleshooting Oil Heating	0.4	10
HVC-20310	Troubleshooting Heat Pumps	0.5	12.5
HVC-20311	Troubleshooting Accessories	0.4	10
	HVAC Level 3 Credits/Classroom Hours:	**5.8**	**145**
HVAC LEVEL 4			
HVC-20400	Construction Drawing/Specification	1	25
HVC-20401	Air Properties & Air System Balancing	0.8	20
HVC-20402	Indoor Air Quality	0.6	15
HVC-20403	Energy Conservation Equipment	0.4	10
HVC-20404	Building Management Systems	0.7	17.5
HVC-20405	System Start-Up & Shut-Down	0.9	22.5
HVC-20406	Heating & Cooling System Design	1	25
HVC-20407	Commercial & Industrial Refrigeration	0.9	22.5
HVC-20408	Alternative Heating & Cooling Equipment	0.4	10
HVC-20409	Introduction to Supervisory Skills	0.5	12.5
	HVAC Level 4 Credits/Classroom Hours:	**7.2**	**180**
ENGINEERING DESIGN TECHNOLOGIES			
EDT-11000	Detailing with AutoCAD	3	64
EDT-14000	Architectural Drawing/CAD	4	64
	EDT Credits/Classroom Hours:	**7**	**128**
TECHNICAL EDUCATION & ELECTIVES			
CAP-29904	Internship/Service Learning	4	96
COR-12000	Green Building and Weatherization	2	32
HVC-14000	Geothermal Heat Pump Systems	3	64
Select technical electives from ELT, MEC, MPT, PLB or WLD (1.4—4.4 or until 60 credits are earned).			
	Technical Education Credits/Class Hours:	**10.4-13.4**	**242**
	Total AAS-Credits/Classroom Hours:	**60**	**1,312-1,360**

Suggested sequence of courses:

Year 1 (Fall Semester)	**Year 1 (Winter Semester)**
EDT-11000—Detailing with AutoCAD	COR-12000—Green Building & Weatherization
ENG-11800—Intro to Technical/Professional Writing	EDT-14000—Architectural Drawing/CAD
Core/HVAC/R Modules	MTH-12000—Intermediate Algebra
	2 credits of HVAC/R Modules
Year 2 (Fall Semester)	**Year 2 (Winter Semester)**
HVC-14000—Geothermal Heat Pump Systems	CAP-29904—Internship/Service Learning
HVAC/R Modules	HVAC/R Modules
Lab science course	Speech course

COSMETOLOGY

Special Certificate (SC)

- *Esthetician*

Certificate (CC)

- *Cosmetology*

Associate in Applied Science (AAS)

- *Cosmetology*

Partnership Programs

- *Davenport University*
- *Franklin University*

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

We welcome high school students into cosmetology programs.

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

For more information, please contact the Cosmetology Department.

Shannon Weaver 989-275-5000, extension 274

ESTHETICIAN

Minimum Credits: 10

Special Certificate (SCES0)

Contact Hours: 16

Introduction

Kirtland's special certificate in Esthetics is designed to provide specialized instruction and practical application for employment in spa settings. This program leads to a Special Certificate of Completion in Esthetics, preparing students to successfully pass the Michigan State Board of Cosmetology exam, which is required by law to practice cosmetology in Michigan. Students must earn a minimum of 10 credit hours (400 clock hours) to qualify for graduation. Job placement in this program is excellent, with opportunities at spa salons, plastic surgeon and dermatology offices.

ESTHETICIAN PROGRAM REQUIREMENTS				
Course	**Title**	**Credits**	**Contact Hours**	**Clock Hours**
COS-14100	Skin Care I	2.5	4	100
COS-14200	Skin Care II	2.5	4	100
COS-14300	Skin Care III	2.5	4	100
COS-14400	Skin Care IV	2.5	4	100
Program Credits/Contact Hours/Clock Hours:		**10**	**16**	**400**

COSMETOLOGY

Minimum Credits: 37.5

Certificate of Completion (CCOS1)

Contact Hours: 60

Introduction

Kirtland's certificate program in cosmetology is designed to provide specialized instruction and practical application for employment in beauty salons. This program prepares students to successfully pass the Michigan State Board Exam, which is required by law to practice cosmetology in Michigan. Job placement for this program is excellent. The courses are taught in modern facilities utilizing cutting-edge equipment. Students wanting to continue in this program may pursue an Associate in Applied Science – Cosmetology degree after obtaining a license.

We welcome high school students into cosmetology programs.

COSMETOLOGY PROGRAM REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
COS-12100	Cosmetology I	2.5	4
COS-12200	Cosmetology II	2.5	4
COS-12300	Cosmetology III	2.5	4
COS-12400	Cosmetology IV	2.5	4
COS-12500	Cosmetology V	2.5	4
COS-12600	Cosmetology VI	2.5	4
COS-12700	Cosmetology VII	2.5	4
COS-12800	Cosmetology VIII	2.5	4
COS-12900	Cosmetology IX	2.5	4
COS-13000	Cosmetology X	2.5	4
COS-13100	Cosmetology XI	2.5	4
COS-13200	Cosmetology XII	2.5	4
COS-13300	Cosmetology XIII	2.5	4
COS-13400	Cosmetology XIV	2.5	4
COS-13500	Cosmetology XV	2.5	4
Program Credits/Contact Hours:		**37.5**	**60**

COSMETOLOGY

Associate in Applied Science (DSMN4)

Minimum Credits: 60.5

Contact Hours: 71-85

Introduction

Kirtland's associate degree program in Cosmetology is designed to provide specialized instruction in practical application, communication skills, and general knowledge for employment as a licensed cosmetologist. This program prepares students to successfully pass the Michigan State Board of Cosmetology Exam. Job placement in this program is excellent. Transfer students must submit a copy of a current cosmetology license prior to completing this program.

We welcome high school students into cosmetology programs.

CORE COURSES			
Course	**Title**	**Credits**	**Contact Hours**
Select any accounting course.			
		4	4
Select any business course.			
		3	3
COS-17500	Salon Management	1	1
	Core Credits/Contact Hours:	**8**	**8**
COSMETOLOGY SEQUENCE OR MICHIGAN COSMETOLOGY LICENSE			
COS-12100 through 13500 (Cosmetology I-XV) or Michigan Cosmetology License:			
	Cosmetology Credits/Contact Hours:	**15-37.5**	**24-60**
GENERAL EDUCATION			
ENG-10303	English Composition I	3	3
MTH-12000	Intermediate Algebra *or higher*	3-4	4
POL-10100	Introduction to American Government	3	3
Select a social science course from ECO, GEO, POL, PSY or SOC.			
		3-4	3-4
Select any speech course.			
		3	3
	General Education Credits/Contact Hours:	**15-17**	**16-17**
ELECTIVES (0-22.5 credits if needed)			
	Elective Credits/Contact Hours:	**0-22.5**	**0-23**
	Minimum Credits/Contact Hours:	**60.5**	**71-85**

Certificates (CC)

- *Pharmacy Technology*
- *Practical Nursing*
- *Surgical Technology*

Advanced Certificate (CC)

- *Vascular Sonography (Advanced Certificate)*

Associate in Applied Science (AAS)

- *Cardiac Sonography*
- *Health Information Technology*
- *Nursing – PN Transition, ADN Direct*
- *Concurrent ADN with BSN (in partnership with SVSU)*

Other Training Opportunities

- *Nursing Assistant Course*
- *Phlebotomy Course*
- *Radiography Partnership*

Partnership Programs

- *Davenport University*
- *Ferris State University*
- *Franklin University*
- *Mid Michigan Community College*
- *Saginaw Valley State University*

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

For more information, please contact your advisor:
989-275-5000, ext. 280.
For advising in Cardiac & Vascular Sonography
at the M-TEC[SM] call: 989-705-3600.

HEALTH SCIENCE

CARDIAC SONOGRAPHY

Minimum Credits: 66.5

Associate in Applied Science (DSON1)

Contact Hours: 89.5-93.5

Introduction

A Cardiac Sonographer (Echo cardiographer) is a health care professional who uses high frequency sound waves to obtain diagnostic recordings and measurements from the ultrasound image of the heart; this data is used by a physician to diagnose and treat various health care problems. A thorough understanding of cardiac anatomy, physiology, hemodynamics, and pathophysiology is required. This program leads to an Associate in Applied Science – Cardiac Sonography degree, and prepares the students to be eligible for the Cardiovascular Credentialing Institute (CCI) exam to obtain their registry. There are special admission requirements to the Sonography program; it is the student's responsibility to understand the requirements and to adhere to them as listed below.

Admission Requirements

To be admitted to the Cardiac Sonography program a separate application is required. Applications can be obtained online and are accepted at the M-TEC[SM] office between February 1 and April 1. *All prerequisite and general education courses must be completed with a grade of C or better, except for Anatomy & Physiology which requires a grade of C+ or better*. Students eligible for admission will be ranked by the date in which Cardiac Sonography was declared to be their program of study (either on original application of by the change of program form). Students will be admitted in cohort groups. Students who are admitted to the program must plan to take the courses in sequence and include summer semester. No waiting list is maintained for this program. Students must reapply each semester if not accepted into the program for the semester requested. The College reserves the right to extend the application period when warranted.

CARDIAC SONOGRAPHY				
PREREQUISITE & GENERAL EDUCATION COURSES WHICH ARE REQUIRED FOR PROGRAM ELIGIBILITY				
Course	**Title**	**Minimum Grade required**	**Credits**	**Contact Hours**
BIO-23500	Anatomy & Physiology I	C+	4	5
BIO-23600	Anatomy & Physiology II	C+	4	5
ENG-10303	English Composition I	C	3	3
MTH-12000	Intermediate Algebra *or competency*	C	0-4	0-4
PSY-10100	Introduction to Psychology	C	3	3
	Prerequisite & General Education Credits/Contact Hours:		**14-18**	**16-20**
CARDIAC SONOGRAPHY PROGRAM COURSES-- Program admission required. Courses must be taken as outlined.				
Semester One—Offered at Kirtland M-TEC[SM] in Gaylord				
SON-10000	Into to Sonography Patient Care	C+	2	3
SON-10600	Cardiovascular A & P	C+	4	4
SON-11000	Ultrasound Physics	C+	3	3
SON-11600	Basic Sonography	C+	3	3
SON-11700	Basic Sonography Lab	S	4	8
	Semester One Credits/Contact Hours:		**16**	**21**
Semester Two—Offered at Kirtland M-TEC[SM] in Gaylord				
SON-12500	Valvular Heart Disease	C+	3	3
SON-13100	Cardiomyopathies/Congenital Defects	C+	3	3
SON-13200	Cardiomyopathies/Congenital Lab	S	4	8
SON-13500	Valvular Heart Disease Clinical Lab	S	2	6
	Semester Two Credits/Contact Hours:		**12**	**20**
Semester Three—Offered at Kirtland M-TEC[SM] in Gaylord				
SON-15000	Complete Adult Echocardiogram	C+	3	3
SON-15600	Advanced Sonography	C+	3	3
SON-15700	Advanced Sonography Lab	S	4	8
SON-16000	Complete Adult Echocardiogram Lab	S	2	6
	Semester Three Credits/Contact Hours:		**12**	**20**
Semester Four—Locations will vary				
SON-29900	Internship (may be located out of state)	S	12.5	12.5
	Semester Four Credits/Contact Hours:		**12.5**	**12.5**
	Minimum Program Credits/Contact Hours:		**66.5-70.5**	**89.5-93.5**

Continued on following page…

Important Notes:

- A minimum grade of "C+" is required in all Cardiac Sonography (SON) courses.
- Students accepted to the Cardiac Sonography program will be required to submit to a complete criminal background fingerprinting review. A fee for this may be required. Felony convictions and certain misdemeanor convictions may prohibit admission to the Cardiac Sonography program due to the inability to place students with certain convictions in clinical facilities.
- There are abilities (with or without accommodation) that a student in this program must have. Please visit the "Required Program Performance Standards" on the Cardiac Sonography (http://www.kirtland.edu/academic/cardiacsonography.htm) website. Forms are provided upon application to the program.
- Prerequisite courses may be repeated one time only in order to obtain the required minimum grade.
- The above information is applicable for students entering the program in the 2014-2015 school year. Students entering the program in future years will be subject to the requirements outlined in the applicable catalog.
- Students must maintain current Professional Provider CPR certification.

VASCULAR SONOGRAPHY

Advanced Certificate (CVAS0)

Minimum Credits: 12
Contact Hours: 12

Introduction

A Vascular Sonographer is a health care professional who uses high frequency sound waves to obtain data and measurements from the ultrasound image of the circulatory vessels in the human body. This data is used by a physician, assisted by the Sonographer, to diagnose and treat various health care problems. A thorough understanding of cardiovascular anatomy, physiology, hemodynamics and pathophysiology is required. This program leads to advanced certification in Vascular Sonography and prepares the student to apply for the Registered Vascular Technologist (*American Registry of Diagnostic Medical Sonographers-ARDMS*) exam or the Cardiovascular Credentialing Institute (CCI) Registered Vascular Specialist exam to obtain their credential. There are special admission requirements for the Vascular Sonography program; it is the student's responsibility to understand the requirements and to adhere to them as listed below and in associated approved documents.

Admission Requirements

To be admitted to the Vascular Sonography program a separate application is required. Applications can be obtained online and are accepted at the M-TEC[SM] office between February 1 and April 1 for the Fall Semester (August). Applicants must possess a recognized ultrasound degree and American Registry of Diagnostic Medical Sonography (ARDMS) registry status. Students will be admitted to cohort groups. Students who are admitted to the program must plan to take the courses in sequence. No waiting list is maintained for this program. Students must reapply each semester if not accepted into the program for the semester requested. The college reserves the right to extend the application period when warranted.

VASCULAR SONOGRAPHY PROGRAM				
Offered at Kirtland M-TEC[SM] in Gaylord				
Course	**Title**	**Minimum Grade Required**	**Credits**	**Contact Hours**
VAS-24000	Vascular Sonography *Offered every other year in even-numbered years beginning Fall 2014*	C+	12	12
		Vascular Sonography Credits/Contact Hours:	12	12

Important Notes:

- A minimum grade of C+ is required in the Vascular Sonography course.
- Students accepted to the Vascular Sonography program will be required to submit to a complete **criminal background fingerprinting** review. A fee for this may be required. Felony convictions and certain misdemeanor convictions may prohibit admission to the Vascular Sonography program due to the inability to place students with certain convictions in clinical facilities.
- There are abilities (with or without accommodation) that a student in this program must have. Please visit the "Required Program Performance Standards" on the Vascular Sonography website http://www.kirtland.edu/academic/vasculartechnology.htm. Forms are provided upon application to the program.
- Students must maintain current Professional Provider CPR certification.

HEALTH INFORMATION TECHNOLOGY

Minimum Credits: 62

Associate in Applied Science (DHIT0)

Contact Hours: 64-65

Graduates of this program are trained in a variety of skills that will enable them to integrate computer-based terminology and concepts of the health care system. Students will learn practical applications of various health information functions such as health care collection and abstraction, enhanced coding, maintenance, monitoring, retrieval, and reporting of medical records. Upon completion of the required coursework, students will be prepared for the national certification exam through the American Health Information Management Association (AHIMA).

Notes

- In order to graduate, students must have a program GPA of 2.3 or better.
- All HIT & OIS courses require a minimum grade of B- (2.7) to progress in the program.

GENERAL EDUCATION COURSES			
Course	**Title**	**Credits**	**Contact Hours**
BIO-10700	Essentials of Anatomy & Physiology	4	5
ENG-10303	English Composition I	3	3
MTH-12000	Intermediate Algebra *or higher*	3-4	4
Select a social science course from ECO, GEO, POL, PSY or SOC.			
		3-4	3-4
Select any speech course.			
		3	3
	General Education Credits/Contact Hours:	**16-18**	**18-19**
OCCUPATIONAL REQUIREMENTS			
ALH-10101	Medical Terminology	2	2
ALH-10801	Pathology with Pharmacology	3	3
ALH-11300	Medical Ethics & Law	3	3
CIS-10500	Intro to Computers	3	3
CIS-23501	Database Design	3	3
HIT-10600	Intro to Health Information Management	3	3
HIT-20000	Intro to Electronic Health Records	3	3
HIT-21100	Healthcare Management & Supervision	3	3
HIT-21300	ICD-10-CM Coding	3	3
HIT-21600	CPT Coding (formerly OIS-11300)	3	3
HIT-23000	Health Statistics & Analysis	3	3
HIT-23100	Health Information Management II	2	2
HIT-23200	Healthcare Data Content & Structure	3	3
HIT-23300	Revenue Cycle & Reimbursement	3	3
HIT-29900	Internship—Health Information Technology*	6	6
	Occupational Credits/Contact Hours:	**46**	**46**
	Minimum Program Credits/Contact Hours:	**62**	**64-65**

Prerequisite for Internship: Completion of all courses required for the program, consent of advisor, and a program GPA of 2.3 or better. Internship applications must be submitted the semester prior to the internship registration.

Suggested sequencing of courses:

Year 1 (Fall Semester) 14-15 credits ALH-10101—Medical Terminology CIS-10500—Intro to Computers ENG-10303—English Composition I HIT-10600—Intro/Health Information Management Social science course	**Year 1 (Winter Semester) 16 credits** BIO-10700—Essentials of A & P HIT-20000—Intro to Electronic Health Records HIT-21300—ICD-10-CM HIT-23100—Health Info Management II MTH-12000—Intermediate Algebra	
Year 2 (Fall Semester) 15 credits ALH-10801—Pathology with Pharmacology ALH-11300—Medical Ethics & Law HIT-21600—CPT Coding HIT-23200—Healthcare Data Content/ Structure Speech course	**Year 2 (Winter Semester) 12 credits** CIS-23501—Database Design HIT-21100—Healthcare Management & Supervision HIT-23000—Health Statistics & Analysis HIT-23300—Revenue Cycle & Reimbursement	**Year 2 (Summer Semester) 6 credits** HIT-29900—Internship-HIT

PHARMACY TECHNOLOGY

Certificate of Completion (CPHM0)

Minimum Credits: 20

Contact Hours: 20

Introduction: The Pharmacy Technology program at Kirtland is a 2-semester certificate program that prepares the student for entry-level pharmacy technician positions in hospitals, retail stores and other special areas of pharmacy practice where he/she will work under the supervision of a registered pharmacist. During the final semester of the program, the student will develop additional skills and knowledge necessary for the entry-level pharmacy technician by spending 144 hours in hospital, retail settings, and specialty areas in an internship under the direct supervision of a pharmacist. Upon completion of this program the student will be prepared to take the Pharmacy Technician Certification Board National Certification Exam.

Admission Requirements – Pharmacy Technology:

- **A**pplicants must be granted regular admission to Kirtland and meet the following requirements to be considered for admission to the Pharmacy Technology program: COMPASS testing to determine competency in MTH-07300/07400 (Basic Algebra with lab), ENG-09000 (College Writing Skills), and ENG-09601 (College Reading Skills).
- Computer skills are essential to program success (Internet, email, word processing).
- Students requesting admission to the program must submit a "Request for Admission to Pharmacy Technology Program" application packet (available online) to the Health Sciences Office by May 1 of the calendar year in which the student is requesting admission to the Pharmacy Technology program. Late applications will be accepted if seats are available after all on-time applicants have been evaluated. Acceptance notifications will be emailed to students via their Kirtland email account in June. ***Note:*** *If applicants exceed the number of available seats in the program, priority will be given to students with required prerequisites completed, then by date of KCC application where Pharmacy Technology is declared to be the program of study or by the date the program of study was changed to Pharmacy Technology, and then by residence within the local service area. Local service area consists of Kirtland's four-county district, those counties that have portions within Kirtland's district, and certain counties that are contiguous to Kirtland's district.*

PHARMACY TECHNOLOGY				
PREREQUISITE REQUIREMENTS				
Students must successfully complete or otherwise demonstrate competency in each of the following courses before being admitted to the pharmacy technology program:				
Course	**Title**	**Minimum Grade required**	**Credits**	**Contact Hours**
MTH-07300/07400	Basic Algebra & Algebra Lab *or competency*	S	0-5	0-5
ENG-09000	College Writing Skills *or competency*	S	0-3	0-3
ENG-09601	College Reading Skills *or competency*	S	0-3	0-3
PHARMACY TECHNOLOGY PROGRAM COURSES				
Program admission is required before the following courses can be taken:				
Semester I – Fall				
ALH-10101	Medical Terminology	C+	2	2
PHM-10000	Introduction to Pharmacy Technology	C+	6	6
PHM-10100	Pharmacology and Pharmacy Calculation	C+	3	3
Semester II – Winter				
PHM-10200	Issues in Pharmacy Technology	C+	3	3
PHM-19900	Pharmacy Technology Internship	S	3	3
SPE-11400	Intro to Interpersonal & Public Communication	C	3	3
	Pharmacy Technology Program Credits/Contacts:		**20**	**20**

Notes

- A high school diploma or GED is required for program acceptance.
- Conviction for some criminal offenses and any drug or substance related offense will render a candidate ineligible for writing the certification examination.
- Felony convictions and misdemeanor convictions involving abuse or neglect of vulnerable populations or any drug or related substance offense will prohibit admission to clinical agencies (a requirement of the program). If in doubt, please check with Cynde Kochensparger, Nursing Clinical Coordinator, at cynde.kochensparger@kirtland.edu.
- Drug testing of all students will be required prior to the internship.
- There are abilities (with or without accommodation) that a student in this program must have. Please visit "Required Program Performance Standards" on the pharmacy technology website (http://www.kirtland.edu/academic/pharmacytechnology.htm).
- The above information is applicable for students entering the program in the 2014-2015 school year. Students entering the program in future years will be subject to the requirements outlined in the applicable catalog.
- A minimum grade of "C+" is required in all Pharmacy Technology (PHM) program courses.
- Successfully complete all prerequisite and general education courses with a "C" or better grade except where noted.

PRACTICAL NURSING

Certificate of Completion (CLPN0)

Minimum Credits: 36.5

Contact Hours: 57-61

Introduction: The PN 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. Each class of nursing students is considered a cohort (group) and courses/schedules are assigned

Successful completion of all Nursing courses is required each semester in order to continue in the Nursing Program.

Certificate of Completion for 2014-2015 Academic Year				
PREREQUISITES AND GENERAL EDUCATION REQUIREMENTS				
All prerequisites and general education course work must be completed prior to admission to the Practical Nursing program.				
Course	**Title**	**Minimum grade required**	**Credits**	**Contact Hours**
BIO-23500	Anatomy & Physiology I	B	4	5
BIO-23600	Anatomy & Physiology II	B	4	5
ENG-10303	English Composition I	C	3	3
MTH-12000	Intermediate Algebra *or competency*	C	0-4	0-4
	Prerequisite & General Education Credits/Contact Hours:		**11-15**	**13-17**
PRACTICAL NURSING PROGRAM COURSES				
Semester One – Fall Semester *(late August to mid-December—approximately 3-4 days per week)*				
NUR-10503	Fundamentals of Nursing Practice	C+	7	13
NUR-10701	Mental Health Concepts	C+	1	1
NUR-10902	Pharmacology I*	C+	2	2
NUR-11000	Introduction to Geriatric Care	C+	1	1
NUR-11100	Math for Meds*	C+	1	1
**NUR-10902 and NUR-11100 must follow each other in a time sequence/time frame.*				
	Semester One Credit/Contact Hours:		**12**	**18**
Semester Two – Winter Semester *(mid-January to early May—approximately 3-4 days per week)*				
NUR-12514	Medical-Surgical Nursing	C+	7	16
NUR-12801	Maternal-Child Nursing Care	C+	2	2
NUR-12900	Pharmacology II	C+	2	2
	Semester Two Credit/Contact Hours:		**11**	**20**
Semester Three—Summer Semester *(mid-May to late June—3 days per week)*				
NUR-13303	Role Transition: Student to Practicing Nurse	C+	1	1
NUR-13414	Clinical Capstone	S	1.5	5
	Semester Three Credit/Contact Hours:		**2.5**	**6**
	Minimum Program Requirements/Contact Hours:		**36.5-40.5**	**57-61**

Notes:

- Prerequisite courses may be repeated one time only to obtain the required grade.
- A five-year time limit on certain prerequisite courses is recommended.
- Students should seek advising from the Student Success Center at ssc@kirtland.eduor phone 989-275-5000, ext. 280.
- Felony convictions and certain misdemeanor convictions will prohibit admission to the nursing program. If in doubt, please check with Cynde Kochensparger, Nursing Clinical Coordinator, at cynde.kochensparger@kirtland.edu.
- Drug testing of all students will be required prior to final program acceptance.
- Applications are accepted annually beginning January 1- May 1. Students need to meet with their academic advisor to begin the application process. Immunization records are required for final admission.
- Students are ranked for acceptance into the program based on grades, GPA and knowledge exam.
- Reentry into the Nursing Program is allowed one time per program and is determined by a committee of nursing faculty.
- Please note that the Nursing Program is a full-time program that may require attendance in lecture or lab Monday through Sunday at any time. Clinical may be assigned during day or evening hours. This will require the ability to maintain a flexible schedule from any applicant. Accommodations for work or personal schedules cannot be guaranteed.
- Program coursework must be completed within two years.
- Please refer to the nursing program website for more detailed information: http://www.kirtland.edu/academic/nursing.htm or contact Susie Allen in the Health Science Office at 989-275-5000, ext. 281 or email susie.allen@kirtland.edu.

LPN to ADN

Associate in Applied Science (DADN1)

Minimum Credits: 28*/64.5*

Contact Hours: 45/102-106****

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. This Associate in Applied Science in Nursing Program is the PN program plus the LPN to ADN program. Graduates of the PN program must have earned a 3.0 or higher G.P.A. in specific PN courses to be considered for admission into the LPN to ADN program. Following successful completion of the LPN to ADN program, graduates are eligible to take the license exam to practice as a Registered Nurse (RN). Each class of nursing students is considered a cohort (group) and courses/schedules are assigned. Graduates of the LPN to ADN Program are qualified to enter the many BSN completion programs available.

Successful completion of all Nursing courses is required each semester in order to continue in the Nursing Program.

Associate in Applied Science for 2014-2015 Academic Year				
PREREQUISITES AND GENERAL EDUCATION REQUIREMENTS **The symbol (#) denotes a course taken prior to or in the Practical Nursing Program. Transfer students must satisfy these requirements regardless of LPN licensure.**				
Course	**Title**	**Minimum grade required**	**Credits**	**Contact Hours**
BIO-23500	Anatomy & Physiology I #	B	4	5
BIO-23600	Anatomy & Physiology II #	B	4	5
ENG-10303	English Composition I #	C	3	3
MTH-12000	Intermediate Algebra *(or competency testing) #*	C	0-4	0-4
NUR-10902	Pharmacology I #	C+	2	2
NUR-12900	Pharmacology II #	C+	2	2
NUR-23700	Pathophysiology for the Health Professional	C+	3	3
PSY-10100	Introduction to Psychology	C	3	3
	Total Credits/Contact Hours:		**17-21**	**19-23**
PROGRAM REQUIREMENTS				
Semester One – Fall Semester				
NUR-22002	Nursing Assessment	C+	2	2
NUR-22214	Advanced Medical-Surgical Nursing	C+	8	17
	Total Semester One Credit/Contact Hours:		**10**	**19**
Semester Two – Winter Semester				
NUR-23201	Family Centered Pediatrics	C+	3	5
NUR-24202	Community Mental Health Nursing	C+	4	8
NUR-24601	Nursing Care of Women & Families	C+	3	5
NUR-25203	Professional Practice	C+	2	2
	Total Semester Two Credits/Contact Hours:		**12**	**20**
	PN Program Requirements (completed prior to ADN program entry)/Contact Hours:		**36.5-40.5**	**57-61**
	***Non-duplicated* ADN program Requirements/Contact Hours:**		**28***	**45****
	Hours to an AAS degree (PN + ADN)/Contact Hours:		**64.5-68.5***	**102-106****

Notes:

- A current PN license is required if a graduate of another college.
- Prerequisite courses may be repeated one time only to obtain the required grade.
- Students should seek advising from the Student Success Center at ssc@kirtland.edu or phone 989-275-5000, ext. 280.
- RN Pharmacology is required as a prerequisite (NUR-10902 and NUR-12900 or equivalent coursework).
- Felony convictions and certain misdemeanor convictions will prohibit admission to the nursing program. If in doubt, please check with Cynde Kochensparger, Nursing Clinical Coordinator, at cynde.kochensparger@kirtland.edu.
- Drug testing of all students will be required prior to final program acceptance.
- Applications are accepted annually beginning January 1- May 1. Students need to meet with their academic advisor to begin the application process.
- Immunization records are required for final admission.
- Students are ranked for acceptance into the program based on grades, GPA and knowledge exam.
- Reentry into the Nursing Program is allowed one time per program and is determined by a committee of nursing faculty.
- Program coursework must be completed within two years.
- Please note that the Nursing Program is a Full-Time Program that may require attendance in lecture or lab Monday through Sunday at any time. Clinical may be assigned during day or evening hours. This will require the ability to maintain a flexible schedule from any applicant. Accommodations for work or personal schedules cannot be guaranteed.
- Please refer to the nursing program website for more detailed information: http://www.kirtland.edu/academic/nursing.htm or contact Susie Allen in the Health Science Office at 989-275-5000, ext. 281 or email susie.allen@kirtland.edu.

ADN
Associate in Applied Science (DDRN1)

Minimum Credits: 60
Contact Hours: 93-96

Introduction: The Associate in Applied Science in nursing program is designed to prepare students for entry-level positions as registered nurses. Following successful completion of the ADN program, graduates are eligible to take the license exam to practice as a Registered Nurse (RN). Each class of nursing students is considered a cohort (group) and courses/schedules are assigned. Graduates of the ADN program are qualified to enter the many BSN completion programs available.

Successful completion of all Nursing courses is required each semester in order to continue in the Nursing Program.

Associate in Applied Science for 2014-2015 Academic Year				
PREREQUISITES AND GENERAL EDUCATION REQUIREMENTS				
Course	**Title**	**Minimum grade required**	**Credits**	**Contact Hours**
BIO-23500	Anatomy & Physiology I	B	4	5
BIO-23600	Anatomy & Physiology II	B	4	5
ENG-10303	English Comp I	C	3	3
MTH-12000	Intermediate Algebra *(or competency testing) See note below.**	C	0-4*	0-4
NUR-23700	Pathophysiology for the Health Professional	C+	3	3
PSY-10100	Introduction to Psychology	C	3	3
	Total Prerequisite & General Education Credits/Contact Hours:		**17- 21**	**19-23**
PROGRAM REQUIREMENTS				
Semester One – Fall Semester				
NUR-10503	Fundamentals of Nursing Practice	C+	7	13
NUR-10902	Pharmacology I	C+	2	2
NUR-11000	Introduction to Geriatric Care	C+	1	1
NUR-11100	Math for Meds	C+	1	1
	Total Semester One Credit/Contact Hours:		**11**	**17**
Semester Two – Winter Semester				
NUR-12514	Medical-Surgical Nursing	C+	7	16
NUR-12900	Pharmacology II	C+	2	2
NUR-22002	Nursing Assessment	C+	2	2
	Total Semester Two Credits/Contact Hours:		**11**	**20**
Semester Three – Fall Semester				
NUR-22414	Advanced Medical-Surgical Nursing II	C+	8	17
NUR-24202	Community Mental Health Nursing	C+	4	7
	Total Semester Three Credit/Contact Hours:		**12**	**24**
Semester Four– Winter Semester				
NUR-23201	Family Centered Pediatrics	C+	3	5
NUR-24601	Nursing Care of Women & Families	C+	3	5
NUR-25203	Professional Practice	C+	2	2
	Total Semester Four Credit/Contact Hours:		**8**	**12**
	Total Program Requirements*:		**60-63**	**93-96**

Notes:

- *Students who test out of Intermediate Algebra must complete at least one additional credit in order to meet the degree requirement of 60 credit hours.
- Prerequisite courses may be repeated one time only to obtain the required grade.
- Students should seek advising from the Student Success Center at ssc@kirtland.eduor phone 989-275-5000, ext. 280.
- Felony convictions and certain misdemeanor convictions will prohibit admission to the nursing program. If in doubt, please check with Cynde Kochensparger, Nursing Clinical Coordinator, at cynde.kochensparger@kirtland.edu.
- Drug testing of all students will be required prior to final program acceptance.
- Applications are accepted annually beginning January 1- May 1. Students need to meet with their academic advisor to begin the application process.
- Immunization records are required for final admission.
- Students are ranked for acceptance into the program based on grades, GPA and knowledge exam.
- Reentry into the Nursing Program is allowed one time per program and is determined by a committee of nursing faculty.
- Please note that the Nursing Program is a Full-Time Program that may require attendance in lecture or lab Monday through Sunday at any time. Clinical may be assigned during day or evening hours. This will require the ability to maintain a flexible schedule from any applicant. Accommodations for work or personal schedules cannot be guaranteed.
- Please refer to the nursing program website for more detailed information: http://www.kirtland.edu/academic/nursing.htm or contact Susie Allen in the Health Science Office at 989-275-5000, ext. 281 or email susie.allen@kirtland.edu.

ADN CONCURRENT

Associate in Applied Science (DDRN1)

Minimum Credits: 60

KCC Contact Hours: 93-96

Introduction: Students wanting to pursue this program will need to declare the DDRN1 (Direct RN Nursing program) and complete the prerequisites for that program. SVSU will determine admissions and prerequisites that are required by SVSU for the concurrent program.

Successful completion of all Kirtland Nursing courses is required each semester in order to continue in the Nursing Program.

NURSING COURSES				
Semester One—Fall Semester				
Course	**Title**	**Minimum grade required**	**Credits**	**Contact Hours**
NUR-10503	Fundamentals of Nursing Practice	C+	7	13
NUR-10902	Pharmacology I	C+	2	2
NUR-11000	Introduction to Geriatric Care	C+	1	1
NUR-11100	Math for Meds	C+	1	1
	SVSU Nursing Course		4	
		Total Semester One Credit Hours:	**15**	
Semester Two—Winter Semester				
NUR-12514	Medical-Surgical Nursing I	C+	7	16
NUR-12900	Pharmacology II	C+	2	2
NUR-22002	Nursing Assessment	C+	2	2
	SVSU Nursing Course		3	
		Total Semester Two Credit Hours:	**14**	
SVSU Summer Semester				
	SVSU Nursing course		4	
		Total Semester Three Credit Hours:	**4**	
Semester Three—Fall Semester				
NUR-22414	Advanced Medical-Surgical Nursing II	C+	8	17
NUR-24202	Community Mental Health Nursing	C+	4	7
	SVSU Nursing Course		2	
		Total Semester Four Credit Hours:	**11**	
Semester Four—Fall Semester				
NUR-23201	Family Centered Pediatrics	C+	3	5
NUR-24601	Nursing Care of Women & Families	C+	3	5
NUR-25203	Professional Practice	C+	2	2
	SVSU Nursing Course		2	
		Total Semester Five Credit Hours:	**10**	
Graduate from Kirtland and continue at SVSU for BSN				

Notes:

- Prerequisite courses may be repeated one time only to obtain the required grade.
- Students should seek advising from the Student Success Center at ssc@kirtland.eduor phone 989-275-5000, ext. 280.
- Felony convictions and certain misdemeanor convictions will prohibit admission to the nursing program. If in doubt, please check with Cynde Kochensparger, Nursing Clinical Coordinator, at cynde.kochensparger@kirtland.edu.
- Drug testing of all students will be required prior to final program acceptance.
- Applications are accepted annually beginning January 1- May 1. Students need to meet with their academic advisor to begin the application process.
- Immunization records are required for final admission.
- Students are ranked for acceptance into the program based on grades, GPA and knowledge exam.
- Reentry into the Nursing Program is allowed one time per program and is determined by a committee of nursing faculty.
- Please note that the Nursing Program is a Full-Time Program that may require attendance in lecture or lab Monday through Sunday at any time. Clinical may be assigned during day or evening hours. This will require the ability to maintain a flexible schedule from any applicant. Accommodations for work or personal schedules cannot be guaranteed.
- Please refer to the nursing program website for more detailed information: http://www.kirtland.edu/academic/nursing.htm or contact Susie Allen in the Health Science Office at 989-275-5000, ext. 281 or email susie.allen@kirtland.edu.

SURGICAL TECHNOLOGY

Certificate of Completion (CSRG0)

Minimum Credits: 45

Contact Hours: 55-59

Introduction: The Surgical Technology program at Kirtland is designed to prepare students for entry-level positions as surgical technicians. Following successful completion of this program, graduates are eligible to take the national certification exam to practice as a Certified Surgical Technician. The program must be completed within one year after beginning the surgical technology courses. Programs are offered at the Kirtland campus in West Branch. Each class of Surgical Technology students is considered a cohort (group) and courses/schedules are assigned. Students must consult with the advisor for health sciences for advising.

PREREQUISITES AND GENERAL EDUCATION REQUIREMENTS				
Course	**Title**	**Minimum Grade required**	**Credits**	**Contact hours**
BIO-23500	Anatomy & Physiology I *("C+" or higher required)*	C+	4	5
BIO-23600	Anatomy & Physiology II *("C+" or higher required)*	C+	4	5
ENG-10303	English Composition I	C	3	3
MTH-12000	Intermediate Algebra *or competency*	C	0-4	0-4
PSY-10100	Introduction to Psychology	C	3	3
	General Education & Prerequisite Credits/Contact Hours:		**14-18**	**16-20**
SURGICAL TECHNOLOGY PROGRAM REQUIREMENTS				
Program admission is required before the following courses can be taken:				
Semester I – Fall				
SUR-10000	Fundamentals of Surgical Technology	C+	3	3
SUR-10100	Surgical Asepsis	C+	2	2
SUR-10200	The Surgical Patient	C+	2	2
SUR-10300	Surgical Pharmacology	C+	2	2
SUR-10400	Basic Operative Procedures	C+	2	2
SUR-10700	Fundamental Surgical Techniques	C+	5	10
	Semester I Credits/Contact Hours:		**16**	**21**
Semester II – Winter				
SUR-20000	Advanced Surgical Procedures	C+	3	6
SUR-20100	Intermediate Surgical Techniques	C+	5	5
SUR-20200	Advanced Surgical Techniques	C+	5	5
SUR-20300	Surgical Professional Practice	C+	2	2
	Semester II Credits/Contact Hours:		**15**	**18**
	Minimum Program Credits/Contact Hours:		**45**	**55-59**

Notes:

- Prerequisite courses may be repeated one time only to obtain the required grade.
- Students should seek advising from the Student Success Center (ssc@kirtland.edu) or phone 989-275-5000, ext. 280.
- Felony convictions and certain misdemeanor convictions will prohibit admission to the surgical technology program. If in doubt, please check with Cynde Kochensparger, clinical coordinator (cynde.kochensparger@kirtland.edu).
- Drug testing of all students will be required prior to final program acceptance.
- Students requesting admission to the program must submit a "Request for Admission to the Surgical Technology Program" application packet (available online) to the Health Sciences Office by May 1 of the calendar year in which the student is requesting admission to the Surgical Technology program. Late applications will be accepted if seats are available after all on-time applicants have been evaluated. Acceptance notifications will be emailed to students via their Kirtland email account in June. ***Note:*** *If applicants exceed the number of available seats in the program, priority will be given to students with required prerequisites completed, then by date of KCC application where Surgical Technology is declared to be the program of study or by the date the program of study was changed to Surgical Technology, and then by residence within the local service area. Local service area consists of Kirtland's four-county district, those counties that have portions within Kirtland's district, and certain counties that are contiguous to Kirtland's district.*
- Immunization records are required for final admission (refer to the Surgical Technology website for details.)
- Students are ranked for acceptance into the program based on: (1) anticipated date of completion of prerequisite course work; (2) date of college application declaring surgical technology as program of study; (3) Preference is given to those applicants who reside within our local service area.
- Program course work must be completed within two years.
- Prerequisite courses must be completed with the required grades for admission to the surgical technology program.

OTHER TRAINING OPPORTUNITIES IN THE HEALTH SCIENCES

NURSING ASSISTANT COURSE

Credits: 6
Contact Hours: 7.5

Kirtland Community College offers a nursing assistant course each semester to prepare students to take the state examination to be certified as a Nursing Assistant. The course is offered at both the Roscommon campus and the Kirtland M-TEC [SM] at Gaylord campus. ***The student is responsible for paying the fee to take the certification exam.***

Prerequisites
ENG-09601 (College Reading Skills). COMPASS testing may be required to determine reading level.

Course	Title	Credits	Contact Hours
ALH-10400	Nursing Assistant	6	7.5

Notes:

- Conviction for some criminal offenses may render a candidate ineligible for taking course and/or the certification examination. A criminal background check is required at the student's expense. Information regarding this and required documentation is available on the Nursing Assistant website.
- Students are required to complete the course with a grade of "C" or better.
- A student must be at least 18 years of age by the time of course completion.
- 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 Certified Nursing Assistant website http://www.kirtland.edu/academic/certifiednursingassistant.htm.

PHLEBOTOMY COURSE

Credits: 6
Contact Hours: 7

Introduction:
Kirtland Community College offers a phlebotomy course fall and winter semesters to prepare students to take the AMT certification examinations. (The cost of the AMT certification exam is not included in the course cost.) The course is offered at the Roscommon campus. Students must have a high school diploma or G.E.D. Training is a 15-week hybrid course consisting of online course work, on-campus labs, and clinical experience and certification preparations.

Prerequisites:
ENG-09601 (College Reading Skills). COMPASS testing may be used to determine reading level.

Course	Title	Credits	Contact Hours
PHB-10100	Phlebotomy	6	7

Notes:

- Students should seek advising from the Student Success Center (ssc@kirtland.edu) or phone 989-275-5000, ext. 280)
- Conviction for some criminal offenses may render a candidate ineligible for taking the course and/or the certification examination. A criminal background check is required and is included in the cost of the class. Information regarding this and required documentation is available on the Phlebotomy website.
- Drug testing of all students will be required prior to the clinical component of the course.
- Students are required to complete the course with a grade of "C" or better.
- A student must be at least 18 years of age by the beginning of the semester.
- 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 Phlebotomy website http://www.kirtland.edu/academic/phlebotomy.htm

RADIOGRAPHY (Partnership with Mid Michigan Community College)

The Radiography program is a collaborative program offered by an agreement between Kirtland Community College and Mid Michigan Community College. The program is designed to prepare graduates to function as members of the health team in hospitals, clinics, government and military installations, industry, and public health. In addition to classroom instruction and experience in the laboratory, the student will receive on-the-job practical education in radiology departments of local hospitals participating in the program.

The prerequisite and general education courses are taken at Kirtland Community College and can be completed in one year. The second year will be taken at Mid Michigan Community College. The third year will be a clinical internship at area hospitals. Program graduates are eligible to take the American Registry of Radiologic Technologists certification examination. Mid Michigan Community College confers the associate degree.

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

- Most general education and prerequisite courses can be taken at Kirtland. HUM-200 must be taken at Mid Michigan Community College.
- MMCC has a limited number of reserved seats for qualified Kirtland students ready to be admitted into the program.
- Kirtland students who are in the program and ready for their clinical internship in a hospital will be assigned to an in-district hospital.
- Contact the Student Success Center (ssc@kirtland.edu) or call 989-275-5000, ext. 280 for more information.

INDUSTRIAL TECHNOLOGIES

The following programs of study are available at the Kirtland M-TEC[SM] in Gaylord.

Certificate (CC)

- *Welding & Fabricating*

Associate in Applied Science (AAS)

- *Mechatronics Facility Technician*
- *Mechatronics Industrial Technician*
- *Welding & Fabricating*

Partnership Programs

- *Davenport University*
- *Ferris State University*
- *Franklin University*

See information on our partnership programs on the web at http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

For more information, please contact the M-TEC[SM].
989-705-3600
mtec.kirtland.edu

MECHATRONICS DEGREES

The energy surrounding the field of mechatronics is unmistakable. Tom Brokaw has done a piece on it. Mike Rowe of TV's Dirty Jobs testified in front of the U.S. Senate about it. What is it? Combining mechanical and electrical skills, the field of Mechatronics is creating a new degree of greatness in America by creating jobs in a variety of industries. Plus, it just sounds cool! Kirtland Community College is ready to give you the training you need to take your skills to the next level. Kirtland offers two Associate in Applied Science degree programs to prepare you for this rapidly growing industry. If you are interested in becoming a facilities technician in a school or hospital setting, check out the Mechatronics Facilities Technician degree. Are you interested in a manufacturing or production facility instead? Kirtland's Mechatronics Industrial Technician is the degree for you. Either way, the Facilities Technician and Industrial Technician AAS degrees are designed to start you on your way to a high paying job in a growing industry.

Mechatronics has been identified as one of the 10 emerging technologies that will change the world. The U.S. Department of Labor listed mechatronics as a new and emerging "green jobs" growth area and part of an in-demand industry cluster specializing in the repair and maintenance of manufacturing equipment, operation systems and the related computer programming components that keep businesses operating efficiently and cost effectively. According to the Bureau of Labor Statistics, the job outlook for mechatronics is bright through 2018. Plus, the National Council on Competitiveness estimates that 100 million new jobs will be created in the 21st century for workers skilled in multiple disciplines. Mechatronics technicians fit this multi-disciplinary/multi-skilled requirement and can expect an annual salary of around $50,000.

MECHATRONICS FACILITIES TECHNICIAN

Associate in Applied Science (DMFT0)

Minimum Credits: 61.3
Contact Hours: 84.84

Kirtland's **Mechatronics Facilities Technician** degree prepares you to operate and maintain the systems and equipment that keep hospitals and schools running smoothly. Your mechatronics training will cover the essentials so HVAC, mechanical, electrical and computer-driven systems run smoothly. You'll be trained to read, analyze, program and correct all of the critical operating systems within the facility.

CORE COURSES			
Course	**Title**	**Credits**	**Class Hours**
COR-10001	Basic Safety	0.5	12.5
COR-10003	Introduction to Hand Tools	0.4	10
COR-10004	Introduction to Power Tools	0.4	10
COR-10006	Basic Rigging	0.6	15
COR-10007	Basic Communication Skills	0.3	7.5
COR-10008	Employability Skills	0.3	7.5
COR-10009	Intro to Materials Handling	0.2	5
	Core Credits/Class Hours:	**2.7**	**67.5**
ELECTRICAL			
ELT-10105	Introduction to NEC	0.3	7.5
ELT-10109	Conductors & Cables	0.4	10
ELT-10203	Motors: Theory & Application	0.8	20
ELT-10209	Conductor Terminations & Splices	0.3	7.5
ELT-10210	Grounding & Bonding	0.6	15
ELT-10211	Circuit Breakers & Fuses	0.5	12.5
ELT-20308	Distribution Equipment	0.5	12.5
ELT-20309	Transformers	0.5	12.5
ELT-20311	Motor Calculations	0.5	12.5
ELT-20313	Motor Controls	0.5	12.5
ELT-20407	Basic Electronic Theory	0.4	10
ELT-20410	Advanced Motor Controls	0.8	20
ELT-20413	Motor Operation & Maintenance	0.4	10
	Electrical Level 1 Credits/Class Hours:	**6.5**	**162.5**
ENGINEERING DESIGN TECHNOLOGY			
EDT-11000	Detailing w/AutoCAD	3	64
	EDT Credits/Class Hours:	**3**	**64**
HVAC/PIPING SYSTEMS			
HVC-11002	Copper & Plastic Piping Practices	0.2	5
HVC-11003	Soldering & Brazing	0.3	7.5
HVC-11004	Ferrous Metal Piping Practices	0.2	4
	Piping Systems Credits/Class Hours:	**0.7**	**17.5**

Continued on following page…

MECHATRONICS			
MEC-10000	Basic Electricity and Controls	3.0	64
MEC-10401	Pneumatics	2.0	32
MEC-10600	Mechanical Drives	3.4	84
MEC-10700	Pump Systems	2.0	32
MEC-10800	Introduction to Hydraulic Systems	2.0	48
MEC-10901	Precision Measuring Tools	2.0	32
MEC-20100	Programmable Logic Controllers	3.0	64
	Mechatronics Credits/Class Hours:	**17.4**	**356**
HVC & ELT ADVISOR APPROVED MODULES—18 HOURS			
	HVC/ELT Credits/Classroom Hours:	**18**	**450**
GENERAL EDUCATION			
CHE-10000 *or* PHY-10501/02	Chemical Science *or* Physical Science & Physical Science Lab	4	80
ENG-11800	Intro to Technical & Professional Writing	3	48
Select Intermediate Algebra (MTH-12000) or higher, excluding Statistics (MTH-20600).			
		3-4	64
Select any speech course.			
		3	48
	General Education Credits/Class Hours:	**13-14**	**240**
	Total AAS Program Credits/Contact Hours:	**61.3**	**84.84**

For assistance with course selection, sequencing and arranging your schedule, please consult with your advisor.

MECHATRONICS INDUSTRIAL TECHNICIAN

Minimum Credits: 61.18

Associate in Applied Science (DMIT0)

Contact Hours: 80.96

Kirtland's **Mechatronics Industrial Technician** program will give you the skills for entry-level positions in automation-related jobs including robot installations maintenance, automation equipment installation, troubleshooting, maintenance and PLC programming. You'll know how to install, maintain and repair the mechanical, controls, fluid power systems, electrical and electronic equipment in a wide variety of fields and industrial settings.

CORE CLASSES			
Course	**Title**	**Credits**	**Classroom Hours**
COR-10001	Basic Safety	0.5	12.5
COR-10003	Introduction to Hand Tools	0.4	10
COR-10004	Introduction to Power Tools	0.4	10
COR-10006	Basic Rigging	0.6	15
COR-10007	Basic Communication Skills	0.3	7.5
COR-10008	Employability Skills	0.3	7.5
COR-10009	Intro to Materials Handling	0.2	5
	Core Credits/Class Hours:	**2.7**	**67.5**
ELECTRICAL			
ELT-10105	Introduction to NEC	0.3	7.5
ELT-10109	Conductors & Cables	0.4	10
ELT-10203	Motors: Theory & Application	0.8	20
ELT-10209	Conductor Terminations & Splices	0.3	7.5
ELT-10210	Grounding & Bonding	0.6	15
ELT-10211	Circuit Breakers & Fuses	0.5	12.5
ELT-20308	Distribution Equipment	0.5	12.5
ELT-20309	Transformers	0.5	12.5
ELT-20311	Motor Calculations	0.5	12.5
ELT-20313	Motor Controls	0.5	12.5
ELT-20407	Basic Electronic Theory	0.4	10
ELT-20410	Advanced Motor Controls	0.8	20
ELT-20413	Motor Operation & Maintenance	0.4	10
	Electrical Level 1 Credits/Class Hours:	**6.5**	**162.5**
ENGINEERING DESIGN TECHNOLOGY			
EDT-11000	Detailing w/AutoCAD	3	64
	EDT Credits/Class Hours:	**3.0**	**64**
HVAC/PIPING SYSTEMS			
HVC-11002	Copper & Plastic Piping Practices	0.2	5
HVC-11003	Soldering & Brazing	0.3	7.5
HVC-11004	Ferrous Metal Piping Practices	0.2	4
	Piping Systems Credits/Class Hours:	**0.7**	**17.5**
MECHATRONICS			
MEC-10000	Basic Electricity and Controls	3.0	64
MEC-10401	Pneumatics	2.0	32
MEC-10600	Mechanical Drives	3.4	84
MEC-10700	Pump Systems	2.0	32
MEC-10800	Introduction to Hydraulic Systems	2.0	48
MEC-10901	Precision Measuring Tools	2.0	32
MEC-20100	Programmable Logic Controllers	3.0	64
MEC-20200	Advanced Controller Applications	3.0	48
MEC-20300	Robotic Systems	2.0	48
MEC-20500	Transfer Line Capstone	3.0	48
	Mechatronics Credits/Class Hours:	**25.4**	**500**
METAL MACHINING			
MPT-10272	Machine Tool Safety	0.17	4.0
MPT-10273	Identifying Surface Finishes	0.08	2.0
MPT-10274	Shop Math-Speeds & Feeds	0.21	5.0
MPT-10275	Sharpening Drill Bits	0.25	6.0
MPT-10276	Drilling on a Press	0.17	4.0
MPT-10277	Power Tap on the Drill Press	0.25	6.0

Continued on following page…

MPT-10278	Drill Press Project	0.58	14.0
MPT-10279	Band Saw Blade Welding	0.25	6.0
MPT-10280	Vertical Band Saw Project	0.25	6.0
MPT-10281	Maintaining the Lathe	0.17	4.0
MPT-10282	Grinding Lathe Tools	0.25	6.0
MPT-10283	Facing on the Lathe	0.21	5.0
MPT-10284	Aligning Lathe Centers	0.17	4.0
MPT-10285	Cutting External Threads	0.50	12.0
MPT-10286	Dial In Vise/Tram in Head	0.21	5.0
MPT-10287	Fly Cutter & End Mill/Square Block	0.21	5.0
MPT-10288	Digital Read/Drill, Tap, & Ream	0.25	6.0
	Metal Machining Credits/Class Hours:	**4.18**	**100**
WELDING			
WLD-11000	Welding Fundamentals	4	96
WLD-21100	Introduction to Robotics	2	48
	Welding Credits/Class Hours:	**6.0**	**144**
GENERAL EDUCATION			
CHE-10000 *or* PHY-10501/02	Chemical Science *or* Physical Science & Physical Science Lab	4	80
ENG-11800	Intro to Technical & Professional Writing	3	48
Select Intermediate Algebra (MTH-12000) or higher, excluding Statistics (MTH-20600).			
		3-4	64
Select any speech course.			
		3	48
	General Education Credits/Class Hours:	**13-14**	**240**
	AAS Program Credits/Contact Hours:	**61.18**	**80.96**

For assistance with course selection, sequencing and arranging your schedule, please consult with your advisor.

WELDING & FABRICATING

Certificate of Completion (CWAF3)

Minimum Credits: 28

Contact Hours: 41.5-45.5

Introduction

Kirtland's Certificate of Completion—Welding and Fabricating—is designed to provide specialized instruction that is necessary for entry and success in the welding fabricating industry. The curriculum is based upon solid theory and hand-on intensive technical skills. The major core curriculum is based upon current manufacturing practices and use of state-of-the-art technology.

OCCUPATIONAL REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
WLD-10400	Material Science	3	4
WLD-10500	Welding Fabrication Level 1	4	6
WLD-11000	Welding Fundamentals	4	6
WLD-11100 *or* WLD-11101 *and* WLD-11102 *and* WLD-11103 *and* WLD-11104 *and* WLD-11105	GMAW and Advanced SMAW Welding *(if previously completed)* *or* GMAW, FCAW & SMAW X-Block *and* GMAW, FCAW & SMAW Horizontal *and* GMAW, FCAW & SMAW-Vertical *and* GMAW, FCAW & SMAW-Overhead *and* WPQR Test-SMAW	4-5	6-7.5
WLD-11200 *or* WLD-11201 *and* WLD-11202 *and* WLD-11203 *and* WLD-11204 *and* WLD-11205	Advanced GMAW and Basic GTAW Welding *(if previously completed)* *or* GMAW-Constant Voltage *and* GMAW-Spray *and* GMAW-Pulse *and* GMAW-Aluminum *and* WPQR Test-GMAW	4-5	6-7.5
WLD-11400	Fabrication Blueprint Reading	1	1
WLD-21200 *or* WLD-21201 *and* WLD-21202 *and* WLD-21203 *and* WLD-21204 *and* WLD-21205	Advanced GTAW Welding *(if previously completed)* *or* GTAW-Flat *and* GTAW-Horizontal *and* GTAW-Vertical *and* GTAW-Overhead *and* WPQR Test-GTAW	4-5	6-7.5
WLD-21500	Welding Fabrication Level 2	4	6
	Occupational Credits/Contact Hours:	**28-31**	**41.5-45.5**

Suggested sequencing of courses—Fall start:

Semester 1 (Fall Semester)—12 credits	**Semester 2 (Winter Semester)—12 credits**	**Semester 3 (Summer Semester)—7 credits**
WLD-10400—Material Science WLD-10500—Welding Fabrication Level I WLD-11000—Welding Fundamentals WKD-11400—Fabrication Blueprint Reading	Modules—WLD-11101, WLD-11102 & WLD- 11103, WLD-11104, WLD-11105, WLD-11201, WLD-11202, WLD-11203, WLD-11204, WLD-11205, WLD-21201 & WLD-21202	Modules—WLD-21203, WLD-21204, WLD-21205 WLD-21500—Welding Fabrication Level II

Suggested sequencing of courses—Winter start:

Semester 1 (Winter Semester)—11 credits	**Semester 2 (Summer Semester)—8 credits**	**Semester 3—(Fall Semester)—12 credits**
WLD-10400—Material Science WLD-10500—Welding Fabrication Level I WLD-11000—Welding Fundamentals	Modules-- WLD-11101, WLD-11102, WLD-11103 & WLD-11104, WLD-11005, WLD-11201, WLD-11202 & WLD-11203	Modules—WLD-11204, 11205, WLD-21201, 21202, 21203, 21204 & 21205 WLD-11400—Fabrication Blueprint Reading WLD-21500—Welding Fabrication Level II

WELDING & FABRICATING TECHNOLOGY

Minimum Credits: 60

Associate in Applied Science (DWAF3)

Contact Hours: 82-88.5

Introduction: Kirtland's Associate in Applied Science—Welding and Fabricating—is designed to provide specialized instruction that is necessary for entry and success in the welding fabricating industry. The curriculum is based upon solid theory and hands-on intensive technical skills. The major core curriculum is based upon current manufacturing practices and use of state-of-the-"arc" technology.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
ENG-10303 or ENG-11800	English Composition I or Intro to Technical & Professional Writing	3	3
MTH-12000 *or* higher*	Intermediate Algebra *or higher* **excluding Statistics (MTH-20600)*	3-4	3-4
Select any physics or chemistry course with a lab.			
		4-5	5-7
Select any speech course.			
		3	3
	General Education Credits/Contact Hours:	**13-15**	**15-17**
OCCUPATIONAL REQUIREMENTS			
EDT-11000	Detailing with AutoCAD	3	4
WLD-10400	Material Science	3	4
WLD-10500	Welding Fabrication Level 1	4	6
WLD-11000	Welding Fundamentals	4	6
WLD-11100 *or* WLD-11101 *and* WLD-11102 *and* WLD-11103 *and* WLD-11104 *and* WLD-11105	GMAW and Advanced SMAW Welding *(if previously completed)* *or* GMAW, FCAW & SMAW X-Block *and* GMAW, FCAW & SMAW Horizontal *and* GMAW, FCAW & SMAW-Vertical *and* GMAW, FCAW & SMAW-Overhead *and* WPQR Test-SMAW	4-5	6-7.5
WLD-11200 *or* WLD-11201 *and* WLD-11202 *and* WLD-11203 *and* WLD-11204 *and* WLD-11205	Advanced GMAW and Basic GTAW Welding *(if previously completed)* *or* GMAW-Constant Voltage *and* GMAW-Spray *and* GMAW-Pulse *and* GMAW-Aluminum *and* WPQR Test-GMAW	4-5	6-7.5
WLD-11300	Non-Destructive Testing	3	4
WLD-11400	Fabrication Blueprint Reading	1	1
WLD-21100	Intro to Robotics	2	3
WLD-21200 *or* WLD-21201 *and* WLD-21202 *and* WLD-21203 *and* WLD-21204 *and* WLD-21205	Advanced GTAW Welding *(if previously completed)* *or* GTAW-Flat *and* GTAW-Horizontal *and* GTAW-Vertical *and* GTAW-Overhead *and* WPQR Test-GTAW	4-5	6-7.5
WLD-21300 *or* WLD-21301 *and* WLD-21302 *and* WLD-21303 *and* WLD-21304	Pipe Welding *(if previously completed)* *or* Flat & Horizontal-Pipe Welding *and* 5G-Up-Pipe Welding *and* 5G-Down-Pipe Welding *and* 6G-Up-Pipe Welding	4	6
WLD-21400	Welder Qualification Testing	4	6
WLD-21500	Welding Fabrication Level 2	4	6
WLD-29900	Welding Internship	3	3
	Occupational Credits/Contact Hours:	**50**	**67-71.5**
	AAS Program Credits/Contact Hours:	**60**	**82-88.5**

Suggested sequencing of courses may be found on the following page…

Suggested sequencing of courses—Fall start:		
Year 1 (Fall Semester)—Minimum 9 credits WLD-10500—Welding Fabrication Level 1 WLD-11000—Welding Fundamentals WLD-11400—Fabrication Blueprint Reading General Education Course(s)	**Year 1 (Winter Semester)—Minimum 10 credits** WLD-10400—Material Science Modules—WLD-11101, 11102, 11103, 11104 & 11105 WLD-11201 & 11202 General Education course(s)	**Year 1 (Summer Semester)—8 credits** Modules—WLD-11203, 11204, 11205, 21201, 21202, 21203, 21204 & 21205
Year 2 (Fall Semester)—Minimum 11 credits EDT-11000—Detailing w/AutoCAD Modules—WLD-21301, 21302, 21303 & 21304 WLD-21500—Welding Fabrication Level 2 General Education course(s)	**Year 2 (Winter Semester)—Minimum 9 credits** WLD-11300—Non-Destructive Testing WLD-21100—Intro to Robotics WLD-21400—Welding Qualification Testing General Education course(s)	**Year 2 (Summer Semester)—Minimum 3 Credits** WLD-29900—Welding Internship General Education course(s)

Suggested sequencing of courses—*Winter* start:		
Year 1 (Winter Semester)—Minimum 8 credits WLD-10500—Welding Fabrication Level 1 WLD-11000—Welding Fundamentals General Education course(s)	**Year 1 (Summer Semester)—Minimum 6 credits** Modules—WLD-11101, 11102, 11103, 11104, 11105 & 11201	**Year 1 (Fall Semester)—Minimum 9 credits** WLD-10400—Material Science Modules—WLD-11202, 11203, 11204, 11205 & 21201 WLD-11400—Fabrication Blueprint Reading General Education course(s)
Year 2 (Winter Semester)—Minimum 7 credits WLD-11300—Non-Destructive Testing Modules—WLD-21202, 21203, 21204 & 21205 General Education course(s)	**Year 2 (Summer Semester)—Minimum 7 credits** Modules—WLD-21301, 21302, 21303 & 21304 WLD-29900—Welding Internship	**Year 2 (Fall Semester)—Minimum 11 credits** EDT-11000—Detailing w/AutoCAD WLD-21400—Welding Qualification Testing WLD-21500—Welding Fabrication Level 2 General Education course(s)

OFFICE INFORMATION SYSTEMS

Certificates (CC)

- *Medical Billing and Coding*
- *Medical Clerk*

Associate in Applied Science (AAS)

- *Administrative Assistant*
- *Health Information Technology—Moved to Health Sciences*
- *Medical Secretary*

Partnership Programs

- *Davenport University*
- *Ferris State University*
- *Franklin University*

See information on our partnership programs on the web at http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

MEDICAL BILLING AND CODING

Certificate of Completion (CMBC0)

Minimum Credits: 36
Contact Hours: 37

Introduction
The Medical Billing and Coding program provides the career education necessary to be proficient in completing insurance claims. Students learn billing and collection techniques and become proficient in assigning ICD-10-CM and CPT codes.

Notes

- In order to graduate, students must have a program GPA of 2.3 or better.
- All HIT and OIS courses require a minimum grade of B- (2.7) to progress in the program.

OCCUPATIONAL REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
ALH-10101	Medical Terminology	2	2
ALH-10801	Pathology with Pharmacology	3	3
ALH-11300	Medical Ethics & Law	3	3
BIO-10700	Essentials of Anatomy & Physiology	4	5
CIS-10500	Introduction to Computers	3	3
ENG-10303	English Composition I	3	3
HIT-10600	Intro to Health Information Management	3	3
HIT-21300	ICD-10-CM Coding	3	3
HIT-21600	CPT Coding	3	3
HIT-23300	Revenue Cycle and Reimbursement	3	3
HIT-29905	Internship—Medical Billing & Coding*	3	3
OIS-18200 *or* OIS-10400	Word Processing I *or* Keyboarding I	3	3
Minimum Program Credits/Contact Hours:		**36**	**37**

Prerequisite for Internship: Completion of all courses required for the program, consent of advisor, and a program GPA of 2.3 or better.

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 1 (Winter Semester) 15 credits**	**Year 1 (Summer Semester) 6 credits**
ALH-10101—Medical Terminology	ALH-10801—Pathology with Pharmacology	ALH-11300—Medical Ethics & Law
BIO-10700—Essentials of A & P	CIS-10500—Intro to Computers	HIT-29905—Internship—MB&C
ENG-10303—English Composition I	HIT-10600—Intro to Health Info Management	
OIS-18200—Word Processing I	HIT-21600—CPT Coding	
or OIS-10400—Keyboarding I	HIT-23300—Revenue Cycle/Reimbursement	
HIT-21300—ICD-10-CM Coding		

For assistance with course selection, sequencing and arranging your schedule, please consult with your advisor.

HEALTH INFORMATION TECHNOLOGY

Associate in Applied Science (DHIT0)

Minimum Credits: 62
Contact Hours: 64-65

NOTE: The Health Information Technology program has moved to the Health Sciences Division. Please refer to page 108 of the program pages section of this catalog.

MEDICAL CLERK

Certificate of Completion (CMOA1)

Minimum Credits: 32

Contact Hours: 32

Introduction

The Medical Clerk program is designed to train students for employment as a medical clerk. The program emphasizes development of proficiency in administrative medical office and hospital unit skills including preparation of correspondence, transcription of medical dictation, billing, insurance, receptionist duties, ethics and law, and medical office procedures.

Notes

- All OIS courses require a minimum grade of B- (2.7) to progress in the program
- In order to graduate, students must have a program GPA of 2.3 or better.
- All courses in this program may apply to the Associate Degree in Office Information Systems. 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.

OCCUPATIONAL REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
ALH-10101	Medical Terminology	2	2
ALH-11300	Medical Ethics & Law	3	3
CIS-10500	Introduction to Computers	3	3
ENG-10303	English Composition I	3	3
OIS-10600	Intro to Health Information Management	3	3
OIS-10700	Medical Office Transcription	3	3
OIS-18000	Office Billing	3	3
OIS-18200 *or* OIS-11400	Word Processing I *or* Keyboarding II	3	3
OIS-20500	Records Management	3	3
OIS-21100	Healthcare Management & Supervision	3	3
OIS-29904	Internship—Medical Clerk*	3	3
	Occupational Credits/Contact Hours:	**32**	**32**

Prerequisite for Internship: Completion of all courses required for the program, consent of advisor, and a program GPA of 2.3 or better.

Suggested sequencing of courses:

Year 1 (Fall Semester) 14 credits	**Year 1 (Winter Semester) 12 credits**	**Year 1 (Summer Semester) 3 credits**
ALH-10101—Medical Terminology	ALH-11300—Medical Ethics & Law	OIS-29904—Internship—Medical Clerk
ENG-10303—English Composition I	CIS-10500—Intro to Computers	
OIS-10600—Intro to Health Information Management	OIS-10700—Medical Office Transcription	
OIS-18000—Office Billing	OIS-18200—Word Processing I	
OIS-20500—Records Management	*or* OIS-11400—Keyboarding II	
	OIS-21100—Healthcare Management & Supervision	

For assistance with course selection, sequencing and arranging your schedule, please consult with your advisor.

ADMINISTRATIVE ASSISTANT

Associate in Applied Science (DADA0)

Minimum Credits: 61

Contact Hours: 62-67

Introduction

The office careers program at Kirtland includes intensive training in basic and advanced secretarial and clerical courses stressing the use of current office procedures and practices assisted by modern equipment and facilities. A variety of courses are offered to meet the needs of beginning and advanced students. This program is designed to enable graduates to obtain positions of responsibility in a variety of office situations. Students may substitute advanced courses for beginning courses with prior advisor approval.

Notes

- All OIS courses require a minimum grade of B- (2.7) to progress in the program
- In order to graduate, students must have a program GPA of 2.3 or better.

GENERAL EDUCATION			
Course	**Title**	**Credits**	**Contact Hours**
ENG-10303	English Composition I	3	3
Select Intermediate Algebra (MTH-12000) or higher.			
		3-5	4-7
Select a humanities course. Current choices at KCC include any ART, ENG-21400 or higher, any HIS, HUM-20500, any MUS, any PHL and THE-12000.			
		3-4	3-4
Select a social science course from ECO, GEO, POL, PSY or SOC.			
		3-4	3-4
Select any speech course.			
		3	3
	General Education Credits/Contacts:	**15-19**	**16-21**
OCCUPATIONAL REQUIREMENTS			
ACC-12500	Computer Accounting with QuickBooks	4	4
BUS-10100	Introduction to Business	3	3
BUS-21500	Business Law	3	3
CIS-10500	Introduction to Computers	3	3
CIS-17001	Microsoft Office	3	3
CIS-22500	Spreadsheets	3	3
OIS-10500	Business Correspondence	3	3
OIS-11201	Business Calculations	3	3
OIS-11400	Keyboarding II	3	3
OIS-18200	Word Processing I	3	3
OIS-20500	Records Management	3	3
OIS-21000	Office Procedures	3	3
OIS-21500	Desktop Publishing for the Office	3	3
OIS-22200	Word Processing II	3	3
OIS-29901	Internship—Administrative Assistant*	3	3
	Occupational Credits/Contact Hours:	**46**	**46**
	Minimum Program Credits/Contact Hours:	**61**	**62-67**

Prerequisite for Internship: Completion of all courses required for the program, consent of advisor, and a program GPA of 2.3 or better.

Suggested sequencing of courses:

Year 1 (Fall Semester) 15 credits	**Year 1 (Winter Semester) 16 credits**	
BUS-10100—Intro to Business	CIS-22500—Spreadsheets	
CIS-10500—Intro to Computers	OIS-10500—Business Correspondence	
ENG-10303—English Composition I	OIS-11400—Keyboarding II	
OIS-18200—Word Processing I	OIS-22200—Word Processing II	
OIS-20500—Records Management	Math or Science course	
Year 2 (Fall Semester) 13-14 credits	**Year 2 (Winter Semester) 12-13 credits**	**Year 2 (Summer Semester) 3 credits**
BUS-21500—Business Law	ACC-12500—Computerized Accounting w/QuickBooks	OIS-29901—Internship-Administrative Assistant*
CIS-17001—Microsoft Office	OIS-21000—Office Procedures	
OIS-11201—Business Calculations	Humanities course	
OIS-21500—Desktop Publishing for the Office	Speech course	
Social science course		

For assistance with course selection, sequencing and arranging your schedule, please consult with your advisor.

MEDICAL SECRETARY

Associate in Applied Science (DMES1)

Minimum Credits: 63

Contact Hours: 64-66

Introduction

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.

Notes

- All OIS courses require a minimum grade of B- (2.7) to progress in the program
- In order to graduate, students must have a program GPA of 2.3 or better.

GENERAL EDUCATION			
Course	**Title**	**Credits**	**Contact Hours**
BIO-10700	Essentials of Anatomy & Physiology	4	5
ENG-10303	English Composition I	3	3
Select a humanities course. Current choices at KCC include any ART, ENG-21400 or higher, any HIS, HUM-20500, any MUS, any PHL and THE-12000.			
		3-4	3-4
Select a social science course from ECO, GEO, POL, PSY or SOC.			
		3-4	3-4
Select any speech course:			
		3	3
	General Education Credits/Contacts:	**16-18**	**17-19**
OCCUPATIONAL REQUIREMENTS			
ALH-10101	Medical Terminology	2	2
ALH-10801	Pathology with Pharmacology	3	3
ALH-11300	Medical Ethics & Law	3	3
CIS-10500	Introduction to Computers	3	3
CIS-22500	Spreadsheets	3	3
OIS-10500	Business Correspondence	3	3
OIS-10600	Intro to Health Information Management	3	3
OIS-10700	Medical Office Transcription	3	3
OIS-11201	Business Calculations	3	3
OIS-11400 or OIS-22200	Keyboarding II or Word Processing II	3	3
OIS-18000	Office Billing	3	3
OIS-18200	Word Processing I	3	3
OIS-20000	Intro to Electronic Health Records	3	3
OIS-20500	Records Management	3	3
OIS-21100	Healthcare Management & Supervision	3	3
OIS-29903	Internship—Medical Secretary*	3	3
	Occupational Credits/Contact Hours:	**47**	**47**
	Minimum Program Credits/Contact Hours:	**63**	**64-66**

Prerequisite for Internship: Completion of all courses required for the program, consent of advisor, and a program GPA of 2.3 or better.

Suggested sequencing of courses:

Year 1 (Fall Semester) 14 credits	**Year 1 (Winter Semester) 16 credits**
ALH-10101—Medical Terminology	BIO-10700—Essentials of A & P
CIS-10500—Intro to Computers	CIS-22500—Spreadsheets
ENG-10303—English Composition I	OIS-10600—Intro/Health Information Management
OIS-18200—Word Processing I	OIS-11400—Keyboarding II
OIS-20500—Records Management	*or* OIS-22200—Word Processing II
	OIS-18000—Office Billing

Year 2 (Fall Semester) 15 credits	**Year 2 (Winter Semester) 14-16 credits**	**Year 2 (Summer Semester) 3 credits**
ALH-10801—Pathology with Pharmacology	OIS-10500—Business Correspondence	OIS-29903—Internship—Medical Secretary
ALH-11300—Medical Ethics & Law	OIS-21100—Healthcare Management & Supervision	
OIS-10700—Medical Office Transcription	Humanities course	
OIS-11201—Business Calculations	Social science course	
OIS-20000—Intro to Electronic Health Records	Speech course	

Careers in PUBLIC SAFETY

Certificate (CC)

- *Military Police Academy*

Advanced Certificate (CC)

- *Police Academy*

Associate (AAS)

- *Corrections Administration-Jail Administration*
- *Criminal Justice-Pre-Service*
- *Emergency Medical Services*

Partnership Programs

- *Alpena Community College*
- *Mid Michigan Community College-*
- *North Central Michigan College*
- *Davenport University*
- *Franklin University*
- *Lake Superior State University*

Additional Training Opportunities

- *Firefighter I & II*

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

Students must plan additional time to complete their program requirements if placement results require them to begin with transitional courses.

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

CORRECTIONS ADMINISTRATION – JAIL ADMINISTRATION

Minimum Credits: 62

Associate in Applied Science (DCRA1)

Contact Hours: 65

Introduction

The Corrections Administration - Jail Administration program is concerned with all segments of the criminal justice system. The major emphasis is placed on a 160-hour Local Corrections Academy, dealing with booking, intake and release, suicide awareness, report writing, prison behavior, correctional law, custody and security, PPCT defensive tactics, interpersonal communication, fire and safety, cultural diversity, sexual harassment, ethics, and stress management. Graduates are prepared for jobs within the local jail systems. 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.

Admission Requirements – Corrections Administration-Jail Administration: Applicants must be granted regular admission to Kirtland and meet the following requirements to be considered for admission to the Corrections Administration-Jail Administration program:

- COMPASS testing to determine competency in math, English and reading.
- Computer skills are essential to program success (Internet, emails, word processing). Students must possess a basic knowledge of computer skills.
- Students requesting admission to the program must submit a "Request for Admission" form (available online at Careers in Public Safety website) and turn it into the Careers in Public Safety office during the first semester of classes. Acceptance letters will be mailed to students who are accepted into the program.

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 Careers in Public Safety Code of Conduct, which includes mandatory dress code; 6) submit proof of a physical examination, if required.

OCCUPATIONAL REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CJS-10000	Introduction to Criminal Justice	3	3
CJS-10200	Physical Training	3	4
CJS-10900	Introduction to Corrections	3	3
CJS-11100	Legal Issues in Corrections	3	3
CJS-11200	Client Growth & Development	3	3
CJS-17000	Correctional Institutions & Facilities	3	3
CJS-17200	Client Relations in Corrections	3	3
CJS-24000	Criminology	3	3
CJS-24500	Social Deviant Behavior	3	3
CJS-26007	Corrections Academy	10	10
CJS-29900	Criminal Justice Internship (Maximum of 9 credits)	3	3
	Total Occupational Credits/Contact Hours:	**40**	**41**
GENERAL EDUCATION			
CHE-10000	Chemical Science	4	5
ENG-10303	English Composition I	3	3
MTH-12000	Intermediate Algebra or higher	3-4	4
PSY-10100	Introduction to Psychology	3	3
PSY-20200	Abnormal Psychology	3	3
SOC-10100	Introduction to Sociology	3	3
SPE-11400	Intro to Interpersonal/Public Communication	3	3
	Total General Education Credits/Contact Hours:	**22-23**	**24**

Additional Notes:

- Conviction for some criminal offenses and any drug or substance related offense will render a candidate ineligible for entry into the program.
- Felony convictions and misdemeanor convictions involving domestic violence or drug/alcohol related offenses will prohibit admission to the program.
- There are abilities that a student in this program must have. A list of these abilities can be obtained from the Careers in Public Safety office. Based on history and physical examination findings, lacking one or more of these required abilities may prevent program admission.
- Candidates in this program must maintain a "C" or better in all Criminal Justice (CJS) courses.
- Successfully complete all prerequisite and general education courses with a "C" or better prior to entry into the Corrections Academy.

Continued on the following page…

Suggested sequencing of courses:

Year 1 (Fall Semester) 12 credits CJS-10000 – Intro to Criminal Justice CJS-10900 – Intro to Corrections ENG-10303 – English Composition I PSY-10100 – Introduction to Psychology	**Year 1 (Winter Semester) 12 credits** CJS-11200 – Client Growth & Development CJS-17000 – Correctional Institutions/Facilities SOC-10100 – Introduction to Sociology SPE-11400 – Interpersonal & Public Communication	**Year 1 (Summer Semester option) 6 credits** CJS-29900 – Criminal Justice Internship PSY-20200 – Abnormal Psychology
Year 2 (Fall Semester) 11 credits CHE-10000 – Chemical Science CJS-11100 – Legal Issues in Corrections MTH-12000 – Intermediate Algebra	**Year 2 (Winter Semester) 12 credits** CJS-10200 – Physical Training I CJS-17200 – Client Relations in Corrections CJS-24000 – Criminology CJS-24500 – Social Deviant Behavior	**Year 2 (Summer Semester option) 6 credits** CJS-29900 – Criminal Justice Internship PSY-20200 – Abnormal Psychology
Year 3 (Fall Semester) 10 credits CJS-26007 – Corrections Academy		

MILITARY POLICE ACADEMY
Special Certificate (SMPA0)

Minimum Credits: 7.5
Contact Hours: 17.5

Introduction
This is a 7-week, Michigan Commission on Law Enforcement Standards (MCOLES) approved regional police academy. This course is specifically designed to complete training for military personnel leaving the service. Students will complete Michigan Commission on Law Enforcement Standards (MCOLES) and successfully pass a mastery exam administered by MCOLES. It will cover investigation, patrol procedures, detention and prosecution, police skills, traffic, tactical operation, EVO (emergency vehicle operation), defensive tactics/forced continuum, firearms and evidence collection. Prerequisite: must meet MCOLES Military Police requirements.

Additional Notes:
- Conviction for some criminal offenses and any drug or substance related offense will render a candidate ineligible for entry into the Police Academy.
- Felony convictions and misdemeanor convictions involving domestic violence or drug/alcohol related offenses will prohibit admission to the program.
- There are abilities and requirements that a student must have/meet. A list of these abilities can be obtained from the MCOLES website. Based on history and physical examination findings, lacking one or more of these required abilities may prevent program admission.
- A "C" or better is required to pass this course.

Course	Title	Credits	Contact Hours
CJS-26601	Military Police Academy	7.5	17.5

POLICE ACADEMY
Advanced Certificate (CPAC0)

Minimum Credits: 21
Contact Hours: 42

The Academy is a 17-week, 40-hour per week, **MCOLES** (Michigan Commission on Law Enforcement Standards) certified program that covers the following: **Investigation -** Introduction to investigation, substantive criminal law, criminal procedure, investigation, court functions and civil law, crime scene process, special investigation, and investigation of domestic violence; **Patrol Procedures -** Patrol operations, interpersonal relations and conflict mediation, patrol techniques, report writing, and juveniles; **Detention and Prosecution** - Receiving and booking process, case prosecution, and civil process; **Police Skills** - First aid, firearms, police physical skills, and emergency vehicle operation; **Traffic** - Motor vehicle law, vehicle stops, traffic control and enforcement, operating under the influence of liquor, and motor vehicle traffic crash investigation; **Special Operations** - Emergency preparedness/disaster control, civil disorders, and tactical operations.

Additional Notes:
- Candidates for this program must possess an Associate Degree or higher or meet the MCOLES Military Police entrance requirements.
- Conviction for some criminal offenses and any drug or substance related offense will render a candidate ineligible for entry into the Police Academy.
- Felony convictions and misdemeanor convictions involving domestic violence or drug/alcohol related offenses will prohibit admission to the program.
- There are abilities that a student must have. A list of these abilities can be obtained from the MCOLES website. Based on history and physical examination findings, lacking one or more of these required abilities may prevent program admission.
- Candidates in this program must maintain a GPA of 2.0 or better; a "C" or better is required to pass this course.

Course	Title	Credits	Contact Hours
CJS-26600	Police Academy	21	42

CRIMINAL JUSTICE PRE-SERVICE

Associate in Applied Science (DCJP0)

Minimum Credits: 61
Contact Hours: 85

Introduction
Criminal Justice Pre-Service is a program leading to certification by the Michigan Commission on Law Enforcement Standards (MCOLES). Upon completion of Police Academy and successfully passing a mastery exam administered by MCOLES, students will be eligible for employment as law enforcement officers in most police agencies in Michigan and some other states. 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-Generalist degree.

Admission Requirements – Criminal Justice Pre-Service: Applicants must be granted regular admission to Kirtland and meet the following requirement to be considered for admission to the Criminal Justice Pre-Service program:

- COMPASS testing to determine competency in math, English and reading.
- Computer skills are essential to program success (Internet, emails, word processing). Students must possess a basic knowledge of computer skills.
- Students requesting admission to the program must submit a "Request for Admission" form (available online at Careers in Public Safety website) and turn it into the Careers in Public Safety office during the student's first semester. Acceptance letters will be mailed to those students accepted into the program.

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 Careers in Public Safety 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.

OCCUPATIONAL REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CJS-10000	Introduction to Criminal Justice	3	3
CJS-10200	Physical Training I	3	4
CJS-21100	Narcotics Investigation	3	3
CJS-24000	Criminology	3	3
CJS-24500	Social Deviant Behavior	3	3
CJS-26600	Police Academy	21	42
CJS-29900	Criminal Justice Internship	3	3
	Total Occupational Credits/Contact Hours:	**39**	**61**
GENERAL EDUCATION			
CHE-10000	Chemical Science	4	5
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
MTH-12000	Intermediate Algebra or higher	3-4	4
PSY-10100	Introduction to Psychology	3	3
PSY-20200	Abnormal Psychology	3	3
SOC-10100	Introduction to Sociology	3	3
	Total General Education Credits/Contact Hours:	**22-23**	**24**

Suggested sequencing of courses:

Year 1 (Fall Semester) 12 credits CJS-10000 – Intro to Criminal Justice CJS-21100 – Narcotics Investigation ENG-10303 – English Composition I PSY-10100 – Intro to Psychology	**Year 1 (Winter Semester) 12 credits** CJS-24000 – Criminology CJS-24500 – Social Deviant Behavior ENG-10403 – English Composition II PSY-20200 – Abnormal Psychology	**Year 1 (Summer Semester) 3 credits** CJS-29900 – Criminal Justice Internship
Year 2 (Fall Semester) 14 credits CHE-10000 – Chemical Science CJS-10200 – Physical Training I MTH-12000 – Intermediate Algebra SOC-10100 – Intro to Sociology	**Year 2 (Winter Semester) 21 credits** CJS-26600 – Police Academy	

For assistance with course selection, sequencing and arranging your schedule, please consult with your advisor.

EMERGENCY MEDICAL SERVICES

Associate in Applied Science (DEMS1)

Minimum Credits: 60
Contact Hours: 81.65

Introduction

This Associate in Applied Science degree prepares the individual for a career in Emergency Medical Services. Imbedded in this curriculum are Basic EMT and Paramedic courses as well as general education requirements. EMS courses are approved by the Michigan Department of Community Health. The entire Emergency Medical Services program is in the process of being accredited by the Commission on Accreditation of Allied Health Education Programs in conjunction with the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professionals. Following successful completion of this program, students are eligible to take the state licensure examination for EMT and Paramedic. Not all courses in this program transfer to all colleges. Students planning to transfer should see an advisor before enrolling in any course.

Requirements

- Must possess a high school diploma or GED
- Conviction for some criminal offenses may render a candidate ineligible to take the national certification examination.
- Must have a felony-free criminal record.
- Students are required to complete all required courses with a "C" or better.
- A student must be at least 18 years of age.
- Must have a Michigan driver's license
- Hepatitis vaccination and current TB test are required
- Students must sign and abide by the Careers in Public Safety Code of Conduct, which includes a mandatory dress code.

PREREQUISITE REQUIREMENTS			
Students must successfully complete or otherwise demonstrate competency in each of the following courses before being admitted to the Emergency Medical Services program.			
Course	**Title**	**Credits**	**Contact Hours**
MTH-07300/07400	Basic Algebra & Algebra Lab *or competency*	0-5	0-5
ENG-09000	College Writing Skills *or competency*	0-3	0-3
ENG-09601	College Reading Skills *or competency*	0-3	0-3
EMS COURSE REQUIREMENTS			
EMS-10000	Basic Emergency Medical Technician (EMT)	10	10
EMS-10100	Clinical I	1	3
EMS-20000	Intro to Emergency Medicine	4	4
EMS-20100	Pharmacology	2.5	3.5
EMS-20200	Patient Assessment	2	2.75
EMS-20300	Medical/Surgical	5	6
EMS-20400	Special Considerations	2.5	3.2
EMS-20500	Clinical II	3	9.2
EMS-20600	Trauma	4.25	6.75
EMS-20700	Clinical III	2	6
EMS-20800	EMS Capstone	5.5	7
EMS-29900	Internship	5.25	5.25
	EMS Credits/Contact Hours:	**47**	**66.65**
GENERAL EDUCATION REQUIREMENTS			
BIO-23500	Anatomy & Physiology I	4	5
ENG-10303	English Composition I	3	3
MTH-12000	Intermediate Algebra *or higher*	3-4	4
PSY-10100	Introduction to Psychology	3	3
	General Education Credits/Contact Hours:	**13-14**	**15**
	Program Credits/Contact Hours:	**60**	**81.65**

EMS Suggested Sequencing of Courses:

Year 1 (Fall Semester)—11 credits EMS-10000—Basic EMT EMS-10100—Clinical I General Education course(s)*	**Year 1 (Winter Semester)—14 credits** BIO-23500—Anatomy & Physiology I ENG-10303—English Composition I MTH-12000—Intermediate Algebra PSY-10100—Introduction to Psychology	
Year 2 (Fall Semester)—8.5 credits EMS-20000—Intro to Emergency Medicine EMS-20100—Pharmacology EMS-20200—Patient Assessment General Education course(s)*	**Year 2 (Winter Semester)—10.5 credits** EMS-20300—Medical/Surgical EMS-20400—Special Considerations EMS-20500—Clinical II General Education course(s)*	**Year 2 (Summer Semester)—6.25 cr** EMS-20600—Trauma EMS-20700—Clinical III
Year 3 (Fall Semester)—10.75 credits EMS-20800—EMS Capstone EMS-29900—Externship General Education course(s)*	***If not taken Year 1 Winter Semester.**	

ADDITIONAL TRAINING OPPORTUNITIES OFFERED THROUGH THE CAREERS IN PUBLIC SAFETY DEPARTMENT

Firefighter I & II

Introduction

The Firefighter I & II is a course leading to certification by the Michigan Office of Firefighter Training (OFFT). Upon completion of Firefighter I & II and successfully passing a written and practical mastery exam administered by OFFT, students will be eligible for employment as certified firefighter in most fire department agencies in Michigan. Students have the opportunity to plan to transfer to a four-year college or university, and credits may also be used toward the Technology Management degree or the Associate in Arts degree.

Admission Requirements: Applicants must be granted regular admission to Kirtland and meet the following requirements to be considered for enrollment in the Firefighter I & II course:

- COMPASS testing to determine competency in math, English and reading.
- Students desiring to take the course must meet with the academic advisor for the Careers in Public Safety programs to complete the required application packet.

Prerequisites

Applicants admitted to the Firefighter I & II course must be qualified according to the rules and regulations of OFFT and follow their policies and procedures. This course has special entrance requirements: 1) be 18 years of age or older; 2) possess a valid Michigan motor vehicle operator's or chauffeur's license; 3) have no felony convictions; 4) have a high school diploma or GED; 5) interview by appointment with an advisor before enrolling in the course; 6) provide personal background information and sign a release form to facilitate possible background investigation (information and/or investigation may determine eligibility to enter the course); 7) sign and abide by the Careers in Public Safety Code of Conduct, which includes a mandatory dress code; and 8) have a physical examination if required).

Course	Title	Credits	Contact Hours
FFT-20700	Firefighter I & II	14	14

TECHNOLOGY MANAGEMENT

Associate in Applied Science (AAS)

- *Technology Management*

Partnership Programs

- *Davenport University*
- *Franklin University*

See information on our partnership programs on the web at http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

TECHNOLOGY MANAGEMENT

Associate in Applied Science (DTEC0)

Minimum Credits: 60

Contact Hours: 60 or more

Introduction

The Technology Management degree is designed for students who want to apply their prior and current technical training and/or education toward the completion of an associate degree. This degree is an appealing choice for students who are former military, current military, or non-completers of a technical education program.

GENERAL EDUCATION			
Course	**Title**	**Credits**	**Contact Hours**
ENG-10303	English Composition I	3	3
Select a humanities course. Current KCC courses include any ART, ENG-21400 or higher, any HIS, HUM-20500, any MUS, any PHL and THE-12000.			
		3-4	3-4
Select Intermediate Algebra (MTH-12000) or higher or any lab science course.			
		3-4	4-7
Select a social science course from ECO, GEO, POL, PSY or SOC.			
		3-4	3-4
Select any speech course.			
		3	3
	General Education Credits/Contact Hours:	**15-18**	**16-21**
OCCUPATIONAL REQUIREMENTS			
BUS-10100	Introduction to Business	3	3
CIS-10500	Introduction to Computers	3	3
BUS-21000 *or* BUS-24500 *or* Military Credit	Principles of Management *or* Human Resource Management *or* Military Credit for Supervision, Management or Leadership	3	3
	Occupational Credits/Contact Hours:	**9**	**9**
TECHNICAL ELECTIVE REQUIREMENTS			
Twenty-five (25) credits of college courses or military equivalent credit from the following list of career/technical programs must be taken to fulfill this requirement. Students must earn a minimum of eighteen (18) credits from one technical area. The balance of the technical credits may be from other technical areas.			
Primary Technical Area (18 credits minimum)			
Secondary Technical Area (0-7 credits)			
	Technical Credits/Contact Hours:	**Min 25**	**varies**
GENERAL ELECTIVE COURSES			
Choose any 10000-level or higher course until the minimum program requirements are met. A maximum of three credits in Physical Education courses can be applied toward degree requirements.			
	General Elective Credits/Contact Hours:	**9-10**	**9-13**
	AAS Degree Credits/Contact Hours:	**Min 60**	**60 or more**

Technical Electives: *Accounting, Allied Health, Automotive Technology, Aviation, Business, Carpentry, Computer Aided Drafting, Computer Information Systems, Cardiac Sonography, Cosmetology, Criminal Justice, Electrical Technology, Emergency Medical Services, Engineering Design Technologies, Fire Fighter Training, Health Information Technology, Heating/Ventilation/AC/Refrigeration, Hospitality Management, Industrial Maintenance, Machine Tool Technology, Manufacturing Processes Technology, Marketing, Massage Therapy, Mechatronics, Nursing, Office Information Systems, Outdoor Power Engines, Pharmacy Technology, Phlebotomy, Plumbing, Surgical Technology, Vascular Sonography, Welding or other Technical elective transferred to Kirtland as ZZZ.*

TRANSFER DEGREES

Transfer Associate Degrees

- *Associate in Arts*
- *Associate in Business Administration*
- *Associate in Computers*
  - *Computer Information Systems*
  - *Computer Science*
- *Associate in Fine Arts-Studio Arts*
- *Associate in Science*

See information on our partnership programs on the web at http://www.kirtland.edu/transferring-from-kirtland

Foundation

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

☐ Mathematics: _____ ☐ English: _____ ☐ Reading: _____

ASSOCIATE IN ARTS
(DLIB0)

Minimum Credits: 60
Contact Hours: 61-69

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. Specialization tracks for many major are found in the following pages.

Since it is not possible to list all recommendations and requirements for all senior colleges, it is imperative that the student who expects to transfer continues to work closely with an academic advisor at <u>both</u> the senior institution and at Kirtland to plan a successful program.

GENERAL EDUCATION			
Course	**Title**	**Credits**	**Contact Hours**
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
MTH-13000	College Algebra *or higher*	4	4
Select a speech course (see advisor prior to choosing a course).			
		3	3
Select two humanities courses <u>from different disciplines.</u> Current KCC offerings which meet this requirement include ART-10000 and 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 and 12300, any PHL and THE-12000.			
		3	3
		3	3
Select one additional humanities course from any of the humanities disciplines. Current KCC offerings include <u>any</u> ART, ENG-21400 or higher, any HIS, HUM-20500, <u>any</u> MUS, any PHL, and THE-12000.			
		3	3-4
Select three social science courses from at least two different disciplines. Choose from ECO, GEO, POL, PSY or SOC.			
		3	3
		3	3
		3-4	3-4
Select two lab science courses with different subject-designators from AST, BIO, CHE, GEL or PHY.			
		4-5	5-7
		4-5	5-7
	General Education Credits/Contact Hours:	**39-42**	**41-46**
ELECTIVES (18-21 credits)			
	Total Elective Credits/Contact Hours:	**18-21**	**18-21**
	Total Program Credits/Contact Hours:	**60**	**62-64**

Specialized academic tracks based on possible programs of study at a 4-year college follow.

Specialization tracks for Associate in Arts majors

Please work with your advisor to ensure smooth transition to your chosen senior institution.

Criminal Justice Generalist Majors

Required courses—See AA degree for distribution requirements; choose from the recommended courses below to help meet these requirements.

Electives for Criminal Justice Generalist Majors
Highly recommended:
CJS-10000—Intro to Criminal Justice (F)
CJS-10900—Intro to Corrections (F)
CJS-24000—Criminology (W)
CJS-24500—Social Deviant Behavior (W)

Other recommended courses:
CHE-10000—Chemical Science (F)
CIS-10500—Intro to Computers (F,W,S)
CJS-10200—Physical Training (F,W,S)
CJS-11100—Legal Issues in Corrections (F)
CJS-11200—Client Growth & Development (F)
CJS-17000—Correctional Institutions & Facilities (W)
CJS-17200—Client Relations in Corrections (W)
CJS-21100—Narcotics Investigation (F)
CJS-29900—Criminal Justice Internship (F,W,S)
PHL-20100—Intro to Philosophy (F)
PHL-21000—Intro to Ethics (F,W)
POL-10100—Intro to American Government (F,W,S)
PSY-10100—Intro to Psychology (F,W,S)
PSY-20200—Abnormal Psychology (F,W,S)
SOC-10100—Intro to Sociology (F,W)
SOC-23500—Racial, Cultural & Ethnic Diversity (F)

Elementary Education Majors

Do you want to become a major influence in a child's life? Become an elementary school teacher. Teachers shape children's views of the importance of education, while helping to foster the development of a child's mind and spirit in powerful ways that last a lifetime. As a teacher, you'll receive rewards from your students over your career that cannot be measured in dollars and cents.

Required courses—See AA degree for distribution requirements; choose from the recommended courses below to help meet these requirements.

Electives for Elementary Education Majors:
Highly recommended:
EDU-10000—Intro to Teaching (F)
POL-10100—Intro to American Government (F,W,S)

Other recommended courses:
AST-10201/02—Astronomy I Lecture & Lab (F)
BIO-10100—General Biology (F,W)
CIS-10500—Introduction to Computers * (F,W,S)
ECO-20100—Principles of Economics-MACRO (F,S)
ECO-20200—Principles of Economics-MICRO (W)
GEL-10500—Physical Geology (F)
GEO-10000—World Geography (F,W,S)
PSY-10100—Intro to Psychology (F,W,S)
SOC-10100—Introduction to Sociology (F,W)

**If required by the transfer college*

Specialization tracks for Associate in Arts majors

Please work with your advisor to ensure smooth transition to your chosen senior institution.

English Majors

The recommended options may or may not suit the student's particular transfer plans, but are suggested as potentially relevant courses for a student wishing to major in English.

Required courses—See AA degree for distribution requirements; choose from the recommended courses below to help meet these requirements.

Electives for English Majors:
Highly recommended:
ENG-21400—Intro to Literature (W-even years)
ENG-21500—Creative Writing (W)
ENG-22500—Contemporary Literature (S-odd years)
ENG-22800—Mythology (F-odd years)
ENG-23000—American Lit through 1865 (F)
ENG-23100—American Lit after 1865 (W)
ENG-23300—British Lit I (F-even years)
ENG-23400—British Lit II (W-odd years)

Other recommended courses:
CIS-10500—Intro to Computers * (F,W,S)
PHL-20100—Intro to Philosophy (F)
or PHL-21000—Intro to Ethics (F,W)
PSY-10100—Intro to Psychology (F,W,S)
SOC-10100—Intro to Sociology (F,W)

**Recommended for students without strong computer skills.*

History Majors

Studying history provides access to the whole world—not just to the past, but to the present that grew out of the past. Studying history teaches you vital, widely applicable skills—research, analysis, writing, and oral communication. Studying history will help you build a career—anything from business to government to education to the law and beyond.

Required courses—See AA degree for distribution requirements; choose from the recommended courses below to help meet these requirements.

Electives for History Majors:
Highly recommended:
HIS-10500—History of World Societies to 1500 (F)
HIS-10600—History of World Societies since 1500 (W)
HIS-20100—US History to 1865 (F)
HIS-20200—US History since 1865 (W)
HIS-20300—Michigan History (F)
HIS-20400—The American Civil War (W)
POL-10100—Intro to American Government (F,W,S)

Other recommended courses:
ECO-20100—Principles of Economics-MACRO (F,S)
ECO-20200—Principles of Economics-MICRO (W)
GEO-10000—World Geography (F,W,S)
HUM-20500—Individual and Society (F,W)
PHL-20100—Intro to Philosophy (F)
PHL-21000—Intro to Ethics (F,W)
POL-20000—International Relations (F-even years)
POL-20100—Comparative Government (F-odd years)
PSY-10100—Intro to Psychology (F,W,S)
SOC-10100—Intro to Sociology (F,W)

Specialization tracks for Associate in Arts majors

Please work with your advisor to ensure smooth transition to your chosen senior institution.

Political Science Majors

Are you interested in American politics or international relations? Critical issues such as health, the environment, civil rights? Theories concerning the ideal government and how power and resources are allocated in society? Do you want to study these subjects and pursue a career based on your interest? If so, you should consider studying political science. Political science students can gain a versatile set of skills that can be applied in a wide range of exciting careers in federal, state and local governments, law, business, international organizations, nonprofit associations and organizations, campaign management and polling, journalism, K-12 education, electoral politics, research and university and college teaching.

Required courses—See AA degree for distribution requirements; choose from the recommended courses below to help meet these requirements.

Electives for Political Science Majors:
Highly recommended:
HIS-10500—History of World Societies to 1500 (F)
HIS-10600—History of World Societies since 1500 (W)
HIS-20400—The American Civil War (W)
GEO-10000—World Geography (F,W,S)
POL-10100—Intro to American Government (F,W,S)
POL-20000—International Relations (F-even years)
POL-20100—Comparative Government (F-odd years)

Other recommended courses:
ECO-20100—Principles of Economics-MACRO (F,S)
ECO-20200—Principles of Economics-MICRO (W)
HUM-20500—Individual and Society (F,W)
PHL-20100—Intro to Philosophy (F)
PHL-21000—Intro to Ethics (F,W)
PSY-10100—Intro to Psychology (F,W,S)
SOC-10100—Intro to Sociology (F,W)

Psychology Majors

A specialization in psychology is for students who are interested in a Bachelor program in Psychology. Students can then use that degree as a stepping stone toward long-term goals in advanced education, or they can seek out entry-level employment working under the supervision of licensed psychologists. While completing the program, students can gain fundamental knowledge in behavior theories and explore the causes of abnormal and normal thought processes.

Required courses—See AA degree for distribution requirements; choose from the recommended courses below to help meet these requirements.

Electives for Psychology Majors
Highly recommended:
PSY-10100—Intro to Psychology (F,W,S)
PSY-20200—Abnormal Psychology (F,W,S)
PSY-24000—Lifespan Developmental Psych (W)
PSY/SOC-26001—Human Sexuality (F)
SOC/CJS-24000—Criminology (W)
SOC/CJS-24500-- Social Deviant Behavior (W)

Other recommended courses:
ECO-20100—Principles of Economics-MACRO (F,S)
ECO-20200—Principles of Economics-MICRO (W)
GEO-10000—World Geography (F,W,S)
HIS-10500—History of World Societies to 1500 (F)
HIS-10600—History of World Societies since 1500 (W)
HUM-20500—Individual and Society (F,W)
PHL-20100—Intro to Philosophy (F)
PHL-21000—Intro to Ethics (F,W)
POL-10100—Intro to American Government (F,W,S)
SOC-10100—Intro to Sociology (F,W)

Specialization tracks for Associate in Arts majors

Please work with your advisor to ensure smooth transition to your chosen senior institution.

Social Work Majors

Required courses—See AA degree for distribution requirements; choose from the recommended courses below to help meet these requirements.

Electives for Social Work Majors:
Highly recommended:
HIS-20100—US History to 1865 (F)
HIS-20200—US History since 1865 (W)
PHL-21000—Intro to Ethics (F,W)
POL-10100—Intro to American Government (F,W,S)
PSY-10100—Intro to Psychology (F,W,S)
SOC-10100—Intro to Sociology (F,W)

Other recommended courses:
BIO-10100—General Biology (F,W)
BIO-10700—Essentials of Anatomy & Physiology (F,W,S)
CIS-10500—Intro to Computers (F,W,S)
CJS/SOC-24000—Criminology (W)
CJS/SOC-24500—Social Deviant Behavior (W)
ECO-20100—Principles of Economics-MACRO (F,S)
GEO-10000—World Geography (F,W,S)
MTH-20600—Application in Statistics (F,W,S)
PSY-20200—Abnormal Psychology (F,W,S)
SOC-23500—Racial, Cultural & Ethnic Diversity (F)

Sociology Majors

Required courses—See AA degree for distribution requirements; choose from the recommended courses below to help meet these requirements.

Electives for Sociology Majors:
Highly recommended:
CJS/SOC-24000—Criminology (W)
CJS/SOC-24500—Social Deviant Behavior (W)
HIS-20100—US History to 1865 (F)
or HIS-20200—US History since 1865 (W)
PHL-21000—Intro to Ethics (F,W)
POL-10100—Intro to American Government (F,W,S)
PSY-10100—Intro to Psychology (F,W,S)
SOC-10100—Intro to Sociology (F,W)

Other recommended courses:
BIO-10100—General Biology (F,W)
BIO-10700—Essentials of Anatomy & Physiology (F,W,S)
CIS-10500—Intro to Computers (F,W,S)
ECO-20100—Principles of Economics-MACRO (F,S)
GEO-10000—World Geography (F,W,S)
MTH-20600—Application in Statistics (F,W,S)
PSY-20200—Abnormal Psychology (F,W,S)
SOC-23500—Racial, Cultural & Ethnic Diversity (F)

ASSOCIATE IN BUSINESS ADMINISTRATION
(DABA1)

Minimum Credits: 60
Contact Hours: 62-64

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. Some of the majors pursued by students following this program include Accounting, Advertising, Economics, Finance, General Business, Marketing, Personnel/Industrial Relations, and 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. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500 *or* CIS-17000	Introduction to Computers *or* Microsoft Office	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
MTH-13000	College Algebra *or higher*	4	4
MTH-20600	Application in Statistics	4	4
SPE-10500 *or* SPE-11400	Fundamentals of Speech *or* Into to Interpersonal & Public Communication	3	3
Select two humanities courses from different disciplines. Current offerings which meet this requirement include ART-10000 and 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 and 12300, any PHL and THE-12000.			
		3	3
		3	3
Select one course from GEO, POL, PSY or SOC (not ECO).			
		3-4	3-4
Select two lab science courses from different disciplines from AST, BIO, CHE, GEL or PHY.			
		3-5	5-7
If the MTA endorsement is desired, select one additional lab science course from a difference discipline than what was chosen above.			
		3-5	5-7
	General Education Credits/Contact Hours:	**33-40**	**39-44**
BUSINESS CORE CLASSES			
Course	**Title**	**Credits**	**Contact Hours**
ACC-12100	Accounting Principles I	4	4
ACC-12200	Accounting Principles II	4	4
BUS-21000	Principles of Management	3	3
BUS-21500	Business Law	3	3
BUS-24500	Human Resource Management	3	3
ECO-20100	Principles of Economics-MACRO	3	3
ECO-20200	Principles of Economics-MICRO	3	3
MKT-20000	Principles of Marketing	3	3
	Business Core Credits/Contact Hours:	**26**	**26**
	Minimum Program Credits/Contact Hours:	**60**	**65-70**

Suggested sequencing of courses:

Year 1 (Fall Semester)—16-17 credits	**Year 1 (Winter Semester)—16-18 credits**
ACC-12100—Accounting Principles I	ACC-12200—Accounting Principles II
CIS-10500—Introduction to Computers	BUS-21000—Principles of Management
or CIS-17000—Microsoft Office	ENG-10403—English Composition II
ENG-10303—English Composition I	Humanities course
Speech course	Lab science course
Humanities course	
Year 2 (Fall Semester)—16-17 credits	**Year 2 (Winter Semester)—12-13 credits**
BUS-24500—Human Resource Management	BUS-21500—Business Law
ECO-20100—Principles of Econ-MACRO	ECO-20200—Principles of Econ-MICRO
MTH-13000—College Algebra	MTH-20600—Application in Statistics
MKT-20000—Principles of Marketing	Humanities course
Social science course	Lab science course

ASSOCIATE IN COMPUTERS
Computer Science (DACP0)

Minimum Credits: 60
Contact Hours: 64-65

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. Program requirements at four-year institutions vary. It is imperative that students choose the electives that will transfer to their select four-year college and for the program in which they wish to earn a degree. These degrees satisfy the requirements of the Michigan Transfer Agreement (MTA) as defined in the handbook section of the college catalog. **Computer Science** degrees have a math and engineering orientation. Upon completion of a four-year degree, career choices include: computer programming, systems programming, software engineering, systems engineering, database administration, network administration, systems analysis and systems administration. Degrees in this area include the following: Software Engineering, Computer Science, Computer Engineering or Computer Networking. **Note: Transfer colleges may require specific courses, so students should consult with their advisor when making selections.**

GENERAL EDUCATION COURSES REQUIRED FOR EACH DEGREE			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ECO-20100	Principles of Economics-MACRO	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
SPE-10500 *or* SPE-11400	Fundamentals of Speech *or* Intro to Interpersonal & Public Communication	3	3
Select two humanities courses from different disciplines. Current KCC offerings which meet this requirement include: ART-10000 and 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 and 12300, any PHL and THE-12000.			
		3	3
		3	3
Select two lab science courses from different disciplines.			
		3-5	5-7
		3-5	5-7
Select one additional social science course from GEO, POL, PSY or SOC (not ECO).			
		3-4	3-4
	General Education Credits/Contact Hours:	**30-35**	**34-39**
COMPUTER SCIENCE DEGREE REQUIREMENTS			
CIS-22400	UNIX	2	2
CIS-27001	Programming I	3	3
CIS-27101	Programming II	4	4
MTH-22002	Calculus I *or higher*	4	4
APPROVED ELECTIVES (12-17 credits required)			
CIS-11700	Visual Basic	3	3
CIS-21000	Internet & Web Page Development	3	3
CIS-21500	Web Animation & Multimedia	3	3
CIS-23501	Database Design	3	3
CIS-26000	Intro to Computer Networking	3	3
CIS-26400	Client-Side Web Programming w/JavaScript	3	3
CIS-27201	Server-Side Web Programming	3	3
MTH-12000	Intermediate Algebra	4	4
MTH-13000	College Algebra	4	4
MTH-18001	Pre-Calculus	4	4
MTH-20600	Applications in Statistics	4	4
MTH-22102	Calculus II	4	4
	Computer Science Degree Credits/Contact Hours:	**25-30**	**25-30**
	Minimum Program Credits (from either program)/Contact Hours:	**60**	**64-65**

Suggested sequencing of courses for Computer Science (DACP0):

Year 1 (Fall Semester) 15-16 credits	**Year 1 (Winter Semester) 15-16 credits**
CIS-10500—Intro to Computers	CIS-22400—UNIX
CIS-27001—Programming I	CIS-27101—Programming II
ENG-10303—English Composition I	ENG-10403—English Composition II
CIS elective or Speech course	MTH-13000 *or* higher *or* CIS approved elective
Humanities course	CIS elective or Speech course
Year 2 (Fall Semester) 16-19 credits	**Year 2 (Winter Semester) 14-17 credits**
CIS-approved elective (if needed)	MTH-22002—Calculus I or higher
ECO-20100—Principles of Economics-MACRO	Humanities course
MTH-18001 *or* CIS approved elective	Lab science course
Lab science course	Social science course

ASSOCIATE IN COMPUTERS
Computer Information Systems (DACP1)

Minimum Credits: 60
Contact Hours: 64-65

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. Program requirements at four-year institutions vary. It is imperative that students choose the electives that will transfer to their select four-year college and for the program in which they wish to earn a degree. **Computer Information Systems** degrees are business oriented. Positions of employment include computer and application programming, systems analysis, network, database and systems administration, web development or microcomputer specialist. Degrees in these areas include the following: Management Information Systems (MIS), Computer Information Systems (CIS) or Information Systems (IS).

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Introduction to Computers	3	3
ECO-20100	Principles of Economics-MACRO	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
SPE-10500 *or* SPE-11400	Fundamentals of Speech *or* Intro to Interpersonal & Public Communication	3	3
Select two humanities courses from different disciplines. Current KCC offerings which meet this requirement include: ART-10000 and 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 and 12300, any PHL and THE-12000.			
		3	3
		3	3
Select two lab science courses from different disciplines.			
		3-5	5-7
		3-5	5-7
Select one additional social science course from GEO, POL, PSY or SOC (not ECO).			
		3-4	3-4
	General Education Credits/Contact Hours:	**30-35**	**34-39**
COMPUTER INFORMATION SYSTEMS DEGREE REQUIREMENTS			
CIS-22400	UNIX	2	2
CIS-27001	Programming I	3	3
CIS-27101	Programming II	4	4
MTH-13000	College Algebra	4	4
MTH-20600	Applications in Statistics	4	4
APPROVED ELECTIVES (8-13 credits required)			
ACC-12100	Accounting Principles I	4	4
ACC-12200	Accounting Principles II	4	4
BUS-10100	Introduction to Business	3	3
CIS-11700	Visual Basic	3	3
CIS-17001	Microsoft Office	3	3
CIS-21000	Internet & Web Page Development	3	3
CIS-21500	Web Animation & Multimedia	3	3
CIS-23501	Database Design	3	3
CIS-26000	Intro to Computer Networking	3	3
CIS-26400	Client-Side Web Programming w/JavaScript	3	3
CIS-27201	Server-Side Web Programming	3	3
ECO-20200	Principles of Economics-MICRO	3	3
MTH-12000	Intermediate Algebra	4	4
MTH-18001	Pre-Calculus	4	4
MTH-22002	Calculus I	4	4
	Computer Information Systems Credits/Contact Hours:	**25-30**	**25-30**
	Program Credits/Contact Hours:	**60**	**64-65**

Suggested sequencing of courses for Computer Information Systems (DACP1):

Year 1 (Fall Semester) 16 credits	**Year 1 (Winter Semester) 14-15 credits**
CIS 10500—Intro to Computers	CIS-27101—Programming II
CIS-27001—Programming I	ENG-10403—English Composition II
ENG-10303—English Composition I	MTH-20600—Application in Statistics
MTH-13000—College Algebra	Elective from approved list
Social science course	
Year 2 (Fall Semester) 15-17 credits	**Year 2 (Winter Semester) 12-16 credits**
ECO-20100—Principles of Economics-MACRO	CIS-22400—UNIX
Elective from approved list	Elective from approved list (if needed)
Elective from approved list (if needed)	Humanities course
Humanities course	Lab science course
Lab science course	Speech course

ASSOCIATE IN FINE ARTS—STUDIO ART

(DAFA1)

Minimum Credits: 62
Contact Hours: 71-76

Introduction

The Associate in Fine Arts: Studio Art degree is designed for students with an interest in studio arts such as sculpture or painting. This degree program works to give students both practical experience in the art form of their choice, and the critical and academic background necessary for further study of the fine arts while helping develop a personal sense of aesthetic and artistic criteria. Because the artist's association with the world is stressed, a strong academic schedule is affiliated with the creative discipline.

Students planning to transfer to a four-year college or university must consult with their advisor and carefully study the requirements of the four-year institution from which they intend to secure a bachelor's degree. Appropriate course substitutions may be made upon the recommendation of a student's advisor and with approval of the appropriate dean or associate dean. Substitutions are only made in accordance with the specific requirements of the baccalaureate degree-granting institution to which the student intends to transfer.

Students who have previously attended other colleges or universities may apply earned transfer credit in subject areas (i.e., psychology elective, biology elective, etc.) where deemed appropriate. This degree satisfies the requirements of the Michigan Transfer Agreement (MTA) as defined in the handbook section of this catalog.

GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CIS-10500	Intro to Computers	3	3
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
SPE-10500	Fundamentals of Speech	3	3
Select one non-ART humanities course. Current KCC offerings which meet this requirement include: ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 and 12300, any PHL and THE-12000.			
		3	3
Select College Algebra (MTH-13000) or Statistics (MTH-20600) or higher.			
		3-4	4
Select two lab science courses from two different disciplines.			
		4-5	5-7
		4-5	5-7
Select two social science courses from two different disciplines. Choose from: ECO, GEO, POL, PSY or SOC.			
		3	3
		3-4	3-4
	General Education Credits/Contact Hours:	**32-36**	**35-40**
PROGRAM REQUIREMENTS			
ART-10000	Art History I	3	3
ART-10103	Art History II	3	3
ART-28000	Portfolio I	3	4
Select studio art electives (7 classes, 21 credits/28 contact hours):			
		3	4
		3	4
		3	4
		3	4
		3	4
		3	4
		3	4
	ART Credits/Contact Hours:	**30**	**38**
	Minimum Program Credits/Contact Hours:	**62**	**73-78**

ASSOCIATE IN SCIENCE –LIFE SCIENCE CONCENTRATION (DASC3)

Minimum Credits: 60
Contact Hours: 67-68

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. Program requirements of four-year institutions vary. It is imperative that the student choose the electives that will transfer to their selected four-year college and for the program in which they wish to earn a degree. This degree/concentration satisfied the requirements for the Michigan Transfer Agreement (MTA) as defined in the handbook section of the college catalog.

LIFE SCIENCE CONCENTRATION			
GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
CHE-10101/02	General Chemistry I & Lab	5	7
CHE-10201/02	General Chemistry II & Lab	5	7
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
MTH-13000	College Algebra or higher	4	4
Speech course-- See advisor for recommendation.			
		3	3
Select two humanities courses from different disciplines. Current KCC offerings which meet this requirement include: ART-10000 and 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 and 12300, any PHL and THE-12000.			
		3	3
		3	3
Select a third humanities course from any of the humanities disciplines and courses. Current KCC offerings include any ART, ENG-21400 or higher, any HIS, HUM-20500, any MUS, any PHL, and THE-12000.			
		3	3-4
Select three social science courses from ECO, GEO, POL, PSY or SOC. Students must select from at least two different disciplines.			
		3	3
		3	3
		3-4	3-4
Select three biology courses (Each must include a lab.).			
		4	5
		4	5
		4	5
Life Science General Education Credits/Contact Hours:		**53-54**	**60-62**
ELECTIVES BASED ON TRANSFER NEEDS			
Elective Credits/Contact Hours:		**6-7**	**6-7**
AS Life Science Concentration minimum credits required/Contact Hours:		**60**	**67-68**

ASSOCIATE IN SCIENCE –PHYSICAL SCIENCE CONCENTRATION (DASC3)

Minimum Credits: 60
Contact Hours: 67-72

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. Program requirements of four-year institutions vary. It is imperative that the student choose the electives that will transfer to their selected four-year college and for the program in which they wish to earn a degree. This degree/concentration satisfied the requirements for the Michigan Transfer Agreement (MTA) as defined in the handbook section of the college catalog.

PHYSICAL SCIENCE CONCENTRATION			
GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
MTH-18001	Pre-Calculus	4	4
Speech course-- See advisor for recommendation.			
		3	3
Select two humanities courses from different disciplines. Current KCC offerings which meet this requirement include: ART-10000 or 10103, ENG-21400 or higher, any HIS, HUM-20500, MUS-10100 or 12300, any PHL and THE-12000.			
		3	3
		3	3
Select a third humanities course from any of the humanities disciplines and courses. Current KCC offerings include any ART, ENG-21400 or higher, any HIS, HUM-20500, any MUS, any PHL, and THE-12000.			
		3	3-4
Select three social science courses from ECO, GEO, POL, PSY or SOC. Students must select from at least two different disciplines.			
		3	3
		3	3
		3	3-4
Select three lab science courses from AST, BIO, CHE, GEL or PHY.			
		4-5	5-7
		4-5	5-7
		4-5	5-7
Select 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	General Chemistry I & Lab *and* General Chemistry II & Lab *or* Physics I w/ Trigonometry & Lab *and* Physics II w/ Trigonometry & Lab *or* Physics I w/ Calculus & Lab *and* Physics II w/ Calculus & Lab	10	14
Physical Science General Education Credits/Contact Hours:		**53-56**	**60--68**
ELECTIVES BASED ON TRANSFER NEEDS			
Elective Credits/Contact Hours:		**4-7**	**4-7**
Minimum AS Physical Science Concentration Credits/Contact hours:		**60**	**67-72**

ASSOCIATE IN SCIENCE –HEALTH SCIENCE CONCENTRATION (DASC3)

Minimum Credits: 60
Contact Hours: 62

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. Program requirements of four-year institutions vary. It is imperative that the student choose the electives that will transfer to their selected four-year college and for the program in which they wish to earn a degree.

Note: Speak with an advisor for appropriate elective choices if the Michigan Transfer Agreement (MTA) endorsement as defined in the handbook section of the college catalog is desired.

HEALTH SCIENCE CONCENTRATION			
GENERAL EDUCATION REQUIREMENTS			
Course	**Title**	**Credits**	**Contact Hours**
Required courses:			
BIO-23500	Anatomy & Physiology I	4	5
BIO-23600	Anatomy & Physiology II	4	5
ENG-10303	English Composition I	3	3
ENG-10403	English Composition II	3	3
MTH-12000	Intermediate Algebra	4	4
MTH-20600	Applications in Statistics	4	4
NUR-23700	Pathophysiology for the Health Professional	3	3
PSY-10100	Introduction to Psychology	3	3
SPE-10500 *or* SPE-11400	Fundamentals of Speech *or* Intro to Interpersonal/Public Communication	3	3
The following courses are highly recommended for transfer and meet the general education requirements of three humanities courses from at least two disciplines and three social science courses (including Intro to Psychology listed above) from at least two disciplines.			
HIS-20400	The American Civil War	3	3
HUM-20500	The Individual and Society	3	3
Select one course (3 credits) from ENG-21400, ENG-22500, ENG-22800, ENG-23300 or ENG-25112.:			
		3	3
Select one course from MUS-10100, MUS-10400, MUS-12300, or THE-12000.			
		3	3
Select two social science courses from different disciplines. Choose from ECO, GEO, POL, PSY or SOC.			
		3	3
		3-4	3-4
	General Education Credits/Contact Hours:	**49-50**	**51-52**
ELECTIVES BASED ON TRANSFER NEEDS **Students pursuing the Health Science Option should work closely with their academic advisor when choosing elective courses.**			
	Health Science Credits/Contact Hours:	**10-11**	**10-11**
Minimum AS Health Science Concentration Credits/Contact Hours:		**60**	**62**

PARTNERSHIPS WITH OTHER INSTITUTIONS

See information on our partnership programs on the web at
http://www.kirtland.edu/transferring-from-kirtland

Remember! When thinking about transferring the question is not

"Will my class transfer?" BUT…

"HOW will my class transfer?

Will this class satisfy a requirement or elective for my desired degree?"

ACC (ACCOUNTING)

ACC 12100 Accounting Principles I (F) 4 (4-0)

This course provides an introduction to fundamental accounting principles. The principles are applied to the recording of transactions as assets, liabilities, owner's equity, income and expenses. The recorded transactions are then used in the preparation of financial statements - balance sheet, income statement and statement of owner's equity for sole proprietorships and partnerships.

ACC 12200 Accounting Principles II (W) 4 (4-0)

This course builds on the fundamental accounting principles taught in Accounting I. The class covers the recording of corporate stock and dividend transactions and the proper presentation of the stockholder's equity section of the balance sheet. The course introduces management accounting concepts through analysis of financial statements, preparation of the statement of cash flows, the introduction to cost accounting concepts and an understanding of the need for and development of budgets. Prerequisite: ACC-12100.

ACC 12500 Computer Accounting w/QuickBooks (F,W,S) 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.

ALH (ALLIED HEALTH)

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. Prerequisite: ENG-09601 or competency.

ALH 10300 Professional CPR (F, S) 0.25 (0.25-0)

This course provides information and practice for appropriate response in the event of cardipulmonary emergency event (one-man, two-man, infant, child, AED & choking victim).

ALH 10400 Nursing Assistant (F,W,S) 6 (3-4.5)

This course will prepare students to provide competent, evidence-based assistive nursing care in a variety of healthcare settings, with primary focus on the elderly. Emphasis will be placed on effective communication and interpersonal skills; infection control measures; safety and emergency procedures; and the promotion of residents' independence and rights. Successful completion of this course will prepare students to be eligible for the state competency evaluation exam and placement on state Nurse Aide Registry. Prerequisite: ENG-09601 or competency,TB Test, Uniform, and clean criminal background. Please visit the Nursing Assistant website: http://www.kirtland.edu/academic-programs/certified-nursing-assistant-course.

ALH 10801 Pathology w/Pharmacology (F,W) 3 (3-0)

This course focus is on description of conditions and diseases of the organ system, including etiology, signs and symptoms, and method of diagnosis and treatment. Students will build on their knowledge of anatomy and physiology and medical terminology through a detailed study of common pathological conditions and the drugs used in their treatment. Prerequisite: ALH-10101 and BIO-10700.

ALH 11300 Medical Ethics & Law (F,W) 3 (3-0)

This course teaches the legal responsibilities and principles that govern the healthcare professional, including examples of common legal and ethical issues that affect those working in the healthcare field. Regulations affecting healthcare professionals and up-to-date information on HIPPA (Health Insurance Portability and Accountability Act of 1996) are discussed. There will be discussions on the legal system, professional liability, medical malpractice, medical records, and ethical and bioethical issues; critical thinking and ethical dilemma exercises will be applied. A research paper is required. Prerequisite: ENG-10303.

ALH 20203 Professional CPR (F,W) 0.5 (0.25-0.25)

This course provides information and practice for appropriate response in the event of cardiopulmonary emergency event (one-man, two-man, infant, child, AED & choking victim).

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) 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 Intro to Design (F,W) 3 (0-4)

In this course, students will gain an understanding of the relationships between shape, form, pattern, texture, and color. By using computers, the student will create compositions dealing with biomorphic and rectilinear shapes. This course is intended to give the student a basic knowledge of the principles of composition and the elements of design and the role they play in the creative process. (Humanities Credit)

ART 10600 Fund of Drawing I (F,W) 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 (F,W) 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 (F,W) 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 I (S) 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 11400 Sculpture I (F,W) 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 (F,W,S) 3 (2-2)

This course offers an introduction to the basic technical skills of photography as a creative medium for personal expression. (Humanities Credit)

ART 17000 Graphic Studio (W) 3 (1-3)

This course is an introduction to the computer as a design tool using industry standards in page layout and digital software.

ART 19000 Digital Communications (F,W) 3 (1-3)

The study of fundamental design concepts and elements as they are applied to digital media. Students will create digitally manipulated images using various imaging techniques for print media as it relates to their major area of study. (Humanities Credit)

ART 20500 Design II (F,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 (F,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 life 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,W) 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 (F,W) 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 21100 3-Dimensional Design (F,W) 3 (0-4)

This course is an introduction to the fundamentals and concepts of organizing forms in three dimensions. Students use basic materials for a sequence of observation-based problems exploring line, plane and volume with modeled and constructed forms, both in relief and free standing. (Humanities Credit)

ART 21400 Sculpture II (F,W) 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 (F,W) 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 (F,W) 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) (F,W,S) 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-10800. (Humanities Credit)

ART 22400 Advanced Sculpture I (F,W) 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 Intro to Color Photography (F,W) 3 (0-4)

This course will deal with color and how it relates to the photographic image. Topics covered will include traditional darkroom produced color prints, digital color photography and printing, film based and digital color correction as well as other alternative processes. (Humanities Credit)

ART 22800 Ceramics (Studio Operations) (F,W,S) 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-10800. (Humanities Credit)

ART 23400 Advanced Sculpture II (F,W) 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 25000 Illustration I (F,W) 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 (F,W) 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 27504 Advanced Drawing (F,W) 3 (1-3)

This course continues the elements of Drawing II and emphasizes independent problem-solving, refinement of technical skills and the development of conceptualization processes. (Humanities Credit)

ART 27505 Photography III (F,W) 3 (0-4)

This course is intended to provide in depth exploration of any of the photographic processes. Assignments will be based on individual student needs and desires. Projects will be designed to encourage the development of the student's style. Special attention will be devoted to produce a body of work that showcases the student's individual skills and talents. (Humanities Credit)

ART 27514 Welded Sculpture I (F,W) 3 (1-3)

Welded Sculpture will deal with metal as a sculptural medium. Students will use various joining techniques such as gas welding, brazing, wire welding and stick welding. In addition to the different welding processes, each student will need to learn how to use other machines that form the metal that you will be working with.

ART 27518 Welded Sculpture II (F,W) 3 (0-4)

This course will develop critical and creative thinking through the exploration of materials, processes, concepts and imagery that was developed in Welded Sculpture I. Exposure to a wide range of ideas will enable students to develop their own sense of direction. Various welding techniques will be used with steel and found objects depending on the design. (Humanities Credit)

ART 27523 Photo Composition & Critique (F,W) 3 (0-4)

Students taking this course will be challenged to present and discuss their work. Special attention will be given to the "photographic image" and its compositional elements. Topics covered include proper image composition, creating visual impact, subject relevance and conceptual aspects of a photograph. (Humanities Credit)

ART 27531 Rendering I (F,W) 3 (1-3)

A drawing and painting course in super realism using various media.

ART 27532 Photo Studio Problems (F,W) 3 (1-3)

Using various techniques and equipment in the photo studio, students will emphasize in exposure control for lighting, posing and staging techniques that are used in classical studio photography. An examination of these classis techniques will be applied to fine art photography.

ART 27533 Watercolors II (S) 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 27539 Advanced Printing Techniques (F,W) 3 (0-4)

This course is intended to allow the student an in-depth study of the traditional photographic printing processes. Special attention will be given to the processes associated with darkroom work. Topics covered include large format printing, fiber based paper printing, large scale contact printing and mounting techniques. (Humanities Credit)

ART 27543 Abstract Painting (F,W) 3 (0-4)

This is an energizing and informative painting class with an emphasis on experimentation and creative process. Students will learn the fundamentals of abstract painting. Building on this foundation, each project will progressively introduce various techniques such as glazing, layering, removal, staining and lifting to achieve depth, line and interest. (Humanities Credit)

ART 27545 Computer Generated Images I (F,W,S) 3 (1-3)

In this course, students will learn the fundamental concepts and features of Adobe Photoshop. These concepts include photo editing and retouching, color correction, layer basics, and special effects. (Humanities Credit)

ART 27546 Computer Generated Images II (F,W) 3 (1-3)

Building on the techniques learned in Computer Generated Images I, this course teaches advanced techniques used by professional graphic artists and photographers. Prerequisite: ART-27545. (Humanities Credit)

ART 27550 Digital Darkroom (F,W) 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. (Humanities Credit)

ART 27553 Adv Black & White Photography (F,W) 3 (1-3)

Students will draw on skills acquired in Photography I and II to develop and polish a personal style. Assignments will be developed to aid the student in pursuing their own unique goals. Prerequisite: ART-21500. (Humanities Credit)

ART 27565 Comic Book Illustration (F,W) 3 (1-3)

This course provides a basic introduction to comic book illustration, with exploration in figure drawing, media, techniques, spatial relationships, and the conceptual progress of page layout. (Humanities Credit)

ART 27566 Computer Generated Images III (F,W) 3 (1-3)

Building on the fundamentals learned in Computer Generated Images I and Computer Generated Images II, this course explores the advanced type techniques and effects, layout, and design. Prerequisite: ART-27546. (Humanities Credit)

ART 27568 Large Format Photography (F,W) 3 (0-4)

This course is devoted to the processes and techniques involved in creating photographs with film formats larger than 35mm. Topics covered will be the use of medium and large format cameras and printing from medium and large format film. (Humanities Credit)

ART 27571 Computer Animation I (F,W) 3 (1-3)

Computer Animation I is an introductory study of the three-dimensional computer images and animation. The class will use 3D Studio to create three-dimensional imagery, apply texture maps, and lighting effects. Several animation techniques will also be studied. Students will meet in small groups to discuss lessons and activities. (Humanities Credit)

ART 27573 Computer Animation II (F,W) 3 (1-3)

This course further develops the student's skill in 3D Studio Max. It will emphasize 'realistic' rendering by means of developing the student's conceptual and technical understanding of effective texture and lighting.

ART 27575 Computer Animation III (F,W) 3 (1-3)

This course focuses on advanced techniques for animators. Both classical animation and new digital skills and techniques will be covered with an emphasis on the situations that are best suited for the student's ultimate goal in their work.

ART 27578 Computer Generated Images IV (F,W) 3 (1-3)

This course continues the exploration of advanced type techniques and effects, layout, & design. Prerequisite: ART-27566 (Humanities Credit)

ART 27581 Children's Book Illustration (F,W) 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 Painting IV (F,W) 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 Watercolors III (S) 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 27595 Color Photography II (F,W) 3 (0-4)

This course is a continuation of "Intro to Color Photography." Students may choose to work in any of the processes used to create a color photograph and will be encouraged to produce a body of work that showcases their individual skill and talent. (Humanities Credit)

ART 27598 Portfolio II (F,W) 3 (1-3)

This course continues the elements of Portfolio to develop a unified body of work.

ART 27604 View Camera Operation (F,W) 3 (0-4)

This course provides an in-depth study of the use and capabilities of the large format view camera. Topics include camera movement, exposure, sheet firm processing and printing from large format film. (Humanities Credit)

ART 27606 Digital Darkroom II (F,W) 3 (0-4)

This course is intended to be the next step after completing Digital Darkroom I. Students will be expected to draw on skills learned in Digital Darkroom I to complete a series of more technically and artistically challenging projects. Students will be encouraged to push their imaginations and polish their creative skills. Each student will work individually with the instructor to establish a unique set of goals and objectives tailored to that student's chosen style, chosen medium and skill level. Progress will be monitored through a series of one-on-one critique with the instructor.

ART 27611 Rendering II (F,W) 3 (1-3)

This course continues the elements of Rendering in superrealism. (Humanities Credit)

ART 27613 Photography Special Processes (F,W) 3 (0-4)

This course is devoted to working with non-camera produced photographic images. Topics covered include (but are not limited to) contact printing, digitally created negatives, photograms, pinhold photography and special chemical processes. (Humanities Credit)

ART 28000 Portfolio I (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.

AST (ASTRONOMY)

AST 10201 Astronomy I Lecture (F) 3 (0-3)

Introductory course studying Astronomy and related sciences. Covering topics of solar/stellar structure and evolution, and cosmology. Prerequisite: MTH-07300. Corequisite: AST-10202. (Science credit)

AST 10202 Astronomy I Laboratory (F) 1 (0-2)

Introducing the techniques for mapping and measuring of the physical universe, and become familiar with the night and day skies. Develop understanding of the mechanisms of the universe. Corequisite: AST-10201. (Science credit)

AUT (AUTOMOTIVE)

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. Prerequisite: AUT-16302 and ENG-09000 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 reassembly of components and fuel systems and in emission control testing. Prerequisite: AUT-16401 and ENG-09000 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. Prerequisites: ENG-08602 or minimum placement of College Reading Skills; co-requisite: ENG-09000.

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. Prerequisite: MTH-06300.

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. Prerequisite: AUT-16401 and ENG-09000 or instructor's permission.

AUT 17703 Automotive Braking Systems (F) 4 (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 20402 Intro to Auto Service Management (F) 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.

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. Prerequisite: AUT-16302 or instructor's permission.

AUT 26500 Steering Suspension & Alignment (F) 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. Prerequisite: AUT-16302 and AUT-17703 or instructor's permission.

AUT 26601 Gas 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 26700 Diesel Eng Performance & Diagnostic (W) 4 (3-3)

This is a lecture/lab course designed to teach students performance and diagnostic procedures on modern passenger car and light duty truck diesel engines. Differences between diesel engine diagnostics and gasoline engines will be covered in great detail. Combustion chamber, fuel, cooling, and lubrication system designs are discussed. Maintenance requirements due to low sulfur fuel, particulate traps, air filter service and new engine oil configurations are all covered. Prerequisite: AUT-26601 or instructor's permission.

AUT 27000 Heating & Air Conditioning (W) 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. Prerequisite: AUT-16302 or instructor's permission.

AUT 27900 Manual Trans Drivelines/Rear Axles (W) 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. Prerequisite: AUT-16302 or instructor permission.

AUT 29900 Automotive Internship (F,W,S) 5

This internship offers supervised automotive repair experience at a selected automotive repair facility. Students accomplish the course objectives while employed in the automotive industry. This course is required for completion of the associate in applied science, and the master certificate program. The student will complete a minimum 180 hours in this course. Prerequisite: instructor permission.

BIO (BIOLOGY)

BIO 10100 General Biology (F,W) 4 (3-2)

This is a lecture and laboratory course in the basic principles of life science; genetics, origin, and evolution of life, structure, function, and classification of organisms and interactions in the ecosystem are stressed. (Science Credit)

BIO 10700 Essentials of Anatomy & Physiology (F,W,S) 4 (3-2)

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. This course includes two hours of laboratory. (Science credit)

BIO 20100 General Zoology (W) 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. Offered in Winter of even-numbered years. (Science Credit)

BIO 21000 Microbiology (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: BIO-10100 or BIO-23500 and BIO-23600, or permission of instructor. Offered in Winter of odd-numbered years.(Science Credit)

BIO 21300 Nature Study (F) 4 (3-2)

A lecture/laboratory and field course in the behavior, ecology, and classification of plants and animals, including recognition of local flora and fauna, the course is designed to give natural history background material to the liberal arts non-science major, to the non-specialists interested in outdoor life, to those interested in nature interpretation, and to elementary school teachers. (Science Credit).
NOTE: This course is physically demanding at times due to several planned hikes. Walking through bogs, fens and wading in rivers are planned. Students are expected to car pool and share expenses for field trips. Contact Denise Kemp 989-275-5000 ext 391 or email denise.kemp@kirtland.edu

BIO 23500 Anatomy & Physiology I (F,W,S) 4 (3-2)

The first of a two-semester sequence; the first semester covers the nature of life, organization of the human body, cell chemistry and metabolism, the integumentary system, histology, the skeletal and muscular systems, and the nervous system including the special senses. (Science Credit)

BIO 23600 Anatomy & Physiology II (F,W,S) 4 (3-2)

This is a continuation of BIO-23500 with emphasis on the sensory system, endocrine system, cardiovascular system, respiratory system, digestive system, urinary system, and reproductive system with an introduction to genetics. The course will conclude with a study of pregnancy and human growth and development. Prerequisite: BIO-23500 with a minimum grade of C. (Science Credit)

BUS (BUSINESS & MARKETING)

BUS 10100 Intro to Business (F,W,S) 3 (3-0)

This course provides an orientation to characteristics and functions of business, business environment, opportunities, ownership, management, organization, marketing, physical plant, personnel, finance, ethics, law, and controls for decision making.

BUS 10700 Entrepreneurship (W,S) 3 (3-0)

Upon satisfactory completion of the course, the student will be able to demonstrate knowledge and comprehension of how to buy an existing small business or how to start a new venture. Students will learn how to analyze, apply and evaluate modern management practices for sustaining the life and profitability of a small business venture.

BUS 10800 Personal Financial Planning (W) 3 (3-0)

This course is designed to help students understand the major personal financial planning problems that individuals and families encounter in life including budgeting, taxes, insurance, savings, credit management, investing, retirement and estate planning.

BUS 21000 Prin of Management (F,W) 3 (3-0)

This course examines management as a basic process of organizing, directing, actualizing, and controlling the operation of a business enterprise.

BUS 21100 E-Commerce Management (W) 3 (3-0)

This course examines and integrates the three elements that are crucial to the success of any e-commerce operation, those being, internet technology, business models and marketing. It addresses how companies are using the Internet to add value using the six-C framework of commerce, content, communication, connectivity, community, and computing. E-commerce management rests on three pillars - Internet and related technologies, business models, and marketing. Future managers learn how the Internet and the Web are organized, how sites can be located and how sites relate to one another. Managers then learn how these technologies affect business variables such as sales, costs, revenues and marketing. Prerequisites: BUS-10100 and CIS-10500 or permission of instructor.

BUS 21500 Business Law (F,W) 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. Prerequisite: ENG-09000 and ENG-09601 or demonstrated competency.

BUS 24500 Human Resource Management (F,W) 3 (3-0)

The object of this course is to acquaint students with the problems of human resource 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.

BUS 29900 Internship in Business & Marketing (F,W,S) 3

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, business department and advisor approval.

CAP (INTERNSHIP/SERVICE LEARNING)

CAP 29901 Internship/Service Learning (F,W,S) 1

This course can be used for technical elective credits in the M-TEC curricula providing students the opportunity to increase the value of their education through a meaningful work experience. This on-the-job training or community service must be mutually agreed upon with the student, advisor, and worksite designee before work commences. This work experience may be paid, voluntary, or community service oriented.

CAP 29902 Internship/Service Learning (F,W,S) 2

This course can be used for technical elective credits in the M-TEC curricula providing students the opportunity to increase the value of their education through a meaningful work experience. This on-the-job training or community service must be mutually agreed upon with the student, advisor, and worksite designee before work commences. This work experience may be paid, voluntary, or community service oriented.

CAP 29903 Internship/Service Learning (F,W,S) 3

This course can be used for technical elective credits in the M-TEC curricula providing students the opportunity to increase the value of their education through a meaningful work experience. This on-the-job training or community service must be mutually agreed upon with the student, advisor, and worksite designee before work commences. This work experience may be paid, voluntary, or community service oriented.

CAP 29904 Internship/Service Learning (F,W,S) 4

This course can be used as technical elective credits in the M-TEC curricula providing students the opportunity to increase the value of their education through a meaningful work experience. This on-the-job training or community service must be mutually agreed upon with the student, advisor, and worksite designee before work commences. This work experience may be paid, voluntary, or community service oriented.

CAR (CAREER & PERSONAL DEVELOPMENT)

CAR 09300 Study Skills (F,W) 1 (1-0)

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.

CAR 10201 College Survival and Success I (F,W) 1 (1-0)

This course introduces skills necessary for early survival and success in college. It focuses on personal development, learning style analysis, time management, goal setting, and a thorough overview and orientation of Kirtland Community College programs, services, and resources.

CAR 10401 College Research in the Digital Age (F,W,S) 1 (1-0)

This course is designed to introduce students to the skills necessary to use an academic library and how to conduct effective research including information gathering, retrieval, and evaluation to support academic success and lifelong learning. Course content will include readings, lecture notes, discussion, and hands-on online searching. Academic integrity and citing sources will be covered.

CAR 12600 Service Learning Lab (V) 1 (99-99)

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

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.

CHE (CHEMISTRY)

CHE 10000 Chemical Science (F) 4 (3-2)

Chemical Science with lab 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: MTH-07300 or high school algebra. (Science Credit)

CHE 10101 Gen 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 algebra 2 semesters with a "C" or better, or MTH-07300 or higher AND a year of high school chemistry (with a minimum grade of "C") or CHE-10000 or CHE-10400 or permission of the instructor. Prerequisite or corequisite: ENG-10303. Corequisite: CHE-10102. (Science Credit)

CHE 10102 Gen Chemistry Lab I (F) 1 (0-3)

This is a laboratory course to accompany CHE-10101. Corequisite: CHE-10101. (Science Credit)

CHE 10201 General Chemistry II (W) 4 (4-0)

This is a continuation of General Chemistry I, concerned broadly with thermodynamics and kinetics. Topics discussed include kinetics data analysis and reaction mechanisms, chemical equilibrium, electrochemistry, chemical thermodynamics, nuclear chemistry, and some descriptive chemistry of the elements. Prerequisite: CHE-10101. Corequisite: CHE-10202. (Science Credit)

CHE 10202 General Chemistry II Lab (W) 1 (0-3)

This is a laboratory course to accompany CHE-10201. Corequisite: CHE-10201. (Science Credit)

CHE 10400 Chemistry for Health Sciences (F,W,S) 4 (3-2)

This is a one semester introductory chemistry course designed for non-science majors. The course is for students planning to enter careers in nursing, nutrition, environmental science, food science and a wide variety of other health-related professions. The course exposes students to concepts of general, organic and biological chemistry. Students will complete 3 contact hours of lecture and 2 contact hours of laboratory experiments weekly. Prerequisites: High School Algebra 2 semesters with a C or better, or MTH-07300 or higher.

CIS (COMPUTER INFORMATION SYSTEMS)

CIS 01000 Basic Computing (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. No prerequisite.

CIS 10500 Intro to Computers (F,W,S) 3 (3-0)

Students will become familiar with hardware and software terminology/concepts, Windows operating system, word processing, spreadsheet, database management and presentation software. Application software used is the current version of Windows and Microsoft Office Professional. Prerequisite Skills: Basic computer and keyboarding skills are required for successful completion of this course.

CIS 11700 Visual Basic (F) 3 (1.5-1.5)

This course serves as an introduction to Visual Basic. The course introduces concepts concerning the design, creation, test, and execution of Visual Basic Applications. Prerequisite: CIS-10500 with a "B" or better, or demonstrated competency.

CIS 17001 Microsoft Office (F) 3 (3-0)

This course covers how to utilize and integrate all the applications contained within Microsoft Office. Exercises will involve business applications using the word processing, spreadsheet, database management, and presentation software components of Microsoft Office. Application software used Microsoft Office Professional which includes: Word, Excel, Access, and PowerPoint. Prerequisite: CIS-10500 or demonstrated competency.

CIS 19600 Hardware Certification (W) 3 (3-0)

This course will attempt to prepare students for the industry standard hardware certification exam. Topics will include major hardware components such as motherboards, processors, memory, storage, and peripheral devices. Operating System software from DOS up to the current Windows version will be covered. Techniques for troubleshooting problems and hands-on applications will be presented. Prerequisite: CIS-10500.

CIS 19700 OS Certification (F) 3 (1-2)

This course will help prepare students for the industry standard hardware certification exam with an emphasis on Operating System (OS) core components. Topics include Windows Operating System software and a review of major hardware components that address: motherboards, processors, memory, storage, and peripheral devices. Prerequisite: CIS-10500, or demonstrated competency.

CIS 21000 Internet & Web Page Development (F) 3 (1-2)

Students will be given an overview of the Internet, WWW and Windows file management techniques. Students will learn how to design and create W3C compliant web pages using HTML, XHTML, and cascading style sheets (CSS). Areas covered include: css formatting, hyperlinks, images, image maps, tables, newsletter formats, forms, framed pages, multimedia files, and java applets. Students will also learn how to create their own graphical images for their pages using web-based sites and Photoshop. Completed pages will be uploaded to the student's Internet web site and debugged. Co-requisite: CIS-10500.

CIS 21500 Web Animation & Multimedia (W) 3 (3-0)

Students will create animated graphic content for websites. Prerequisite: CIS-10500 or demonstrated competency.

CIS 22400 UNIX (W) 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 (W) 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 is the current commercial version of Microsoft Excel. Prerequisite: CIS-10500 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. Prerequisite: CIS-10500 or demonstrated competency.

CIS 24500 Project Management (F) 3 (3-0)

Students will learn how to schedule, budget and allocate resoiurces for various projects and assess the quality and productivity of those projects. Completing projects on time and within budget will be emphasized. Scheduling and costing tools will be presented. Co-requisite: CIS-10500 or demonstrated competency.

CIS 26000 Intro to Computer Networking (W) 3 (3-0)

This course serves as an overview of digital data communications. The course addresses the following: data communications, digital and analog signals, communications media, multiplexers, data transmission, Protocols, Network concepts, WANs, MANs, LANs, communications services, the Internet, eBusiness, network security, and network management. This course is designed to prepare students for the Network+ exam. Prerequisite: Keyboarding skills.

CIS 26400 Client-Side Web Prog w/JavaScript (F) 3 (3-0)

JavaScript is a programming language that resides inside HTML documents and is used to create interactive web pages. Topics such as variables, conditionals, functions, objects, properties, methods, event handlers, and form validation will be covered. Students will also work with JQuery and AJAX. . Prerequisite: CIS-21000 or demonstrated competency.

CIS 26500 Networking II (F) 3 (3-0)

Students will obtain knowledge and skills required to successfully install, operate, and troubleshoot a small branch office network. Topics covered include: building a simple network, establishing Internet connectivity, managing network device security and building a medium-sized network. This course is design to prepare studenta for the Cisco CCENT exam. Prerequisite: CIS-26000.

CIS 27001 Programming I (F) 3 (3-0)

This course investigates general methods of problem-solving, principles of programming, and algorithmic design. This includes data types, data storage, I/O (input and output), arithmetic operators, assignment and expressional operators, functions and modular programming, array processing, pointers, record data structures and file I/O. Classes, methods and inheritance will also be introduced. Corequisite: CIS-10500 or demonstrated competency. Prerequisite: MTH-07300.

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, sorting, collection classes, events and graphics. Prerequisite: Grade of "C" or better in CIS-27001 or demonstrated competency.

CIS 27201 Server-Side Web Programming (F) 3 (3-0)

Students will produce interactive, dynamic web-based applications using popular, marketable, server-side programming languages and tools. Database connectivity will be emphasized. Languages used include PHP and ASP. Prerequisite: CIS-21000.

CIS 275-- Directed Study-Computer Information System (V) 1-6

This is a course designed to meet special occupational needs for individual students. Prerequisite: advisor recommendation.

CIS 29900 Internship/Computer Information Sys (V) 3

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 G.P.A., sophomore standing, CIS department and advisor approval.

CJS (CRIMINAL JUSTICE)

CJS 10000 Intro 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.

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 of the Careers in Public Safety 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 and permission of the Careers in Public Safety advisor.

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 and permission of the Careers in Public Safety advisor.

CJS 10900 Intro to Corrections (F) 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 the Careers in Public Safety advisor.

CJS 11100 Legal Issues in Corrections (F) 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 the Careers in Public Safety advisor.

CJS 11200 Client Growth & Development (F) 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 the Careers in Public Safety advisor.

CJS 17000 Correctional Institution/Facilities (W) 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 the Careers in Public Safety advisor.

CJS 17200 Client Relations in Corrections (W) 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 the Careers in Public Safety advisor.

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 the Careers in Emergency Services Advisor.

CJS 24000 Criminology (W) 3 (3-0)

This course provides an analysis of crime, criminal behavior, and punishment through a variety of historical and contemporary theoretical perspectives. Prerequisite or corequisite: ENG-10303 and PSY-10100 or SOC-10100 or permission of instructor. (Social Science Credit)

CJS 24500 Social Deviant Behavior (W) 3 (3-0)

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 the Careers in Public Safety advisor. (Social Science Credit)

CJS 26007 Corrections Academy (F) 10

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 Careers in Public Safety.

CJS 26600 Police Academy (F,W) 21

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 26601 Military Police Academy (W) 7.5

This is a 7-week, Michigan Commission on Law Enforcement Standards (MCOLES) approved regional police academy, specifically designed to complete training for military personnel leaving the service. Students will complete Michigan Commission on Law Enforcement Standards (MCOLES) and successfully pass a mastery exam administered by MCOLES. It will cover investigation, patrol procedures, detention and prosecution, police skills, traffic, tactical operation, EVO (emergency vehicle operation), defensive tactics/forced continuum, firearms and evidence collection. Prerequisite: must meet MCOLES Military Police requirements.

CJS 29900 Criminal Justice Internship (F,W,S) 3

After successful completion of basic CJ courses, students may elect an internship. Students are placed in an approved training station, earn credits for satisfactory work performance, & may earn remuneration. Participation requires approval from the director. Occupational interests are considered with their background & related classes to determine 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 & the college.

COR (CORE CONSTRUCTION)

COR 10001 Basic Safety (F,W,S) 0.5

This course covers need-to-know information for trainees to work safely. It includes what personal protective equipment to wear, how to perform basic construction tasks safely, and what to do if an accident occurs.

COR 10002 Introduction to Construction Math (F,W,S) 0.4

From basic addition to multiplying fractions and more, this course prepares trainees to do the calculations they'll be performing on the job site. This includes multiplication tables and unit conversion charts.

COR 10003 Introduction to Hand Tools (F,W,S) 0.4

This course covers a basic toolbox worth of equipment with color pictures of the tools and illustrations of how to use them. It also covers maintenance instructions and safety tips.

COR 10004 Introduction to Power Tools (F,W,S) 0.4

This course provides pictures and how-to-use instructions for tools powered by electricity, batteries, and pressurized air, such as drills, saws, grinders and sanders, and other common construction equipment. It also covers maintenance instructions and safety tips.

COR 10005 Intro to Construction Drawings (F,W,S) 0.4

This course introduces trainees to the different types of plans and how they represent a finished building. It shows the parts of blueprints in detail, including symbols, the title block, and gridlines.

COR 10006 Basic Rigging (F,W,S) 0.6

This course covers the slings, hardware, hoists, and hitches used in rigging operations. It also highlights critical safety issues and accepted rigging techniques and practices.

COR 10007 Basic Communication Skills (F,W,S) 0.3

Provides trainees with techniques for communicating effectively with co-workers and supervisors. Includes practical examples that emphasize the importance of verbal and written information and instructions on the job. Also discusses effective telephone and e-mail communication skills.

COR 10008 Basic Employability Skills (F,W,S) 0.3

Identifies the roles of individuals and companies in the construction industry. Introduces trainees to critical thinking, problem solving skills, and computer systems and their industry applications. Also reviews effective relationship skills, effective self-presentation, and key workplace issues, such as sexual harassment, stress, and substance abuse.

COR 10009 Intro to Materials Handling (F,W,S) 0.2

Recognizes hazards associated with materials handling and explains proper materials handling techniques and procedures. Also introduces materials handling equipment, and identifies appropriate equipment for common job-site tasks.

COR 12000 Green Building/Weatherization (W) 2 (2-0)

The green environment is an important consideration in the construction industry. Professionals in the construction trades must understand how daily activities affect not only the structure being built or remodeled, but also the environment. This course will explain the things that one can do to make a difference by applying green building principles and reducing the carbon footprint. Topics will also include modern construction techniques and weatherization fundamentals that are essential in the building industry.

COS (COSMETOLOGY)

COS 12100 Cosmetology I (F,W,S) 2.5

This course covers orientation, career information, state laws and regulations, professional image, first aid, chemistry, electricity, job-seeking, and professional ethics. Students must pass this course with a minimum grade of "C-" to advance to the next section.

COS 12200 Cosmetology II (F,W,S) 2.5

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. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12100.

COS 12300 Cosmetology III (F,W,S) 2.5

This course covers principles and techniques of treatment and disorders of the hair and scalp and related chemistry, shampoos, rinses, and scalp treatments. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12200.

COS 12400 Cosmetology IV (F,W,S) 2.5

This course covers the principles and techniques of wet styling, blow dry and waving, finger waving, and hairdressing. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12300.

COS 12500 Cosmetology V (F,W,S) 2.5

This course covers the principles and techniques of sectioning, removing length or bulk with a razor, scissors, clippers, or shears in haircutting. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12400.

COS 12600 Cosmetology VI (F,W,S) 2.5

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. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12500.

COS 12700 Cosmetology VII (F,W,S) 2.5

This course covers the principles and techniques of sectioning, wrapping, processing of chemicals, and rearranging the hair. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12600.

COS 12800 Cosmetology VIII (F,W,S) 2.5

This course covers the principles and techniques of sectioning, curling, and relaxing hair as a texture service. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12700.

COS 12900 Cosmetology IX (F,W,S) 2.5

This course covers the principles and techniques of advanced nails with nail art. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12800.

COS 13000 Cosmetology X (F,W,S) 2.5

This course covers the principles and techniques of massage, manicuring, and pedicuring. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-12900.

COS 13100 Cosmetology XI (F,W,S) 2.5

This course covers the principles and techniques of skin chemical procedures, massage, and facial treatments. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-13000.

COS 13200 Cosmetology XII (F,W,S) 2.5

This course covers the principles and techniques of cosmetic application, artificial eyelashes, removal of unwanted hair, and lash and brow tinting. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-13100.

COS 13300 Cosmetology XIII (F,W,S) 2.5

This course covers the principles and techniques of light therapy. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-13200.

COS 13400 Cosmetology XIV (F,W,S) 2.5

This course covers the fundamentals of business management, opening a salon, and business plans. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-13300.

COS 13500 Cosmetology XV (F,W,S) 2.5

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. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-13400.

COS 14100 Skin Care I (F,W,S) 2.5 (0.51-4)

In this course, the student will learn how to have a professional image, the history of skin and its cells, and anatomy and physiology. Students will also learn bacteria classifications and safety procedures for a salon. The student will learn the business part of managing a solon and the selling of products and services. Students must pass this course with a minimum grade of "C-" to advance to the next section.

COS 14200 Skin Care II (F,W,S) 2.5 (0.51-4)

In this course, the student will learn about skin disorders, nutrition and health of the skin, chemistry and product ingredients, skin analysis and client consultation, and the proper draping of the client. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-14100.

COS 14300 Skin Care III (F,W,S) 2.5 (0.51-4)

In this course, the student will learn proper cleansing, massage and mask therapy, and how to do facials with and without the aid of machines. Students must pass this course with a minimum grade of "C-" to advance to the next section. Prerequisite: COS-14200.

COS 14400 Skin Care IV (F,W,S) 2.5 (0.51-4)

In this course, the student will learn about removing unwanted hair, aging factors and cosmetic surgery effects, male skin care, aromatherapy, advanced topics such as makeup, and working with a physician. Prerequisite: COS-14300.

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. Students must pass this course with a minimum grade of "C-" to advance to the next section.

COS 21100 Cosmetology Seminar (V) 1

This seminar provides brush-up for licensed cosmetologists. Students must pass this course with a minimum grade of "C-" to advance to the next section.

COS 21300 Cosmetology Seminar (V) 4

This seminar provides brush-up for licensed cosmetologists. Students must pass this course with a minimum grade of "C-" to advance to the next section.

ECO (ECONOMICS)

ECO 20100 Prin of Economics-MACRO (F,S) 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 or corequisite: ENG-10303. Recommended Prerequisite: Sophomore standing. (Social Science Credit)

ECO 20200 Prin 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 or corequisite: ENG-10303. Recommended Prerequisite: Sophomore standing. (Social Science Credit)

EDT (ENGINEERING DESIGN TECHNOLOGY)

EDT 11000 Detailing w/AutoCAD (F) 3 (2-2)

Detailing with AutoCAD is intended to instruct students in the fundamentals of two-dimensional, computer-aided drafting. Topic areas will include orthographic, auxiliary, and section view drawings with an emphasis on dimensioning techniques common to industry. Assignments will be completed on a computer using AutoCAD software. Prerequisite: CIS-01000 or CIS-10500 or advisor waiver.

EDT 14000 Architectural Drafting/CAD (W) 4 (2-2)

In Architectural Drafting, students will prepare complete sets of residential and/or light commercial working drawings. Students will complete assignments with a computer-aided drafting system. Prerequisite: EDT-11000, or permission of instructor.

EDU (EDUCATION)

EDU 10000 Intro to Teaching (F) 3 (2-1)

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-10303.

ELT (ELECTRICAL TECHNOLOGY)

ELT 10101 Orientation to the Electrical Trade (F,W,S) 0.1

Provides an overview of the electrical trade and discusses the career paths available to electricians.

ELT 10102 Electrical Safety (F,W,S) 0.4

Covers safety rules and regulations for electricians. Teaches the necessary precautions to take for various electrical hazards found on the job. Also covers the OSHA-mandated lockout/tagout procedure. (Replaces ELT-10044).

ELT 10103 Introduction to Electrical Circuits (F,W,S) 0.3

Introduces series, parallel, and series-parallel circuits. Covers resistive circuits, Kirchoff's voltage and current laws, and circuit analysis. (Replaces ELT-10047).

ELT 10104 Electrical Theory (F,W,S) 0.3

Introduces series, parallel, and series-parallel circuits. Covers resistive circuits, Kirchoff's voltage and current laws, and circuit analysis. (Replaces ELT-10048).

ELT 10105 Intro to the NEC (F,W,S) 0.3

Provides a navigational road map for using the NEC. Introduces the layout of the NEC and the types of information found within the code book. Allows trainees to practice finding information using an easy-to-follow procedure. (Replaces ELT-10050).

ELT 10106 Device Boxes (F,W,S) 0.4

Covers the hardware and systems used by an electrician to mount and support boxes, receptacles, and other electrical components. Covers NEC® fill and pull requirements for device, pull, and junction boxes under 100 cubic inches. (Replaces ELT-10046)

ELT 10107 Hand Bending (F,W,S) 0.4

Provides an introduction to conduit bending and installation. Covers the techniques for using hand-operated and step conduit benders, as well as cutting, reaming, and threading conduit. (Replaces ELT-10045).

ELT 10108 Raceways and Fittings (F,W,S) 0.8

Introduces the types and applications of raceways, wireways, and ducts. Stresses the appropriate NEC® requirements. (Replaces ELT-10051).

ELT 10109 Conductors and Cables (F,W,S) 0.4

Focuses on the types and applications of conductors and covers proper wiring techniques. Stresses the appropriate NEC® requirements. (Replaces ELT-10052)).

ELT 10110 Basic ELT Construction Drawings (F,W,S) 0.3

Focuses on electrical prints, drawings, and symbols. Teaches the types of information that can be found on schematics, one-lines, and wiring diagrams. (Replaces ELT-10053).

ELT 10111 Residential Electric Services (F,W,S) 0.6

Covers the electrical devices and wiring techniques common to residential construction and maintenance. Allows trainees to practice making service calculations. Stresses the appropriate NEC® requirements. (Replaces ELT-10055).

ELT 10112 Electrical Test Equipment (F,W,S) 0.2

Focuses on proper selection, inspection, and use of common electrical test equipment, including voltage testers, clamp-on ammeters, ohmmeters, multimeters, phase/motor rotation testers, and data recording equipment. Also covers safety precautions and meter category ratings. (Replaces ELT-10049).

ELT 10202 Alternating Current (F,W,S) 0.7

Focuses on forces that are characteristic of alternating-current systems and the application of Ohm's law to AC circuits. (Replaces ELT-10056).

ELT 10203 Motors: Theory and Application (F,W,S) 0.8

Covers AC and DC motors, including the main components, circuits, and connections. (Replaces ELT-10057).

ELT 10204 Electrical Lighting (F,W,S) 0.6

Introduces the basic principles of human vision and the characteristics of light. Focuses on the handling and installation of various types of lamps and lighting fixtures. (Replaces ELT-10067).

ELT 10205 Conduit Bending (F,W,S) 0.6

Covers all types of bends in all sizes of conduit up to 6 inches. Focuses on mechanical, hydraulic, and electrical benders. (Replaces ELT-10059).

ELT 10206 Pull and Junction Boxes (F,W,S) 0.5

Driven by the NEC®. Explains how to select and size pull boxes, junction boxes, and handholes. (Replaces ELT-10060).

ELT 10207 Conductor Installations (F,W,S) 0.4

Covers the transportation, storage, and setup of cable reels; methods of rigging; and procedures for complete cable pulls in raceways and cable trays. (Replaces ELT-10061).

ELT 10208 Cable Tray (F,W,S) 0.3

Focuses on NEC® installation requirements for cable tray, including cable installations. (Replaces ELT-10062).

ELT 10209 Conductor Terminations and Splices (F,W,S) 0.3

Describes methods of terminating and splicing conductors of all types and sizes, including preparing and taping conductors. (Replaces ELT-10063).

ELT 10210 Grounding and Bonding (F,W,S) 0.6

Focuses on the purpose of grounding and bonding electrical systems. Thoroughly covers NEC® requirements. (Replaces ELT-10058).

ELT 10211 Circuit Breakers and Fuses (F,W,S) 0.5

Describes fuses and circuit breakers along with their practical applications. Also covers sizing. (Replaces ELT-10065).

ELT 10212 Control System and Concepts (F,W,S) 0.5

Gives basic descriptions of various types of contactors and relays along with their practical applications. (Replaces ELT-10066).

ELT 14000 Solar/Wind Energy Systems (F,W,S) 3 (2-2)

This course is designed to teach students how solar and wind energies are converted, transmitted and stored. Topics include design, components, installation, power distribution and maintenance of solar/wind energy systems. Theory and hands- on instruction include both residential and industrial renewable energy generation systems that are commonly used to provide the electrical needs of consumers in today's markets. Prerequisites: ELT-10103, ELT-10104, and ELT-10112, OR OPE-14000 OR AUT-16401.

ELT 20303 Load Calculations - Branch Circuits (F,W,S) 0.7

Explains how to calculate branch circuit and feeder loads for various residential and commercial applications. (Replaces ELT-20068).

ELT 20304 Conductor Selection and Calculation (F,W,S) 0.6

Covers the various factors involved in conductor selection, including insulation types, current-carrying capacity, temperature ratings, and voltage drop. (Replaces ELT-20069).

ELT 20305 Practical Applications of Lighting (F,W,S) 0.5

Covers specific types of incandescent, fluorescent, and HID lamps, as well as ballasts, troubleshooting, and various types of lighting controls. (Replaces ELT-20082).

ELT 20306 Hazardous Locations (F,W,S) 0.6

Covers the NEC® requirements for equipment installed in various hazardous locations. (Replaces ELT-20080).

ELT 20307 Overcurrent Protection (F,W,S) 1

Explains how to size and select circuit breakers and fuses for various applications. Also covers short circuit calculations and troubleshooting. (Replaces ELT-20307).

ELT 20308 Distribution Equipment (F,W,S) 0.5

Discusses switchboards and switchgear, including installation, grounding, and maintenance requirements. This module includes blueprints. (Replaces ELT-20073).

ELT 20309 Transformers (F,W,S) 0.5

Discusses transformer types, construction, connections, protection, and grounding. (Replaces ELT-20074).

ELT 20310 Commercial Electrical Services (F,W,S) 0.4

Covers the components, installation considerations, and NEC® requirements for various commercial services.

ELT 20311 Motor Calculations (F,W,S) 0.5

Covers calculations required to size conductors and overcurrent protection for motor applications. (Replaces ELT-20076).

ELT 20312 Voice, Data, and Video (F,W,S) 0.4

Covers installation, termination, and testing of various voice, data, and video cabling systems.

ELT 20313 Motor Controls (F,W,S) 0.5

Provides information on selecting, sizing, and installing motor controllers. Also covers control circuit pilot devices and basic relay logic. (Replaces ELT-20078).

ELT 20404 Load Calculations - Feeder and Serv (F,W,S) 0.8

Topics include basic calculation procedures for commercial and residential applications. (Replaces ELT-20081).

ELT 20405 Health Care Facilities (F,W,S) 0.4

Covers the installation of electric circuits in health care facilities, including the requirements for life safety and critical circuits.

ELT 20406 Standby and Emergency Systems (F,W,S) 0.4

Explains the NEC® requirements for electric generators and storage batteries. (Replaces ELT-20083).

ELT 20407 Basic Electronic Theory (F,W,S) 0.4

Explains the function and operation of basic electronic devices, including semiconductors, diodes, rectifiers, and transistors. (Replaces ELT-20084).

ELT 20408 Fire Alarm Systems (F,W,S) 0.6

Covers fire alarm control units, Digital Alarm Communicator Systems (DACS), wiring for alarm initiating and notification devices, and alarm system maintenance. (Replaces ELT-20085).

ELT 20409 Specialty Transformers (F,W,S) 0.4

Covers various types of transformers and their applications. Also provides information on selecting, sizing, and installing these devices. (Replaces ELT-20086).

ELT 20410 Advanced Motor Controls (F,W,S) 0.8

Discusses applications and operating principles of solid-state controls, reduced-voltage starters, and adjustable frequency drives. Also covers basic troubleshooting procedures. (Replaces ELT-20087).

ELT 20411 HVAC Controls (F,W,S) 0.6

Provides a basic overview of HVAC systems and their controls. Also covers electrical troubleshooting and NEC® requirements. (Replaces ELT-20088).

ELT 20412 Heat Tracing and Freeze Protection (F,W,S) 0.4

Covers various heat tracing systems along with their applications and installation requirements. (Replaces ELT-20090).

ELT 20413 Motor Operation and Maintenance (F,W,S) 0.4

Covers motor cleaning, testing, and preventive maintenance. Also describes basic troubleshooting procedures.

ELT 20414 Medium Voltage Termination/Splices (F,W,S) 0.4

Offers an overview of the NEC® and cable manufacturers' requirements for medium-voltage terminations and splices.

ELT 20415 Special Locations (F,W,S) 0.8

Describes the NEC® requirements for selecting and installing equipment, enclosures, and devices in various special locations including places of assembly, theaters, carnivals, agricultural buildings, marinas, temporary installations, wired partitions and swimming pools.

ELT 20416 Introductory Skills for Crew Leader (F,W,S) 0.6

Teaches the basic leadership skills required to supervise personnel. Discusses principles of project planning, scheduling, estimating, management, and presents several case studies for student participation.

ELT 20418 Michigan Laws & Rules (F,W,S) 0.6

The requirements of the Electrical Administrative Act (217) and Michigan 2008 Electrical Code rules, Part 8 will be discussed as to how these laws apply to safeguard person and property in electrical installations in the State of Michigan. Student will also learn how to fill out application forms for electrical licensure and the permitting process. Prerequisite: ELT-10105

EMS (EMERGENCY MEDICAL SERVICES)

EMS 10000 Basic Emergency Medical Technician (F) 10 (10-0)

The Basic Emergency Medical Technician course is a Michigan Department of Community Health approved course that provides the information and experience necessary to prepare the student to take the National Registry Basic EMT Certification Exam. Students learn the role and responsibilities of an emergency medical technician in providing emergency care. This program covers anatomy and physiology, initial patient survey and triage, airway management, oxygen therapy, and treatment of bleeding, shock, cardiac arrest, fractures, spinal injuries and other medical emergencies. Additional areas of study include automated external defibrillation,multi-lumen airways and general pharmacology. Prerequisites: MTH-07300/07400, ENG-09000 and ENG-09601 or demonstrated competency.

EMS 10100 Clinical I (F) 1 (0-3)

This course is designed for students to observe and participate in the clinical experiences in both the pre-hospital and hospital settings. Students must complete a minimum of thirty-two hours in the hospital emergency room and at a pre-hospital life support agency. Prerequisites: MTH 07300/07400, ENG-09000 and ENG-09601 or demonstrated competency.

EMS 11000 Emergency First Responder (S) 3.75 (3.75-1)

This course will provide the student with the knowledge and skills necessary to manage ill or injured victims at the scene of an emergency until the arrival of ambulance personnel. All students who successfully complete this course will be eligible to take the NREMT Emergency Medical Responder test to obtain a state of Michigan MFR License.

EMS 20000 Intro to Emergency Medicine (F) 4 (4-0)

This course is the beginning of the Paramedic portion of the EMS program. Topics covered include EMS safety, well being, roles responsibiolity, illness/injury prevention, legal issues, ethics, medical terminology, anatomy and physiology, pathophysiology, life span development, public health, basic pharmacology principles, medications and pharmacology. Prerequisites: EMS-10000 and EMS-10100. Co-requisites: EMS-20100 and EMS-20200.

EMS 20100 Pharmacology (F) 3.5 (2.5-1)

This course covers medications and pharmacology, drug calculations, medicine administration, IV/IO access, airway anatomy and physiology, oxygen administration, intubation, and CPAP/capnography. Prerequisites: EMS-10000 and EMS-10100. Co-requisites: EMS-20000 and EMS-20200.

EMS 20200 Patient Assessment (F) 2.75 (2-0.75)

This course covers communication, history taking, patient assessment, and communication/documentation for Paramedics. Prerequisites: EMS-10000 and EMS-10100. Co-requisites: EMS-20000 and EMS-20100.

EMS 20300 Medical/Surgical (W) 5 (5-1)

This course introduces students to concepts focusing on how the client responds to alterations in health. Course content includes ears, eyes, nose, throat, pulmonology, cardiology, neurology, endocrinology/nutrition, immune system, GI systems, renal, urogenital, musculoskeletal/skin, toxicology, infectious disease, psychiatric/drug abuse, blood disorders/shock. Prerequisites: EMS-10000, EMS-10100, EMS-20000, EMS-20100 and EMS-20200. Co-requisites: EMS-20400 and EMS-20500.

EMS 20400 Special Considerations (W) 2.5 (2.5-0.7)

This course introduces students to concepts related to obstetrics/gynecology, neonatology, pediatrics, geriatrics, abuse/assault, special needs and social issues/chronic illness. Prerequisites: EMS-10000, EMS-10100, EMS-20000, EMS-20100 and EMS-20200. Co-requisites: EMS-20300 and EMS-20500.

EMS 20500 Clinical II (W) 3 (0-9.2)

This course is designed for students to observe and participate in clinical experiences in both the pre-hospital and hospital settings. Student must complete a minimum of 150 hours in the hospital emergency room, OB and Surgery. Prerequisites: EMS-10000, EMS-10100, EMS-20000, EMS-20100 and EMS-20200. Co-requisites: EMS-20300 and EMS-20400.

EMS 20600 Trauma (S) 0 (4.25-2.5)

This course focuses on skills required when treating trauma situations. Topics include bleeding, soft tissue injuries, burns, head/face trauma, spinal trauma, thoracic trauma, abdominal trauma, musculoskeletal trauma, environmental emergencies, farm/wilderness emergencies, trauma treatment transport, deployment operations, crime scene, dispatch, vehicle ops, rescue, hazardous material/disaster response, tactical EMS. Prerequisites: EMS-10000, EMS-10100, EMS-20000, EMS-20100, EMS-20200, EMS-20300, EMS-20400 and EMS-20500. Co-requisite: EMS-20700.

EMS 20700 Clinical III (S) 2 (0-6)

This course is designed for students to observe and participate in the clinical experiences in both the pre-hospital and hospital settings. Students must complete a minimum of 100 hours in the hospital emergency room, OB and Surgery. Prerequisites: EMS-10000, EMS-10100, EMS-20000, EMS-20100, EMS-20200, EMS-20300, EMS-20400 and EMS-20500. Co-requisite: EMS-20600.

EMS 20800 EMS Capstone (F) 7 (5.5-1.5)

This capstone course will build upon the entire didactic portion of the EMS program. It will provide the core certificate courses such as CPR for the Healthcare Provider, ACLS (Advanced Cardiac Life Support), PALS (Pediatric Advanced Life Support) and PHTLS (Pre-Hospital Trauma Life Support), which will be the requirement for most EMS jobs. This course will also be a complete review of everything the student has learned and prepare him/her for the Final Exam and the National Registry Exam. Prerequisites: EMS-10000, EMS-10100, EMS-20000, EMS-20100, EMS-20200, EMS-20300, EMS-20400, EMS-20500, EMS-20600 and EMS-20700. Co-requisite: EMS-29900.

EMS 29900 Internship (F) 5.25

The externship course is a requirement of the State of Michigan which allows the student to provide pre-hospital care as a team leader with a life support agency. A licensed experienced paramedic and EMT will be with the student at all times. The student must complete 250 hours in the pre-hospital setting with a life support agency and achieve 50 patient contacts. Prerequisites: EMS-10000, EMS-10100, EMS-20000, EMS-20100, EMS-20200, EMS-20300, EMS-20400, EMS-20500, EMS-20600 and EMS-20700. Co-requisite: EMS-20800.

ENG (ENGLISH & LITERATURE)

ENG 08602 Basic Reading Skills (F,W) 3

This course offers instruction in basic reading techniques to improve comprehension, vocabulary, and critical thinking skills. Prerequisite: COMPASS Reading score of 31-55.

ENG 08805 Writing Mechanics (F,W) 2

This course provides individualized and/or small group instruction in basic writing skills. Prerequisite: permission of the instructor.

ENG 09000 College Writing Skills (F,W,S) 3

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-10303 for students who have not demonstrated proficiency on the English placement test.

ENG 09601 College Reading Skills (F,W,S) 3

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.

ENG 10303 English Composition I (F,W,S) 3 (3-0)

Composition I teaches the writing skills necessary to succeed in communicating in career, college or life. Students will write and revise four formal, structured essays, two impromptu essays, and many informal composition works. The course will introduce students to research skills through a short research project applying writing and computer skills. Prerequisite: ENG-09000 or a satisfactory writing sample, and ENG-09601 or a satisfactory reading placement. (Communication)

ENG 10403 English Composition II (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. Prerequisite: Satisfactory (C- or above) completion of ENG-10303. (Communication)

ENG 10602 Technical Writing (F,W,S) 3 (3-0)

A course which introduces effective organizational writing with a technical focus. Students write documents which meet the information needs of business, industrial, professional, and government organizations. Assignments include business letters, memorandums, job applications materials, technical descriptions, instructions, proposals, and short and long reports. The course provides practice in document design, library methods, research techniques, and documented research writing. Prerequisite: Satisfactory (C- or above) completion of ENG-10303.

ENG 11800 Intro Technical & Prof Writing (F,W) 3 (3-0)

ENG-11800 is an introduction to technical and professional communication for students pursuing applied science degrees and certificates in career and technical programs. The course is intended to meet the needs of students who wish to gain useful practice in professional communication required in organizations and the work place. This course is not intended for transfer students. Prerequisites: ENG-09601 (College Reading Skills) and ENG-09000 (College Writing Skills) or demonstrated competency. Corequisite: Enrollment in a Career Technical Program

ENG 21400 Intro to Literature (W) 3 (3-0)

This course considers the expression in literature of such universal themes in human experience as the loss of innocence, the search for identity, the desire for happiness, and the confrontation with death through the study of selected essays, fiction, poetry, and drama. Prerequisite: Satisfactory (C- or above) completion of ENG-10303 or permission of instructor. (Humanities Credit - Literature) Note: Offered in Winter of even-numbered years.

ENG 21500 Creative Writing (F,W) 3 (3-0)

This course provides study and practice of imaginative writing in poetry and fiction. 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-10303 or permission of instructor. (Humanities Credit)

ENG 22300 Intro to Poetry (F) 3 (3-0)

This course provides discussion, analysis, and critical evaluation of selected works by various poets. Prerequisite: Satisfactory (C- or above) completion of ENG-10303 or permission of instructor. (Humanities Credit - Literature)

ENG 22500 Contemporary Literature (S) 3 (3-0)

Students will study works of selected authors of the 20th century. Prerequisite: Satisfactory (C- or above) completion of ENG-10303 or permission of instructor. (Humanities Credit - Literature) Note: Offered in Summer of odd-numbered years.

ENG 22800 Mythology (F) 3 (3-0)

A cross-cultural and historical survey of the world's myths, the class will also consider such questions as the meaning of myth, the purposes and functions of myth, theories of how myths originate, and ways that myths have been analyzed and interpreted. Prerequisite: Satisfactory (C- or above) completion of ENG-10303 or permission of instructor. (Humanities Credit - Literature) Note: Offered in Fall of odd-numbered years.

ENG 23000 American Literature Before 1865 (F) 3 (3-0)

This course surveys the growth and development of America's literature from its beginnings to the Civil War. Representative authors may include Bradstreet, Franklin, Irving, Cooper, Poe, Hawthorne, Thoreau, Melville, Whitman, and others. Prerequisite: Satisfactory (C- or above) completion of ENG-10303 or permission of instructor. (Humanities Credit - Literature)

ENG 23100 American Literature After 1865 (W) 3 (3-0)

This course is a survey of the growth and development of America's literature from the Civil War to the present day. Representative authors may include Twain, James, Frost, Eliot, O'Neill, Hemingway, Faulkner, Welty, Bellow, and others. Prerequisite: Satisfactory (C- or above) completion of ENG-10303 or permission of instructor. (Humanities Credit - Literature)

ENG 23300 British Literature I (F) 3 (3-0)

A survey of British Literature from its beginnings through the 18th Century. Prerequisite: Satisfactory (C- or above) completion of ENG-10303 or permission of instructor. Note: Offered in even-numbered years. (Humanities Credit-Literature)

ENG 23400 British Literature II (W) 3 (3-0)

A survey of British Literature from Romanticism to the present. Prerequisite: Satisfactory (C-or above) completion of ENG-10303 or permission of instructor. (Humanities credit--Literature) Note: Offered in Winter of odd-numbered years.

ENG 251-- Topics in Literature (S) 3 (3-0)

This course is a study of a significant literary topic and may cover genres, literary figures, subjects, or themes. The class may be repeated for credit if the topics are different. Prerequisite: Satisfactory (C- or above) completion of ENG-10303 or permission of instructor. Note: offered in even-numbered years. (Humanities Credit - Literature)

ESL (ENGLISH AS A SECOND LANGUAGE)

ESL 01000 Eng as a 2nd Lang/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 Eng as a 2nd Lang/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 Eng as a 2nd Lang/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-10303. Prerequisite: ESL-05000 or permission of instructor, based on a personal interview and a writing sample (placement test).

FFT (FIRE FIGHTER TRAINING)

FFT 20700 Firefighter I & II (F,W) 14

This course first provides an introduction to basic fire suppression, prevention procedures and skill development, and then deals with advanced fire suppression techniques. This course is for students who are currently employed by a Michigan Fire Marshall recognized fire department, or currently seeking employment, and/or volunteer in a recognized fire district. This course meets the state-mandated requirements for preparing students to take the exam for state certification for entry-level on-call or volunteer fire fighters. Michigan State law mandates that persons taking this course must be at least 18 years of age and have a valid Michigan Driver's License.

GEL (GEOLOGY)

GEL 10500 Physical Geology (F) 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)

GEL 23000 Prehistoric Life (W) 4 (3-2)

An introduction to the three billion year history of life on earth. Topics include the origin of life, mass extinctions, history of dinosaurs and evolution of mammals Prerequisite: ENG-09600. (Science Credit)

GEO (GEOGRAPHY)

GEO 10000 World Geography (F,W,S) 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-10303. (Social Science Credit)

HIS (HISTORY)

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. Prerequisites: ENG-09000 and ENG-09601 or demonstrated competency. (Humanities Credit)

HIS 10600 Hist 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. Prerequisites: ENG-09000 and ENG-09601 or demonstrated competency. (Humanities 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. Prerequisites:ENG-09000 and ENG-09601 or demonstrated competency. (Humanities 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. Prerequisites: ENG-09000 and ENG-09601. (Humanities Credit)

HIS 20300 Michigan History (F) 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-10303. (Humanities Credit)

HIS 20400 The American Civil War (W) 3 (3-0)

This course examines the origins and outcomes of the sectional conflict that split the United States in two from 1861 to 1865. Emphasis is given to social, political, and military events from the 1840s to the end of Reconstruction. Prerequisite or corequisite: ENG-10303. (Humanities Credit)

HIT (HEALTH INFORMATION TECHNOLOGY)

HIT 10600 Intro to Health Information Managem (F,W,S) 3 (3-0)

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.

HIT 20000 Intro to Electronic Health Records (F,W,S) 3 (3-0)

Introduces students to health informatics, with primary focus on the function of electronic health records (EHR) systems in health care delivery. Emphasis will be directed toward interdisciplinary use of an EHR to enhance quality and safety in patient care. Students will learn to use EHR software, access a patient account, create a patient file, and to enter and retrieve data. Compliance with HIPAA and confidentiality will be introduced. Prerequisite: OIS-10600 or HIT-10600.

HIT 21100 Healthcare Management & Supervision (F,W,S) 3 (3-0)

This course is a concentrated application of various tasks that a medical office assistant performs including administrative responsibilities, preparing and organizing patient charts, medical ethics and law, telephone procedures, appointments, records management, billing and coding. The use of the computer is emphasized in each of these applications. Medical office scenarios and simulations are used throughout the course to better familiarize the student with the everyday workings of the medical office setting and gain a better understanding of EHR (Electronic Health Records). Prerequisites: ENG-10303, HIT-10600 or OIS-10600, and either OIS-18000 or HIT-23300 (formerly OIS-23300).

HIT 21300 ICD-10-CM (F,W,S) 3 (3-0)

The focus of this class is learning the coding guidelines for International Classification of Diseases-10th edition, Clinical Modification (ICD-10-CM) and then applying the guidelines to code patient diagnosis. Students will identify appropriate ICD diagnosis codes, complications and comorbidities. Co-requisite: ALH-10101.

HIT 21600 CPT Coding (F,W,S) 3 (3-0)

This course includes the study and practical application of coding medical diagnoses and procedures from medical record documentation using CPT-4 coding systems. The student will review medical records to identify the key components of documentation that are used in the coding and documentation process. Prerequisite: OIS-21300 or HIT-21300.

HIT 23000 Health Statistics & Analysis (F,W,S) 3 (0-3)

This course is designed to provide health care students with the rudimentary understanding of the terms, definitions and formulae used in computing health care statistics and to self-testing opportunities and applications of the statistical formulae. Prerequisite: MTH-07300/07400 or competency.

HIT 23100 Health Information Management II (F,W,S) 2 (2-0)

This course will provide a comprehensive understanding of the history, theory, and potential benefits of health information management systems. Students will apply critical thinking to solve a problem or explore a scenario, encouraging the student to learn by doing. Prerequisite: OIS-10600 or HIT-10600.

HIT 23200 Health Data Content & Structure (F,W,S) 3 (3-0)

This course is designed to focus on primary health records (with coverage both in paper and electronic health records) and secondary health records to operate healthcare facilities and improve patient care. Students will apply critical thinking to solve a problem or explore a scenario, encouraging the student to learn by doing. Prerequisite: CIS-10500 and either OIS-23100 or HIT-23100.

HIT 23300 Revenue Cycle & Reimbursement (F,W,S) 3 (3-0)

This course is designed to give health information professionals a better understanding and participate in revenue cycle management in their facilities by providing examples of how facilities can move from managing the revenue cycle by department to an interdisciplinary approach to gain significant improvement on the timely flow of revenue. Students will also be reviewing health insurance forms and abstracting pertinent information for billing purposes. Students will prepare and organize patient charts, bills, ledgers, and encounter forms. Prerequisite: OIS-21300 or HIT-21300; Co-requisite: HIT-21600 (previously OIS-11300).

HIT 29900 Internship-Health Information Tech (F,W,S) 6

Six to fifteen weeks of professional practice experience in health care settings (240 internship hours total). Topics to be covered include quality assurance, release of information, coding, abstracting, utilization management, storage and retrieval, computer applications in health information practice, tumor registry, and professional interaction with health care facility and medical staff. Prerequisite: Completion of all other required courses for the degree, completion of all HIT and OIS courses with a minimum grade of B-, an overall program GPA of 2.3 and permission of the HIT/OIS advisor.

HIT 29905 Internship-Medical Billing/Coding (F,W,S) 3

The internship consists of 108 hours of supervised office work experience in a facility. Some internships may have an option of face-to-face or virtual learning depending upon the certificate or degree program. A 20-hour online career workshop consisting of research, portfolios, interviewing, networking, time and stress management, resume writing and cover letters will take place during the first four weeks of the semester. Students will complete a final office skills competency test at the end of the internship. Prerequisite: Completion of all other required courses for the certificate, completion of all HIT and OIS courses with a minimum grade of B-, an overall program GPA of 2.3, and permission of the HIT/OIS advisor.

HSP (HOSPITALITY MANAGEMENT)

HSP 10000 Introduction to Hospitality (F) 3 (3-0)

This course is designed to build an understanding of the hospitality industry through an examination of the segments of the industry and appraisals of the management skills that future managers need to succeed. The student will also gain an insight into the development of the industry and explore the multiple career opportunities in various types of hotels and restaurants; it includes trends and explains the importance of the various segments as they work together to provide quality guest service.

HSP 10100 Sanitation (F) 2 (2-0)

This course develops the knowledge of basic principles of sanitation and safe food handling in hospitality operations. This course provides foodservice personnel with the importance of food safety, good personal hygiene, time and temperature control, preventing cross-contamination, cleaning and sanitizing, safe food preparation, receiving and storing food, methods of thawing, cooking, cooling and reheating food, HACCP (Hazard Analysis and Critical Control Points) and food safety regulations. Students can earn the ServSafe Food Protection Manager Certification, accredited by the American National Standards Institute (ANSI)-Conference for Food Protection (CFP).

HSP 10200 Housekeeping Management (W) 3 (3-0)

This course assists students with the development of practical applications of housekeeping operation including the planning, organizing, staffing, and control techniques required to assure quality service. The course examines appropriate personal and professional practices, career opportunities, and organizational structures within a housekeeping department.

HSP 20100 Food and Beverage Management (W) 3 (3-0)

This course is a comprehensive review of operations pertaining to food and beverage management. Students will examine various responsibilities, management issues, and operations as they pertain to food and beverage. Students will engage in the theory and practice of service fundamentals. This course also provides an overview of production, origins, purchasing, and responsible service of wine, spirits, and beers. It is designed to move the student through the various management steps involved in food service. Food production issues are studied from a managerial point of view. Standards in food production and beverage service are the focal area of the course. Prerequisite: HSP-10100.

HSP 20300 Hospitality Human Resource Mgmt (F) 3 (3-0)

This course explores the supervisor's role as a leader, coach and personnel manager. Topics include managing culturally diverse workers plus recruitment, selection, orientation, training, evaluating, and disciplining employees. Retention of employees, sexual harassment, and worker motivation will also be covered.

HSP 29900 Hospitality Internship (F,W,S) 3 (3-0)

The internship is designed to provide students with an opportunity to earn credit while obtaining meaningful discipline-related work experience outside the classroom setting. Prerequisites: HSP-10000 and HSP-10100

HUM (HUMANITIES)

HUM 20500 The Individual and Society (F,W) 3 (3-0)

This course examines the perspectives of many social sciences and cultures in order to appreciate the mosaic of American and other societies from a variety of points of view. As several key current social issues and controversies are studied, students will work to illuminate an understanding of their own place in their communities, the larger society, and the modern world. Prerequisites: ENG-09000 and ENG-09601 or demonstrated competency. (Humanities Credit)

HVC (HEATING/VENTILATION/AC/REFRIGERATION)

HVC 10200 Commercial Airside Systems (F,W,S) 0.5

Describes the systems, equipment, and operating sequences used in a variety of commercial airside system configurations, such as constant volume single-zone and multi-zone, VVT, VAV, and dual-duct VAV. (Replaces HVC-20149).

HVC 10201 Chimneys, Vents, and Flues (F,W,S) 0.2

Covers the principles of venting fossil-fuel furnaces and the proper methods for selecting and installing vent systems for gas-fired heating equipment. (Replaces HVC-10103).

HVC 10202 Intro to Hydronic Systems (F,W,S) 0.4

Introduces hot water heating systems, focusing on safe operation of the low-pressure boilers and piping systems commonly used in residential applications.

HVC 10203 Air Quality Equipment (F,W,S) 0.2

Covers the basic principles, processes, and devices used to control humidity and air clean-lines, as well as devices used to conserve energy in HVAC systems. (Replaces HVC-10109).

HVC 10204 Leak Detect/Evacuate/Recover/Charge (F,W,S) 0.8

Covers the basic refrigerant handling and equipment servicing procedures to service HVAC systems in an environmentally safe manner. (Replaces HVC-10113).

HVC 10205 Alternating Current (F,W,S) 0.3

Covers transformers, single-phase and three-phase power distribution, capacitors, the theory and operation of induction motors, and the instruments and techniques used in testing AC circuits and components. Also reviews electrical safety. (Replaces HVC-10105).

HVC 10206 Basic Electronics (F,W,S) 0.2

Explains the theory of solid-state electronics, as well as the operation, use, and testing of the various electronic components used in HVAC equipment. Includes an introduction to computers. (Replaces HVC-10106).

HVC 10207 Control Circuit Troubleshooting (F,W,S) 1.2

Covers the operation, testing, and adjustment of conventional and electronic thermostats, as well as the operation of common electrical, electronic, and pneumatic circuits used to control HVAC systems. Also explains how to analyze circuit diagrams for electronic and microprocessor-based controls used in comfort heating and cooling equipment and how to troubleshoot systems that use these controls. (Replaces HVC-10123).

HVC 10208 Troubleshooting Gas Heating (F,W,S) 0.5

Covers tools, instruments, and techniques used in troubleshooting gas heating appliances, including how to isolate and correct faults. (Replaces HVC-20141).

HVC 10209 Troubleshooting Cooling (F,W,S) 0.8

Covers the basic techniques and equipment used in troubleshooting cooling equipment, focusing on analyzing system temperatures and pressures in order to isolate faults. (Replaces HVC-20144).

HVC 10210 Heat Pumps (F,W,S) 0.8

Covers the principles of reverse cycle heating, describes the operation of the various types of heat pumps, and describes how to analyze heat pump control circuits. Includes heat pump installation and service procedures. (Replaces HVC-10112).

HVC 10211 Installation/Maintenance Practices (F,W,S) 0.7

Covers the application and installation of various types of fasteners, gaskets, seals, and lubricants, as well as the installation and adjustment of different types of belt drives, bearings, and couplings. Includes job documentation and customer relations. (Replaces HVC-10121).

HVC 10212 Sheet Metal Duct Systems (F,W,S) 0.2

Covers layout, fabrication, installation, and insulating sheet metal ductwork. Also includes selection and installation of registers, diffusers, dampers, and other duct accessories

HVC 10213 Fiberglass/Flex Duct Systems (F,W,S) 0.2

Covers the layout, fabrication, installation, and joining of fiberglass ductwork and fittings. Describes the proper methods for attaching and supporting flex duct.

HVC 11000 Intro to HVAC (F,W,S) 0.3

Covers the basic principles of heating, ventilating, and air conditioning, career opportunities in HVAC, and apprenticeship programs. (Replaces HVC-10093).

HVC 11001 Trade Mathematics (F,W,S) 0.4

Explains how to solve problems involving the measurement of lines, area, volume, weights, angles, pressure, vacuum, and temperature. Also introduces scientific notation, powers, roots, and basic algebra and geometry. (Replaces HVC-10094).

HVC 11002 Copper and Plastic Piping Practices (F,W,S) 0.2

Covers the selection, preparation, joining, and support of copper and plastic piping and fittings. (Replaces HVC-10096).

HVC 11003 Soldering and Brazing (F,W,S) 0.3

Covers tools, materials, and safety precautions and depicts step-by-step procedures for soldering and brazing piping. (Replaces HVC-10097).

HVC 11004 Ferrous Metal Piping Practices (F,W,S) 0.2

Covers various types of iron and steel pipe and fittings, and provides step-by-step instructions for cutting, threading, and joining ferrous piping. (Replaces HVC-10098).

HVC 11005 Basic Electricity (F,W,S) 0.5

Teaches power generation and distribution, electrical components, DC circuits, and electrical safety. (Replaces HVC-10099).

HVC 11006 Intro to Cooling (F,W,S) 1.2

Covers the basic principles of heat transfer, refrigeration, and pressure-temperature relationships and describes the components and accessories used in air conditioning systems. (Replaces HVC-10100).

HVC 11007 Intro to Heating (F,W,S) 0.6

Covers heating fundamentals, types and designs of furnaces and their components, and basic procedures for installing and servicing furnaces. (Replaces HVC-10101).

HVC 11008 Air Distribution Systems (F,W,S) 0.4

Describes air distribution systems and their components, air flow measurement, ductwork installation principles, and the use of instruments for measuring temperature, humidity, pressure, and velocity. (Replaces HVC-10120).

HVC 14000 Geothermal Heat Pump Systems (F,W,S) 3 (2-2)

This course is designed to teach students the theory, design, installation and maintenance of water source geothermal heating/cooling systems. Theory concepts include open/closed loop systems and lab application with common geothermal systems. Prerequisites: HVC-11005, HVC-11006, HVC-11007 and HVC-10210.

HVC 20300 Refrigerants and Oils (F,W,S) 0.4

Covers characteristics and applications of the current generation of refrigerants, including both pure and blended refrigerants. Also provides extensive coverage of lubricating oils used in refrigeration systems.

HVC 20301 Compressors (F,W,S) 0.6

Explains the operating principles of the different types of compressors used in comfort air conditioning and refrigeration systems, along with basic installation, service, and repair procedures for these compressors. (Replaces HVC-10111).

HVC 20302 Metering Devices (F,W,S) 0.3

Covers the operating principles, applications, installation, and adjustment of the various types of fixed and adjustable expansion devices used in air conditioning equipment. (Replaces HVC-10110).

HVC 20303 Retail Refrigeration (F,W,S) 0.8

Introduces the product refrigeration components and systems, such as the reach-in coolers and freezers commonly used in markets.

HVC 20304 Commercial Hydronic Systems (F,W,S) 0.5

Covers the various types of boilers, components, and piping systems used in commercial heating applications. Also introduces chilled water systems and their components.

HVC 20305 Steam Systems (F,W,S) 0.4

Covers operating principles, piping systems, components, and preventive maintenance requirements of steam systems and steam traps.

HVC 20306 Planned Maintenance (F,W,S) 0.8

Describes the purpose of planned maintenance and outlines the procedures for servicing gas and oil furnaces, electric heating equipment, cooling equipment, and heat pumps. (Replaces HVC-20140).

HVC 20307 Water Treatment (F,W,S) 0.4

Covers the kinds of water problems encountered in heating and cooling systems and identifies various water treatment methods. (Replaces HVC-20132).

HVC 20308 Troubleshooting Electronic Controls (F,W,S) 0.3

Explains how to analyze circuit diagrams for electronic and microprocessor-based controls used in comfort heating and cooling equipment and how to troubleshoot systems that use these controls and equipment. (Replaces HVC-20147).

HVC 20309 Troubleshooting Oil Heating (F,W,S) 0.4

Covers how to identify the common causes of problems in oil furnaces and offers hands-on experience in isolating and correcting oil furnace malfunctions. (Replaces HVC-20143).

HVC 20310 Troubleshooting Heat Pumps (F,W,S) 0.5

Reviews heat pump operation and heat pump control circuits, including how to isolate and correct faults in the heating, cooling, auxiliary heat, and defrost functions of heat pumps. (Replaces HVC-20145).

HVC 20311 Troubleshooting Accessories (F,W,S) 0.4

Provides hands-on lab sessions on how to troubleshoot humidifiers, electronic air cleaners, economizers, zone controls, and heat recovery ventilators. (Replaces HVC-20146).

HVC 20400 Construction Drawing/Specification (F,W,S) 1

Covers how to interpret the various drawings used in commercial construction, including mechanical drawings, specifications, shop drawings, and as-builts and to perform takeoff procedures for equipment, fittings, ductwork and other components. (Replaces HVC-20128).

HVC 20401 Air Properties and System Balancing (F,W,S) 0.8

Covers air properties and gas laws, as well as the use of psychrometric charts. It covers the tools, instruments, and methods used in balancing an air distribution system. (Replaces HVC-20150).

HVC 20402 Indoor Air Quality (F,W,S) 0.6

Defines the issues associated with indoor air quality and its affect on the health and comfort of building occupants. Provides guidelines for performing an IAQ survey and covers the equipment and methods used to monitor and control indoor air quality. (Replaces HVC-20129).

HVC 20403 Energy Conservation Equipment (F,W,S) 0.4

Covers the various heat recovery/reclaim devices, along with other energy recovery equipment used to reduce energy consumption in HVAC systems. (Replaces HVC-20130).

HVC 20404 Building Management Systems (F,W,S) 0.7

Explains how computers and microprocessors are used to manage zoned HVAC systems. This module has been updated to reflect new system architecture, advances in network protocols and systems controllers, and communication via Internet and wireless. (Replaces HVC-20131).

HVC 20405 System Start-Up and Shut-Down (F,W,S) 0.9

Covers procedures for the startup of hot water, steam heating, chilled water, and forced-air distribution systems. Emphasis is on startup after initial equipment installation or after an extended period of shutdown. Includes procedures for preparing these systems for extended shutdown. (HVC-20133).

HVC 20406 Heating/Cooling System Design (F,W,S) 1

Identifies and explains the factors that affect heating and cooling loads, describes the process by which heating and cooling loads are calculated, and shows how load calculations are used in the selection of heating and cooling equipment. Covers types of duct systems and their selection, sizing, and installation requirements. (Replaces HVC-20134).

HVC 20407 Commercial/Industrial Refrigeration (F,W,S) 0.9

This module expands the study of product and process refrigeration begun in Level 3. It deals with the type of systems used in cold storage and food processing facilities, as well as transportation refrigeration. (Replaces HVC-20135).

HVC 20408 Alternative Heat/Cool Equipment (F,W,S) 0.4

Covers the variety of alternative devices that are used to reduce energy consumption, including wood, coal, and pellet-fired systems, waste-oil heaters, geothermal heat pumps, solar heating, in-floor radiant heating, and direct-fired makeup units.

HVC 20409 Introduction to Supervisory Skills (F,W,S) 0.5

Along with the principles of project planning, scheduling, and estimating, this module teaches the basic skills required for supervising personnel.

MEC (MECHATRONICS)

MEC 10000 Basic Electricity & Controls (V) 3 (2-2)

Industry relevant fundamentals of AC/DC electrical systems are introduced in subject areas including safety, electrical circuits, measurement, circuit analysis, inductance, capacitance and transformers. Relay logic control circuits are presented for students to understand in commercial and industrial applications. Additional concepts include solenoid valves, sequencing controls, time delay functions, proximity sensors, photo electric sensors and Hall-effect sensors. The learning environment will be a combination of theory based concepts and hands-on applications using industry recognized equipment and materials. Prerequisite: MTH-06300 (Basic Math) or competency.

MEC 10401 Intro to Pneumatics (F,W,S) 2

This course will teach basic pneumatics to prepare learners to work intelligently in industry with pneumatic applications. It introduces pneumatic power and takes learners through key topics and skills in pneumatic power and safety, pneumatic circuits, pneumatic schematics, the principles of pneumatic pressure and flow, and pneumatic speed control circuits. It covers pressure regulation, air filtration, how to connect pneumatic circuits, pneumatic cylinders, valves and actuators, a wide array of pneumatic applications, pressure and cylinder force, pneumatic leverage, pressure and volume, and air flow resistance.

MEC 10600 Mechanical Drives (F,W,S) 3.4 (1-4.3)

Mechanical drives introduces mechanical systems and develops fundamental knowledge of mechanical systems and practices. Covers basic safety, installation, key fasteners, power transmission systems, v-belt drives, chain drives, spur gear drives, and multiple shaft drives. Topics covered include learning how to select, install, adjust, troubleshoot and repair a range of mechanical systems which are commonly found in both automated and manual machines used in every industry around the world.

MEC 10700 Pump Systems (F,W,S) 2 (1-1)

This course will introduce the student to centrifugal pumping systems commonly found throughout industrial and commercial facilities. Coursework will include safety, pump operation, maintenance, and system design including pump selection for various applications. Laboratory activities will include pump start up, calculating head pressure, flow rates as well as disassembly and inspection.

MEC 10800 Intro to Hydraulic Systems (F,W,S) 2 (1-2)

Students will learn the history of hydraulics, the design of hydraulics circuits and the components utilized in hydraulic systems. Topics covered will include safety power units, actuators, conductors, control valves and fluid conditioning. Students will assemble various hydraulic circuits with components that are widely used throughout industry.

MEC 10901 Precision Measuring Tools (F,W,S) 2

Introduces basic measurement, precision measurement tools, and dimensional gauging. Learners will cover concepts such as S.I. Measurement, U.S. Customary Measurements, Tape Measure and Measurement Conversion. Applications taught include using a dial caliper, digital caliper, English and metric micrometer, to include outside, inside and depth. Dimensional gauging will include an introduction to gauging as well as indicator measurement, data collection, and statistical process control (SPC). Measurement Tools provides an overview of concepts in control, chart analysis and operation, geometric dimensioning and tolerancing, and location, orientation, and form tolerances.

MEC 20100 Programmable Logic Controllers (F,W,S) 3 (2-2)

The course Programmable Controller -- SLC500/01 teaches how to program, operate, and interface the SLC500/01 programmable controller and RSLinx PLC programmable software in a variety of industrial applications. Students learn industry-relevant skills including subject areas such as PLC orientation, operation, programming, motor control, discrete I/O interfacing, event sequencing, application development, timer instructions, and counter instructions,. Learners will gain knowledge in how to design, program and operate a PLC to control a number of process applications used by industries all over the world. Prerequisites: MEC-10200 and MEC-10300.

MEC 20200 Adv Controller Applications (F,W,S) 3 (1-2)

This course will teach how to design, program and operate a PLC to control a number of process applications used by industries all over the world. The skills learned are in high demand everywhere today. These skills include orientation, operation, programming, memory organization, program analysis, motor control, discrete I/O interfacing, troubleshooting, systems troubleshooting, event sequencing, application development timer instructions, counter instructions, program control instructions, and math and data move instructions.

MEC 20300 Robotic Systems (F,W,S) 2 (1-2)

Robotic systems used in modern manufacturing systems will be the focus of this course. Topics will include electromechanical and fluid power systems, sensors, controls, maintenance and troubleshooting. Students will program robots commonly used in manufacturing environments. Prerequisite: WLD-21100.

MEC 20500 Transfer Line Capstone (F,W,S) 3 (2-2)

Studies will include the operation, maintenance, troubleshooting and repair of an industrial transfer line to include a pick and place feeding station, gauging station, orientation-processing station, and a servo-robotic assembly station. With an emphasis on safety and operation, lecture and lab activities will allow students to learn and utilize the technologies that integrate industrial automated assembly found in manufacturing environments. Prerequisites: MEC-20200 and MEC-20300.

MKT (MARKETING)

MKT 11000 Prin of Selling (F) 3 (3-0)

This course covers principles and techniques employed by successful salesmen, with emphasis on how to sell rather than how to manage.

MKT 11500 Customer Relations (W) 3 (3-0)

This course examines the role of Customer Relations in the economy with emphasis on customer relations in business and organizations that have considerable dealings with the public. The class addresses the four C's of excellent customer service, dealing with difficult people, handling angry customers, developing service strategies, customer service habits to develop, do's and don'ts of customer service, customer service on the web, and culminates with the student's development of a customer relations policy and program for their 'chosen' organization.

MKT 20000 Principles of Marketing (F,W) 3 (3-0)

This course covers the managerial approach to the marketing process. This includes marketing and business management, the role of the consumer, marketing structure, merchandising, support functions, and product flow.

MKT 20200 Internet Marketing (W) 3 (3-0)

This course focuses on marketing in electronic environments primarily on the Internet, on one or more of its services (WWW, email), or offline by enterprises that produce and sell Internet-related products. The focus is on the synergy created when traditional marketing is performed in electronic environments and greatly reduce or eliminate time and space constraints, facilitate personalization and customization and allow the interoperability of computers and other devices.

MKT 20400 Advertising (W) 3 (3-0)

This course addresses the social value of advertising and its role in marketing. Analysis of behavioral scientists' findings in regard to customer appeals and motivations, window display techniques, and principles of advertising copy and layout are conducted.

MPT (MANUFACTURING TECHNOLOGY)

MPT 10272 Machine Tool Safety **0.17**

Safety is the most important concern in the machine shop. This course will give you an overview of safe work practices, safe clothing, personal safety, fire prevention in the shop, hand tool safety, and machinery safety.

MPT 10273 Identifying Surface Finishes **0.08**

This course gives consideration to surface smoothness wherever two machined surfaces come into contact with each other. This packet will help the learner identify factors which contribute to the quality of surface finish and give the learner practice in identifying surface finishes.

MPT 10274 Shop Math - Speeds and Feeds **0.21**

This course will teach the learner how to accurately calculate cutting speeds, RPM, and feeds for the purpose of cutting metal.

MPT 10275 Sharpening Drill Bits **0.25**

In this course the learner will learn how to sharpen a drill bit by hand.

MPT 10276 Drilling on a Press **0.17**

In this course the learner will be taught how to drill holes in a work piece on the drill press.

MPT 10277 Power Tap on the Drill Press **0.25**

In this course the learner will be taught the proper steps and how to power tap on the drill press.

MPT 10278 Drill Press Project **0.58**

In this course the learner will use several drilling operations to complete a drill vise to print specifications.

MPT 10279 Band Saw Blade Welding **0.25**

In this course the learner will develop the skill of welding a band saw blade.

MPT 10280 Vertical Band Saw Project **0.25**

In this course the learner will be taught how to select, mount, cut and weld band saw blades. The student will also learn how to saw pieces to meet specifications.

MPT 10281 Maintaining the Lathe **0.17**

In this course the student will be introduced to the lathe, its basic parts and accessories. The student will also learn lathe safety procedures and maintenance.

MPT 10282 Grinding Lathe Tools **0.25**

In this course the student will learn how to sharpen lathe tools.

MPT 10283 Facing on the Lathe **0.21**

In this course the student will learn how to face the ends of a work piece to a specified length.

MPT 10284 Aligning Lathe Centers **0.17**

In this course the student will learn how to align the centers of the lathe using the trial cut method.

MPT 10285 Cutting External Threads **0.5**

In this course the student will learn about threads and thread forms and how to chase an external thread.

MPT 10286 Dial In Vise/Tram in Head **0.21**

In this course the student will learn the processes of a milling machine.

MPT 10287 Fly Cutter & End Mill/Square Block **0.21**

In this course the student will learn how to square a block of material on all 6 sides.

MPT 10288 Digital Read/Drill, Tap, & Ream **0.25**

This course will teach the learner how to use the digital readout to locate part coordinates to the print specifications.

MTH (MATHEMATICS)

MTH 06300 Basic Mathematics (F,W,S) 4

Mathematical concepts involving whole numbers, fractions, decimals, percents, proportions, measurement, geometry, and elementary algebraic operations will be taught.

MTH 07300 Basic Algebra (F,W,S) 4

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. A graphing calculator is required. Prerequisite: MTH-06300 or required COMPASS test scores.

MTH 07400 Basic Algebra Lab (F,W,S) 1

This course provides instructional support for Basic Algebra (MTH-07300). Students will receive homework support and supplemental instruction. Corequisite: MTH-07300 Basic Algebra.

MTH 12000 Intermediate Algebra (F,W,S) 4 (4-0)

This course includes the study of the properties of real numbers, basic concepts of algebraic operations, solving and graphing linear and nonlinear functions, systems of equations, complex numbers, quadratic functions, factoring, rational expressions, and basic interpretations of tables and graphs of data. A graphing calculator is required. Prerequisite: requisite COMPASS test scores or MTH-07300. (Math Credit)

MTH 13000 College Algebra (F,W) 4 (4-0)

This is a one semester course designed to prepare students for the study of calculus. The topics to be covered include review of the fundamentals of algebra, relations, functions, solutions, of first- and second degree equations and inequalities, systems of equations, determinants, binomial theorem, mathematical induction, polynomial functions and theory of equations, analytic geometry and conic sections, geometric and arithmetical sequences and series, and miscellaneous topics. Calculators will be used for selected topics. 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 graphic calculator is required. Contact the mathematics department for information on calculator type. Prerequisite or corequisite: MTH-13000 (Math Credit)

MTH 20600 Application in Statistics (F,W,S) 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) 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-13000 and 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)

MUS (MUSIC)

MUS 10100 Music History & Appreciation (F,S) 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-10303. (Humanities Credit)

MUS 10400 Piano I (F) 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 10802 Contemp Acoustic Guitar Styles I (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 Contemp Acoustic Guitar Styles II (W) 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 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 12300 Jazz History & Appreciation (W) 3 (3-0)

This course is an in-depth study of America's only original art form through a historical and social perspective beginning with Blues and including Dixieland, swing, BeBop, and modern jazz. (Humanities credit)

MUS 15000 Vocal Ensemble (F,W) 1 (0-3)

Performance ensemble with an emphasis of vocal mechanics, choral blending, rehearsal technique, sight singing, and ear training. Elementary music theory will also be taught, including treble and bass note reading, note values and rhythms (simple meter), and major key signatures. Repertoire is at the discretion of the instructor and will include a variety of genres ranging from the Middle Ages and Contemporary/Popular and may include foreign language literature.

MUS 27503 Intermediate Voice (W) 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)

NUR (NURSING)

NUR 10503 Fund of Nursing Practice (F) 7 (3-10)

This is the introductory course providing a foundation upon other courses will build and expand. It will introduce the nursing student to the philosophy and objectives of practical nursing. Content includes evidence-based principles and skills associated with basic nursing practice with emphasis on safety, comfort, coping and adaptation. The student is introduced to the nursing process, basic communication skills, general assessment, death and dying, and spiritual/transcultural issues. Students will have guided learning laboratory and clinical practices in selected health care facilities/settings. The focus is application of the principles and activities concerned with basic nursing techniques that are common to the client within the health care facility. Prerequisite: Admission to the Nursing Program.

NUR 10701 Mental Health Concepts (F) 1 (1-0)

This course is designed to assist the student nurse to develop knowledge and skills for 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. The student is introduced to the nursing process applied to psychiatric nursing, therapeutic communication skills, and general assessment. Upon completion, students should be able to provide safe nursing care, incorporating the concepts identified in this course. Prerequisite: Admission to the Level I Nursing Program.

NUR 10902 Nursing Pharmacology I (F) 2 (2-0)

A course designed to introduce the student to basic concepts of drug therapy, methods of drug administration, nutritional therapies, and related nursing activities and responsibilities. The course is based on pharmacologic concepts including pharmacodynamics and pharmacokinetics. The focus of the course is on application of principles and methods of drug administration to related nursing ativities and responsibilities. Upon completion of this course, the student will be able to apply the theoretical concepts of drug therapy in the provision of safe nursing care throughout various clinical experiences with clients across the lifespan. Prerequisites: BIO-23500 and BIO-23600. Corequisite: NUR-11100.

NUR 11000 Intro to Geriatric Care (F) 1 (1-0)

This course provides information on the care of the geriatric client. Theories of aging, the physiologic and psychosocial changes, issues associated with the aging process and appropriate nursing interventions are discussed. Ethical and legal aspects of caring for the geriatric population and evidence based practice are addressed. Prerequisite: Admission to the Level 1 Nursing Program.

NUR 11100 Math for Meds (F) 1 (1-0)

Math for Meds is a topic course designed to provide nursing students with information to calculate fractional dosages, equivalencies, individual safe dosages and infusions accurately. Emphasis is placed on accurate medication calculation and is required for clinical competency upon entering the second semester of the clinical rotation in the Level I Nursing Program. Prerequisites: BIO-23500 and BIO-23600. Corequisite: NUR-10902.

NUR 12514 Medical-Surgical Nursing (V) 7 (3-13)

This course introduces students to concepts focusing on how the client 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 resumes a basic understanding of normal anatomy and physiology, nutrition and nursing foundations. The student will apply evidence-based practice to problem solving in client needs in clinical practice. Upon completion of this course the student should be able to apply the concepts of medical-surgical nursing in the provision of safe nursing care. Prerequisite: Admission to the Practical Nursing Program.

NUR 12801 Maternal Child Nursing (W) 2 (2-0)

This course utilizes the nursing process to introduce the student to client-centered care concepts of obstetric/pediatric nursing. The course will include growth and development concepts, common heath issues seen in childbearing/childrearing families, principles of nutrition and the promotion of safety. Upon completion of this course, the student should be able to apply the concepts of evidence-based practice and safe nursing care. Students will have opportunities to relate obstetric/pediatric nursing theory to clients in Medical/Surgical nursing clinical. Prerequisite: Admission into the Level 1 Nursing Program.

NUR 12900 Pharmacology II (W) 2 (2-0)

This course is designed to follow NUR-10901, Pharmacology I, to assist the student in relating drug therapies to disease processes. The course is based on pharmacological concepts including pharmacodynamics and pharmacokinetics. The focus of the course is on application of principles and methods of drug administration related nursing activities and responsibilities. Upon completion of this course, the student will be able to apply the theoretical concepts of drug therapies in the provision of safe nursing care throughout various clinical experiences with clients across the lifespan. Prerequisite: NUR-10902 and MTH-11100.

NUR 13303 Role Trans:Student-Practicing Nurse (S) 1 (1-0)

This capstone course emphasizes the professional responsibilities associated with a graduate practical nurse. Focus is on employment opportunities, nursing regulation, standards of practice and accountability. This course also discusses concepts of lifelong learning, current issues, components of quality and safety, and role transition from student to practicing nurse. Upon completion of this course, students will be able to provide safe nursing care incorporating the concepts identified in this course. Prerequisite: Admission to the Level 1 Nursing Program.

NUR 13414 Clinical Capstone (S) 1.5 (0-5)

This capstone course emphasizes the professional responsibilities of a practical nurse. Focus is on employment opportunities, nursing regulation, standards of practice and accountability. This course also discusses concepts of lifelong learning, current issues, components of quality and safety, and role transition from student to practicing nurse. Upon completion of this course, students will be able to provide safe nursing care incorporating the concepts identified in this course. Prerequisite: Admission to the Practical Nursing Program.

NUR 22002 Nursing Assessment (V) 2 (2-0)

This course is designed to explore the nursing process in depth as a foundation for professional nursing practice. Methods for eliciting a sound health history and techniques for physical assessment will be introduced as a means of providing essential information for care planning. This course is designed to build on previous knowledge of the body's anatomy and physiology. Prerequisite: Certificate in Practical Nursing.

NUR 22214 Advanced Medical-Surgical Nursing (V) 8 (4-13)

This is a critical thinking course designed to aid students in the use of the nursing process as it relates to adult clients with acute and chronic multi-system 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. The complementary clinical 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 to an ADN Nursing Program.

NUR 22414 Adv Medical-Surgical Nursing II (F,W) 8 (4-13)

This is a critical thinking course designed to aid students in the use of the nursing process as it relates to adult clients with acute and chronic multi-system 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. The complementary clinical 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 to an ADN Nursing Program.

NUR 23201 Family Centered Pediatrics (V) 3 (2-3)

The purpose of this course is to aid the student in applying the nursing process to the needs of children (infants through adolescence) and their families. Concepts are focused on the child's growth and development in relation to health promotion, health maintenance and managing illness. Strong emphasis is placed on the knowledge of skills needed to provide safe quality care. Students will have multiple opportunities to relate theory to children and families during times of illness, recovery and health. Application of family-centered pediatrics nursing care will occur within the hospital and community settings in the complementary clinical course. Prerequisite: Admission to the Level 2 Nursing Program.

NUR 23700 Pathophysiology for the Health Prof (F,W) 3 (3-0)

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. Prerequisite: BIO-23500; Co-requisite: BIO-23600.

NUR 24202 Community Mental Health Nursing (V) 4 (2.5-4.5)

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. Hospital and community experiences are utilized to provide student opportunities to apply and analyze the nursing process to clients with maladaptive behavior focusing on one-to-one interpersonal relationships. Prerequisite: Admission to the Level 2 Nursing Program.

NUR 24601 Nursing Care of Women & Families (V) 3 (2-3)

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 women's health, obstetric and neonatal nursing. Students will have the opportunities to relate family-centered obstetric nursing theory to clients in the clinical component of the course. Prerequisite: Admission to the Level 2 Nursing Program.

NUR 25203 Professional Practice (V) 2 (2-0)

This course is designed to assist the transition of the student nurse to graduate nurse. Professional nursing behaviors and attitudes are explored. Health care systems, nursing personnel and roles, staffing, and other professional issues are examined and evaluated. Prerequisite: Admission to the Level 2 Nursing Program.

OIS (OFFICE INFORMATION SYSTEMS)

OIS 10400 Keyboarding I (F,W,S) 3

Students will be using a microcomputer and appropriate software to develop 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 skills.

OIS 10500 Business Correspondence (F,W,S) 3

Detailed examination of methods of communication in business. Instruction and practice in writing and constructing rough drafts, finished letters and forms used in business. Includes 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. Prerequisites: ENG-09000 and ENG-09600 or satisfactory placements in Reading and Writing.

OIS 10600 Intro to Health Information Mgmt (F,W,S) 3

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.

OIS 10700 Medical Office Transcription (F,W,S) 3

This introductory course is designed to expose the student to beginning stages of medical transcription. The student will learn the different tools of transcription and how to operate the different types of transcription equipment. Guidelines will be introduced for style, grammar, and specific medical transcription mechanics such as editing, spelling and formatting of medical reports. Intermediate transcription skills will be developed upon completion of this course. Corequisites: ALH-10101 AND OIS-11400 or OIS-18200.

OIS 11201 Business Calculations (F,W,S) 3

This course presents the basic principles of mathematics and applies them in a series of practical business problems. Course content includes various methods of computing interest and bank discounts, payroll, taxes, inventory, annuities and business statistics. This course is for students who are looking at a future in bookkeeping, accounting or finance and will benefit consumers, employees, and small business owners. Excel applications may also be introduced.

OIS 11400 Keyboarding II (F,W,S) 3

This course is designed to increase speed and accuracy in the preparation of keyed projects. The student will be introduced to memorandums and email, personal and business letters, as well as, various letter styles, forms, manuscripts, and tabulation problems. Prerequisite: Previous keyboarding experience required.

OIS 17000 Legal Terminology & Transcription (F,W) 3

This course is designed to give the student a background in basic legal terminology including spelling, pronunciation, and meaning. The student will develop transcription skills by transcribing from taped dictation documents dealing with the courts, legal systems, and litigation procedures. Prerequisite: ENG-10303. Corequisites: OIS-11400.

OIS 18000 Office Billing (F,W,S) 3

This course will introduce students to various aspects of a medical practice. All aspects of medical billing will be eovered including ICD-9-CM and ICD-10-CM coding, CPT coding, stress and time management, CMS-1500 forms and medical procedures, as well as basic office functions and communications. Co-requisite: ALH-10101.

OIS 18200 Word Processing I (F,W,S) 3

This course is designed to provide students with 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, retrieving, creating, maintaining files, using writing tools, using tabs, and manipulating text.

OIS 20000 Intro to Electronic Health Records (F,W,S) 3

Introduces students to health informatics, with primary focus on the function of electronic health records (EHR) systems in health care delivery. Emphasis will be directed toward interdisciplinary use of an EHR to enhance quality and safety in patient care. Students will learn to use EHR software, access a patient account, create a patient file, and to enter and retrieve data. Compliance with HIPAA and confidentiality will be introduced. Prerequisite: OIS-10600 or HIT-10600.

OIS 20500 Records Management (F,W,S) 3

This course is an introduction to the basic principles, procedures, and methods of records storage, control, retrieval and management. The principles and practical applications of alphabetic, subject, numeric, and geographic filing are simulated. For enhancement of records management techniques an interview with a records manager is an off-campus business will be conducted by the students.

OIS 21000 Office Procedures (F,W) 3

This course is designed to develop the knowledge and skills necessary for success in the workplace and to develop a competency in administrative and office support tasks such as telephone, records management, mail, financial records, and typing specialized letters, business forms and legal papers. Students will apply business terminology in the production of accurate documents and demonstrate understanding of clerical duties. Prerequisites: ENG-10303, OIS-11400 and OIS-18200.

OIS 21100 Healthcare Management & Supervision (F,W.S) 3

This course is a concentrated application of various tasks that a medical office assistant performs including administrative responsibilities, preparing and organizing patient charts, medical ethics and law, telephone procedures, appointments, records management, billing and coding. The use of the computer is emphasized in each of these applications. Medical office scenarios and simulations are used throughout the course to better familiarize the student with the everyday workings of the medical office setting and gain a better understanding of EHR (Electronic Health Records). Prerequisites: ENG-10303, either OIS-10600 or HIT-10600, OIS-20500 and HIT-23300 (formerly OIS-23300).

OIS 21500 Desktop Publishing for the Office (F,W,S) 3

This is a course designed to study the technology of desktop publishing. A word processing program will be used to create documents such as reports, brochures, advertisements, newsletters, flyers, and correspondence. Advanced features will also be taught; therefore, the student will acquire a skill that is valuable in both small and large offices. Prerequisites: CIS-10500 and OIS-22200; or permission of advisor. Corequisites: OIS-11400.

OIS 22200 Word Processing II-Word (F,W,S) 3

This course is designed to provide advanced applications of the word processing system and program used in OIS-18200. The student will demonstrate proficiency in advanced word processing applications including power typing, creation of documents, and enhancement to promote efficiency. Prerequisite: OIS-18200.

OIS 22500 Legal Office Procedures (F,W,S) 3

This course is designed to provide students with fundamental concepts of American jurisprudence, and practical application of tasks that will be required in a legal office setting. Prerequisites: BUS-10100, BUS-21500, and OIS-17000 . Corequisites: OIS-11400.

OIS 29901 Internship-Administrative Assistant (F,W,S) 3

The internship consists of 108 hours of supervised office work experience in a facility. Some internships may have an option of face-to-face or virtual learning depending upon the certificate or degree program. A 20-hour online career workshop consisting of research, portfolios, interviewing, networking, time and stress management, resume writing and cover letters will take place during the first four weeks of the semester. Students will complete a final office skills competency test at the end of the workshop. Prerequisite: Completion of all other required courses for the degree, completion of all OIS courses with a minimum grade of B-, an overall program GPA of 2.3, and permission of the OIS advisor.

OIS 29903 Internship-Medical Secretary (F,W,S) 3

The internship consists of 108 hours of supervised work experience in a facility. Some internships may have an option of face-to-face or virtual learning depending upon the certificate of degree program. A 20-hour online career workshop consisting of research, portfolios, interviewing, networking, time and stress management, resume writing and cover letters will take place during the first four weeks of the semester. Students will complete a final office skills competency test at the end of the internship. Prerequisite: Completion of all other required courses for the degree, completion of all OIS courses with a minimum grade of B-, an overall program GPA of 2.3, and permission of the OIS advisor.

OIS 29904 Internship-Medical Clerk (F,W,S) 3

The internship consists of 108 hours of supervised office work experience in a facility. Some internships may have an option of face-to-face or virtual learning depending upon the certificate or degree program. A 20-hour online career workshop consisting of research, portfolios, interviewing, networking, time and stress management, resume writing and cover letters will take place during the first four weeks of the semester. Students will complete a final office skills competency test at the end of the internship. Prerequisite: Completion of all other required courses for the certificate, completion of all OIS courses with a minimum grade of B-, an overall program GPA of 2.3, and permission of the OIS advisor.

PHB (PHLEBOTOMY)

PHB 10100 Phlebotomy Technician (F,W) 6

This course provides the student with an overview of the healthcare field, and skills and knowledge to properly and safely collect a blood or body fluid specimen and prepare the specimen for testing by the medical laboratory. The student will be able to utilize a variety of blood collection methods, to include vacuum, syringe, and capillary puncture. The student will put safety practices into place to protect themselves and the patient. The student will also gain an understanding of performing CLIA waived laboratory tests.

PHL (PHILOSOPHY)

PHL 20100 Intro to Philosophy (F) 3 (3-0)

An introduction to not only the study of philosophy, but also its active and systematic practice. While the course explores such topics as the origin and development of philosophy, the ideas of major philosophers, and significant philosophical issues and problems, students are encouraged, above all, to practice the methods of philosophy as a life skill. Prerequisite or corequisite: ENG-10303 or permission of instructor. (Humanities Credit)

PHL 21000 Introduction to Ethics (F,W) 3 (3-0)

An introduction to the study of moral philosophy. Through reading, writing, and discussion, students will explore moral values and the major ethical theories, practice effective moral reasoning, and apply ethical thinking to issues and problems in various fields and their own lives. Prerequisite or corequisite: ENG-10303 or permission of instructor. (Humanities Credit)

PHM (PHARMACY TECHNOLOGY)

PHM 10000 Intro to Pharmacy Technology (F) 6 (6-0)

This course is designed to teach the student the concepts necessary for a pharmacy technician in a hospital or retail setting, including dispensing and control of drugs, knowledge of the physiological effects of drugs, inventory control, insurance billing, pharmacy terminology and the evolution of pharmacy. Prerequisites: ENG-09000, ENG-09600 and MTH-07300 or demonstrated competencies and acceptance into the pharmacy technology program. Corequisites: ALH-10101 and PHM-10101.

PHM 10100 Pharmacology/Pharmacy Calculations (F) 3 (3-0)

This course focuses on the acquisition of knowledge related to the generic, trade name and function of drugs. Mathematical concepts such as fractions and decimals, as well as medication labels, calculations and measurement of medications are taught. The pharmacy technician will utilize these concepts in his or her job. Prerequisite: admission into the pharmacy technician program. Corequisites: ALH-10101 and PHM-10000.

PHM 10200 Issues in Pharmacy Technology (W) 3 (3-0)

This course is designed to educate the student regarding the responsibilities and concerns associated with the graduate Pharmacy Technician including medical law and ethics, current issues, and policy related to pharmacy and review for the certification exam. Prerequisites: ALH-10101, PHM-10000 and PHM-10100. Corequisites: PHM-19900 and SPE-11400.

PHM 19900 Pharmacy Technology Internship (W) 3

The student will apply the concepts and theory learned in the didactic courses to the clinical environment to include the retail pharmacy, hospital pharmacy and specialty pharmacy. Prerequisites: ALH-10101, PHM-10000, and PHM-10100. Corequisites: PHM-10200 and SPE-11400.

PHY (PHYSICS)

PHY 10501 Physical Science (W) 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: MTH-07300 or demonstrated competency; Corequisite: PHY-10502. (Science Credit)

PHY 10502 Physical Science Lab (W) 1 (0-2)

This is a laboratory course to accompany PHY-10501. Corequisite: PHY-10501. (Science Credit)

PHY 20101 Physics I with Trigonometry (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. Corequisite: MTH-18001 and PHY-20102. (Science Credit)

PHY 20102 Physics I with Trigonometry Lab (F) 1 (0-3)

This is a laboratory course to accompany PHY-20101. Corequisite: PHY-20101.

PHY 20201 Physics II with Trigonometry (W) 4 (4-0)

This is a continuation of Physics I w/Trigonometry. Topics will include principles of electricity and magnetism, optics, and concepts of modern physics such as relativity and nuclear physics. Prerequisite: PHY-20100 or PHY-20101/02 or permission of instructor. Corequisite: PHY-20202. (Science Credit)

PHY 20202 Physics II with Trigonometry Lab (W) 1 (0-3)

This is a laboratory course to accompany PHY-20201. Corequisite: PHY-20201. (Science Credit)

PHY 22101 Physics I with Calculus (F) 4 (4-0)

This is an introductory lecture course that will provide a calculus-based background of basic principles and theories with practical applications; topics will include general properties of matter with emphasis on mechanics and waves; heat and thermodynamics, and sound. Prerequisite: MTH-22002. Corequisite: MTH-22102 and PHY-22102. (Science Credit)

PHY 22102 Physics I with Calculus Lab (F) 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 Physics II with Calculus (W) 4 (4-0)

This is a continuation of PHY-22101 that will provide a calculus-based background of basic principles and theories with practical applications; topics will include electricity and magnetism, optics and light, modern physics, and nuclear physics. Prerequisite: PHY-22101. Corequisite: PHY-22202. (Science Credit)

PHY 22202 Physics II with Calculus Lab (W) 1 (0-3)

This is an laboratory course that should be taken in tandem with the PHY-22201 physics lecture course. It will provide the student with a background of basic laboratory skills and experimental experience in approaching physical principles and theories with practical applications; topics will include electricity and magnetism, optics and light, modern physics, and nuclear physics. Emphasis will be placed on proper laboratory procedures and utilization of the Scientific Method. Prerequisite: PHY-22101 and PHY-22102. Corequisite: PHY-22201. (Science Credit)

PLB (PLUMBING)

PLB 10301 Intro to the Plumbing Profession (F,W,S) 0.2

Introduces trainees to the many career options available in today's plumbing profession. Provides a history of plumbing and also discusses the current technology, industries, and associations that make up the modern plumbing profession. Also reviews human relations and safety skills.

PLB 10302 Plumbing Safety (F,W,S) 0.8

Discusses the causes of accidents and their consequences and repercussions in terms of delays, increased expenses, injury, and loss of life. Reviews the types and proper use of personal protective equipment (PPE). Instructs trainees in the use of critical safety information conveyed in hazard communication (HazCom), safety signs, signals, lockout/tagout, and emergency response. Covers confined-space safety, and reviews safety issues related to hand and power tools.

PLB 10303 Plumbing Tools (F,W,S) 0.3

Instructs trainees in the care and use of the different types of hand and power tools they will use on the job. Gives trainees the information they need to select the appropriate tools for different tasks, and reviews tool maintenance and safety issues.

PLB 10304 Intro to Plumbing Math (F,W,S) 0.3

Reviews basic math concepts, such as whole numbers, fractions, decimals, and squares, and demonstrates how they apply to on-the-job situations. Teaches trainees how to measure pipe using fitting tables and framing squares and how to calculate 45-degree offsets.

PLB 10305 Intro to Plumbing Drawings (F,W,S) 0.5

Introduces trainees to the different types of plumbing drawings they will encounter on the job and discusses how to interpret and apply them when laying out and installing plumbing systems. Discusses the symbols used in plumbing and mechanical drawings and reviews isometric, oblique, orthographic, as well as schematic drawings. Requires trainees to render plumbing drawings and to recognize how code requirements apply to plumbing drawings.

PLB 10306 Plastic Pipe and Fittings (F,W,S) 0.4

Introduces trainees to the different types of plastic pipe and fittings used in plumbing applications, including ABS, PVC, CPVC, PE, PEX, and PB. Describes how to measure, cut, join, and support plastic pipe according to manufacturer's instructions and applicable codes. Also discusses pressure testing of plastic pipe once installed.

PLB 10307 Copper Pipe and Fittings (F,W,S) 0.4

Discusses sizing, labeling, and applications of copper pipe and fittings and reviews the types of valves that can be used on copper pipe systems. Explains proper methods for cutting, joining, and installing copper pipe. Also addresses insulation, pressure testing, seismic codes, and handling and storage requirements.

PLB 10308 Cast Iron Pipe and Fittings (F,W,S) 0.5

Introduces trainees to hub-and-spigot and no-hub cast iron pipe and fittings and their applications in DWV systems. Reviews material properties, storage and handling requirements, and fittings and valves. Covers joining methods, installation, and testing.

PLB 10309 Carbon Steel Pipe and Fittings (F,W,S) 0.4

Discusses threading, labeling, and sizing of carbon steel pipe and reviews the differences between domestic and imported pipe. Also covers the proper techniques for measuring, cutting, threading, joining, and hanging carbon steel pipe.

PLB 10310 Corrugated Stainless Steel Tubing (F,W,S) 0.1

Reviews flexible plastic-coated steel tubing. Discusses piping system components and the various connection and installation options. Also reviews applicable safety and code requirements.

PLB 10311 Fixtures and Faucets (F,W,S) 0.2

Discusses the proper applications of code-approved fixtures and faucets in plumbing installations. Reviews the different types of fixtures and faucets and the materials used in them. Also covers storage, handling, and code requirements.

PLB 10312 Intro to Drain/Waste/Vent (DWV) Sys (F,W,S) 0.4

Explains how DWV systems remove waste safely and effectively. Discusses how system components, such as pipe, drains, traps, and vents, work. Reviews drain and vent sizing, grade, and waste treatment. Also discusses how building sewers and sewer drains connect the DWV system to the public sewer system.

PLB 10313 Intro to Water Distribution Systems (F,W,S) 0.4

Identifies the major components of water distribution systems and describes their functions. Reviews water sources and treatment methods and covers supply and distribution for the different types of systems that trainees will install on the job.

PLB 10314 Plumbing Math Two (F,W,S) 0.6

Explains the Pythagorean theorem and reviews methods for finding angles. Discusses the techniques used to calculate simple and rolling offsets, as well as offsets on parallel runs of pipe.

PLB 10315 Reading Commercial Drawings (F,W,S) 0.8

Teaches trainees how to interpret and use civil, architectural, structural, mechanical, plumbing, and electrical drawings when installing plumbing systems. Covers how to create and use isometric drawings, material takeoffs, and approved submittal data.

PLB 10316 Hanger/Support/Struc Pen/Fire Stop (F,W,S) 0.4

Introduces trainees to methods for attaching and running DWV and water supply piping in relation to structural elements, including pipe hangers and supports, modifications to structural members, and fire stopping.

PLB 10317 Installing & Testing DWV Piping (F,W,S) 1

Explains how to locate, install, connect, and test a complete drain, waste, and vent (DWV) system.

PLB 10318 Installing Roof/Floor/Area Drains (F,W,S) 0.2

Covers the proper techniques for locating, installing, and connecting roof, floor, and area drains according to code. Also discusses waterproof membranes and flashing, drain components, and proper drain applications.

PLB 10319 Types of Valves (F,W,S) 0.2

Reviews the many types of valves, their components, and valve applications. Also covers valve repair and replacement.

PLB 10320 Install & Test Water Supply Piping (F,W,S) 0.8

Explores the proper techniques for locating, installing, and testing complete water supply systems, including piping, meters, water heaters, water softeners, and hose bibs. Reviews common code requirements for water supply systems.

PLB 10321 Installing Fixtures/Valves/Faucets (F,W,S) 0.8

Covers the installation of basic plumbing fixtures, including bathtubs, shower stalls, lavatories, sinks, water closets, and urinals. Also reviews the installation of associated valves, faucets, and components.

PLB 10322 Intro to Electricity (F,W,S) 0.6

Introduces trainees to the principles of electricity, including voltage, current, resistance, and power. Includes important electrical formulas, circuitry, and common plumbing-related electrical applications.

PLB 10323 Installing Water Heaters (F,W,S) 0.2

Discusses gas-fired, electric, solar, instantaneous, and indirect water heaters, components, and applications. Reviews proper installation and testing techniques and covers the latest federal guidelines that apply to water heaters.

PLB 10324 Fuel Gas Systems (F,W,S) 0.8

Introduces the techniques for safe handling of natural gas, liquefied petroleum gas, and fuel oil. Reviews fuel gas and fuel oil applications, systems installation, and testing.

PLB 10325 Servicing Fixtures/Valves/Faucets (F,W,S) 0.2

Covers the troubleshooting and repair of fixtures, valves, and faucets in accordance with code and safety guidelines.

POL (POLITICAL SCIENCE)

POL 10100 Intro 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. Prerequisites: ENG-09000 and ENG-09601 or demonstrated competency. (Social Science Credit)

POL 20000 International Relations (F) 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) Note: Offered in the Fall of even-numbered years.

POL 20100 Comparative Government (F) 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) Note: Offered in the Fall of odd-numbered years.

PSY (PSYCHOLOGY)

PSY 10100 Intro 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. Prerequisites: ENG-09000 and ENG-09601 or demonstrated competency. (Social Science Credit)

PSY 20200 Abnormal Psychology (F,W,S) 3 (3-0)

Abnormal psychology provides examination of the main psychological disorders manifested by individuals across the life span. This includes a descriptive and theoretical survey of the major forms of psychopathology in children, adolescents, and adults, and will also explore current trends and research in the fields of mental health and psychopathology. The course will provide an historical overview of mental illness followed by exploration into the eating disorders, schizophrenia, mood disorders, suicide, anxiety disorders, dissociative disorders, sexual and gender identity disorders and the insanity defense. Prerequisite: PSY-10100. (Social Science Credit)

PSY 24000 Lifespan Developmental Psychology (W) 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)

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 or corequisite: ENG-10303. (Social Science Credit)

SOC (SOCIOLOGY)

SOC 10100 Intro to Sociology (F,W) 3 (3-0)

This course is an introduction to the nature of society, culture, group relations, social processes, and institutions. Prerequisite: ENG-08602 or demonstrated competency. (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: SOC-10100. (Social Science Credit)

SOC 24000 Criminology (W) 3 (3-0)

This course provides an analysis of crime, criminal behavior, and punishment through a variety of historical and contemporary theoretical perspectives. Prerequisite or corequisite: ENG-10303 and PSY-10100 or SOC-10100 or permission of instructor. (Social Science Credit)

SOC 24500 Social Deviant Behavior (W) 3 (3-0)

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)

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 or corequisite: ENG-10303. (Social Science Credit)

SON (CARDIAC SONOGRAPHY)

SON 10000 Intro to Sonography Patient Care (F) 2 (2-1)

This course consists of theory and guided learning lab practice. Focus is acquisition of basic skills and an understanding of cardiac medical terminology, pharmacology, and monitoring along with the basics of IV therapy, vital signs, patient transfer, O2 maintenance and medical ethics (including HIPPA).

SON 10600 Cardiovascular Anatomy & Physiology (F) 4 (4-0)

A complete study and explanation of the heart, the peripheral and arterial systems and their associated structures. This class is vital to an understanding of the anatomy & function of the heart and vascular systems as well as the basic physiology as it relates to cardiac and vascular anatomy and function. Prerequisite: program admission.

SON 11000 Ultrasound Physics (F) 3 (3-0)

This course is designed to teach the fundamentals of Ultrasound Physics and instrumentation. This includes review of different transducer models, the propagation of sound waves, and the Ultrasound's effect on the body.

SON 11600 Basic Sonography (F) 3 (3-0)

This course applies the knowledge of cardiovascular anatomy and physiology to the fundamentals of ultrasound imaging and the knowledge to obtain the standard basic views required for an echocardiographic examination. Prerequisite: program progression. Corequisite: SON-11700.

SON 11700 Basic Sonography Lab (F) 4 (0-8)

This course is the application of theory to practice related to the fundamentals of ultrasound imaging and the standard basic views required for an echocardiographic examination. Prerequisite: program progression. Corequisite: SON-11600.

SON 12500 Valvular Heart Disease (W) 3 (3-0)

This course presents cardiovascular related valvular conditions and diseases. Their etiology and symptoms are discussed and correlated to cardiovascular imaging and techniques required to assist the physician in diagnosis of these conditions. Prerequisite: program progression. Corequisite: SON-13500.

SON 13100 Cardiomyopathies/Congenital Defects (W) 3 (3-0)

This course provides further knowledge of Cardiomyopathies and Congenital defects related to cardiac anatomy and physiology to the principles of cardiac imaging techniques and procedures. Prerequisite: Program progression. Corequisite: SON-13200.

SON 13200 Cardiomyopathies/Congenital Lab (W) 4 (0-8)

This course applies theory to practice of Cardiomyopathies and Congenital Defects and integrates the knowledge of anatomy, physiology and hemodynamics with clinical skills. Prerequisite: Program progression. Corequisite: SON-13100.

SON 13500 Valvular Heart Disease Clinical Lab (W) 2 (0-6)

This course presents cardiovascular related valvular conditions and diseases. Their etiology and symptoms are discussed and correlated to cardiovascular imaging and techniques required to assist the physician in diagnosis of these conditions. Prerequisite: program progression. Corequisite: SON-12500.

SON 15000 Complete Adult Echocardiogram (S) 3 (3-0)

This course relates further knowledge of cardiac anatomy and physiology and cardiac pathology and abnormalities that may be encountered in a clinical setting. Prerequisite: Program progression. Corequisite: SON-16000.

SON 15600 Advanced Sonography (S) 3 (3-0)

This course focuses on correlating cardiac disease processes and pathophysiology to aid the physician in the appropriate disease diagnosis. The students increase in knowledge as this course integrates advanced cardiac imaging techniques to investigate various cardiac disease states. Prerequisite: program progression. Prerequisite: Program progression. Corequisite: SON-15700.

SON 15700 Advanced Sonography Lab (S) 4 (0-8)

This course applies theory to practice related to pathophysiology of cardiac disease, advanced cardiac imaging techniques and procedures with doppler flow and measurements of patients with advanced cardiac disease. Prerequisite: Program progression. Corequisite: SON-15600.

SON 16000 Complete Adult Echocardiogram Lab (S) 2 (0-6)

This course is an arranged off-campus clinical experience at a variety of facilities. Prerequisite: program progression. Corequisite: SON-15000.

SON 29900 Internship (F) 12.5

Students will be assigned to an off campus, remote site in order to complete 697.5 clock hours of practice with a preceptor. Prerequisite: program progression.

SPE (SPEECH)

SPE 10500 Fund of Speech (F,W,S) 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 10600 Mediated Communication (F,W) 3 (3-0)

This course focuses on the process of oral communication beginning with purpose, ethics, audience and culture, and the stages of planning, delivering and evaluating various types of professional and real world speeches/presentations through the media/digital world such as, but not limited to Skype, Prezl and YouTube.com. Emphasis is placed on developing the student's abilities in organization, presentation and presence. Specific activities the student will be evaluated on include text over selected chapters, written outlines, use of technology to communicate professionally, visual aids and recorded speeches (informative and persuasive) made in front of an audience.

SPE 11400 Intro to Interpersonal/Public Comm (F,W,S) 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)

SUR (SURGICAL TECHNOLOGY)

SUR 10000 Fundamentals of Surgical Technology (F) 3 (3-0)

This course introduces the role of the surgical technician as well as the procedures, skills, and protocol to work in the operating room environment. Prerequisite: acceptance into the surgical technology program. Corequisite: SUR-10100.

SUR 10100 Surgical Asepsis (F) 2 (2-0)

This course defines and describes pathogenic microorganism as well as hospital infections causes and prevention. The student will learn methods of controlling these microorganisms through sterilization and disinfection. Corequisite: SUR-10000.

SUR 10200 The Surgical Patient (F) 2 (2-0)

This course provides knowledge related to care and safety of the surgical patient pre, post and during their surgical experience. The introduction of the technicians role and responsibilities related to legal and ethical dilemmas faced in the healthcare field are explored. Prerequisite: program progression.

SUR 10300 Surgical Pharmacology (F) 2 (2-0)

This course provides knowledge related to different types of anesthesia and their indications as well as their contraindications. The student will learn mathematical calculations as well as the commonly used medications for the surgical patient. Prerequisite: program progression.

SUR 10400 Basic Operative Procedures (F) 2 (2-0)

The student will learn the basic types of surgical procedures with an emphasis on maintaining sterile technique. With these procedures the anatomy, physiology and pathophysiology will be reviewed. Prerequisite: program progression. Corequisite: SUR-10000, SUR-10500, and SUR-10600.

SUR 10700 Fundamental Surgical Techniques (F) 5 (0-10)

This course will apply theory to practice with mock surgical procedures and simulation with principles, protocols and skills learned in Fundamentals of Surgical Technology and Basic Operative Procedures. Prerequisite is program progression. Corequisite: SUR-10000, SUR-10100, SUR-10200, SUR-10300 and SUR-10400.

SUR 20000 Advanced Surgical Procedures (W) 3 (0-6)

This course advances the students knowledge and skills with more complex and advanced surgical procedures focusing on the sequential aspect of the procedure with specialized instrumentation. Anatomy and physiology of these complex cases is reviewed as well as biomedical components in the surgical environment. Prerequisite: program progression. Corequisite: SUR-20100 and SUR-20200.

SUR 20100 Intermediate Surgical Techniques (W) 5 (0-5)

This course provides for application of theory in the clinical environment of a hospital with the application of skills in basic and advanced surgical procedures. Prerequisite: program progression. Corequisite: SUR-20000.

SUR 20200 Advanced Surgical Techniques (W) 5 (0-5)

This course provides for application of theory in the clinical environment of a hospital with the application of skills in basic and advanced surgical procedures while incorporating the biomedical resources in surgical specialty areas. Prerequisite: program progression. Corequisite: SUR-20000.

SUR 20300 Surgical Professional Practice (W) 2 (2-0)

This course provides knowledge related to future advances in surgical technology in specialty surgeries and telesurgery. Preparation for the national certification exam is provided and an emphasis on professional practice responsibilities is reviewed. Prerequisite: program progression.

THE (THEATRE)

THE 12000 Intro to Theatre (W) 3 (3-0)

This course is a survey of the evolution of world theatre forms, from the cave drawings of prehistoric man to the most recent shows on the Broadway stage. Classroom discussions will cover the major producers, playwrights, performers, directors, and designers of each era covered, as well as the body of literature that has come to represent that era. Classroom sessions will be augmented by readings from these periods. (Humanities Credit)

VAS (VASCULAR SONOGRAPHY)

VAS 24000 Vascular Sonography (F) 12 (12-0)

This online course will cover ultrasound imaging of the cerebrovascular, peripheral venous and arterial systems, Doppler assessment of the intra-abdominal and retroperitoneal circulation. Course content includes mechanisms of disease, imaging protocols, anatomy, physiology and hemodynamics. Special topics will include vascular ultrasound imaging, venous reflux, cardiac pump function effect on Doppler waveforms, arterial mapping and flow dynamics. Students will be introduced to pulse volume recording. Normal and abnormal case studies will be presented with clinical correlations. Prerequisite: Advisor approval.

WLD (WELDING)

WLD 10400 Material Science (F,W) 3 (1-3)

Course covers mechanical and chemical composition, metallurgical aspects, weldability, and specific requirements for welding of materials. Explains effects of welding and cutting/heating and cooling on ferrous, non-ferrous, and non-metal materials.

WLD 10500 Welding Fabrication Level 1 (F,W) 4 (2-4)

This course will teach skills necessary to fabricate a variety of projects using drilling, rolling, forming, bending, and cutting techniques. Students will learn how to calculate material sizes needed to accommodate bend radius, saw and torch kerf, etc.

WLD 11000 Welding Fundamentals (F,W,S) 4 (2-4)

This course will teach the skills necessary to weld, braze and cut metal using oxygen and acetylene. Other cutting processes such as Plasma Arc Cutting and Carbon Arc Gouging will also be learned. Students will learn how to weld using the Shielded Metal Arc Welding, Gas Metal Arc Welding and Flux Core welding processes.

WLD 11101 GMAW, FCAW & SMAW x-Block (F,W,S) 1

Safety rules and mechanical equipment in the Welding Fabrication Lab. G.M.A.W., F.C.A.W, and S.M.A.W. welding in the flat position on an x-block. Prerequisite WLD-11000.

WLD 11102 GMAW, FCAW & SMAW-Horizontal (F,W,S) 1

G.M.A.W., F.C.A.W., and S.M.A.W. welding in the horizontal position. Prerequisite: WLD-11101.

WLD 11103 GMAW, FCAW & SMAW-Vertical (F,W,S) 1

G.M.A.W., F.C.A.W., and S.M.A.W. welding in the vertical position. Prerequisite: WLD-11102.

WLD 11104 GMAW, FCAW & SMAW-Overhead (F,W,S) 1

G.M.A.W., F.C.A.W. and S.M.A.W. welding in the overhead position. Prerequisite: WLD-11103.

WLD 11105 WPQR Test-SMAW (F,W,S) 1

Completing an AWS, WPQR Qualification Test using S.M.A.W. Prerequisite: WLD-11104.

WLD 11201 GMAW-Constant Voltage (F,W,S) 1

Safety and mechanical equipment in the Welding Fabrication Lab. G.M.A.W. in the flat position using 0.045 wire and G.M.A.W. in the Vertical Down position using 0.045 wire. Prerequisite: WLD-11105.

WLD 11202 GMAW-Spray (F,W,S) 1

G.M.A.W.-Spray in the flat and horizontal position on steel and stainless steel and G.M.A.W. in the flat and horizontal position using metal core wire. Prerequisite: WLD-11201.

WLD 11203 GMAW-Pulse (F,W,S) 1

G.M.A.W.-Pulse in the flat and horizontal position on steel, stainless steel and aluminum. Prerequisite: WLD-11202.

WLD 11204 GMAW-Aluminum (F,W,S) 1

G.M.A.W -- C.V. and Pulse in the flat and horizontal position on aluminum. Prerequisite: WLD-11203.

WLD 11205 WPQR Test-GMAW (F,W,S) 1

Complete an AWS-WQPR Welder Qualification Test. Prerequisite: WLD11204.

WLD 11300 Non-Destructive Testing (F,W) 3 (2-2)

This course will teach the skills necessary to perform visual, dye penetrant, magnetic particle inspection and effy current testing on welds. Prerequisite: WLD-11000.

WLD 11400 Fabrication Blueprint Reading (F) 1 (1-0)

This course will teach the basics of reading and interpreting fabrication blueprints. This course will also teach how to create simple and intermediate fabrication blueprints. Corequisite: WLD-11000.

WLD 21100 Intro to Robotics (F,W) 2 (1-2)

This course will teach the basics of what an industrial robot is and applications for which it is used. This course is an introduction on how to select, implement, and program an industrial robot.

WLD 21201 GTAW-Flat (F,W,S) 1

Safety rules and operation of the mechanical equipment in the Welding Fabrication Lab. Set-up, operation and shutting down of the G.T.A.W. equipment. G.T.A.W. in the flat position on steel, stainless steel and aluminum. Prerequisite: WLD-11205.

WLD 21202 GTAW-Horizontal (F,W,S) 1

G.T.A.W. in the horizontal position on steel, stainless steel and aluminum. Prerequisite: WLD-21201.

WLD 21203 GTAW-Vertical (F,W,S) 1

G.T.A.W. in the vertical position on steel, stainless steel and aluminum. Prerequisite: WLD-21202.

WLD 21204 GTAW-Overhead (F,W,S) 1

G.T.A.W. in the overhead position on steel, stainless steel and aluminum. Prerequisite: WLD-21203.

WLD 21205 WPQR Test-GTAW (F,W,S) 1

Complete an AWS WPQR Welder Qualification Test using G.T.A.W. Prerequisite: WLD-21204.

WLD 21301 Flat & Horizontal Pipe Welding (F,W,S) 1

Safety rules and operation of the mechanical equipment in the Welding Fabrication Lab, set-up and operation of the pipe beveler and welding pipe with G.M.A.W., S.M.A.W., & G.T.A.W. in 1GR, 2G positions on steel pipe. Prerequisite: WLD-20205. Corequisite: WLD-21302.

WLD 21302 5G-Up Pipe Welding (F,W,S) 1

Welding pipe with G.M.A.W., S.M.A.W. & G.T.A.W. in 5G-up position on steel pipe. Prerequisite: WLD-21301. Corequisite: WLD-21303.

WLD 21303 5G-Down Pipe Welding (F,W,S) 1

Welding pipe with G.M.A.W., S.M.A.W. & G.T.A.W. in 5G-down position on steel pipe. Prerequisite: WLD-21302. Corequisite: WLD-21304.

WLD 21304 6G-Up Pipe Welding (F,W,S) 1

Welding pipe with G.M.A.W., S.M.A.W. & G.T.A.W. in 6G-up position on steel pipe. Prerequisite: WLD-21303. Corequisite: WLD-21400.

WLD 21400 Welder Qualification Testing (F,W,S) 4 (2-4)

This course will teach the skills necessary to weld and test to AWS standards. This course includes developing and qualifying by testing, 6 welding procedure specifications and corresponding procedure qualification records and welder performance qualification records.

WLD 21500 Welding Fabrication Level 2 (F,S) 4 (2-4)

This course will teach the skills necessary to fabricate a variety of advanced projects using drilling, rolling, forming, bending and cutting techniques. Prerequisites: WLD-11100 and WLD-10500.

WLD 29900 Welding Internship (F,W,S) 3

This course will teach real world fabricating, welding, and/or non-destructive testing techniques with the student working in a manufacturing environment. Prerequisites: WLD-11000, WLD-11100, WLD-11200 & WLD-21200.

PERSONNEL

KIRTLAND COMMUNITY COLLEGE ADMINISTRATION

Thomas Quinn, President
- B.A. University of Minnesota
- M.A. University of Northern Iowa
- Ed.S Winona State University
- Ph.D. University of South Dakota

Jason Broge, Vice President of Business Services
- B.S. Central Michigan University
- M.A. Siena Heights University

Julie Lavender, Vice President of Instructional Services
- B.S.N. University of Texas
- M.S. University of Oklahoma
- Ed.D. Northcentral University

Laura Percival, Dean of Occupational Programs
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- M.A. Michigan State University

Evelyn Schenk, Director: Facilities Management
- A.A.S. Kirtland Community College
- B.S. Ferris State University
- M.S. Ferris State University

Timothy Scherer, Chief Information Officer & Title III Project Director
- A.A.S. Community College of the Air Force
- B.S. Park College

Dale Shantz, Director of Human Resources and Talent Development
- B.A. University of Michigan
- M.A. Michigan State University

Debra Shumaker, Director of Library and Tutoring Services
- B.A. Central Michigan
- M.S. Drexel University

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- B.S. University of Wisconsin
- M.A. University of Wisconsin
- Ph.D. Purdue University

Michelle Vyskocil, Vice President of Student Services/Registrar
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- M.A. Central Michigan University

FULL-TIME FACULTY AND COUNSELOR

Lisa Awrey, Instructor: Nursing
- A.D.N. Kirtland Community College
- M.S.N. Walden University

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- M.A. University of Minnesota

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- M.A. Wright State University

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- A.A.S Lake Superior State University
- B.S. Lake Superior State University

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- M.A. Iowa State University

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- B.A. Temple University
- M.S. National University
- M.S. University of Southern California
- Ph.D. University of Phoenix

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- B.S. State Univ. of NY College at Cortland
- M.S.E. State Univ. of NY College at Cortland

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- B.S.N. Mercy College of Detroit
- M.S.N. Wayne State University

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- M.B.A. Plymouth State University

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- B.A. Davenport University

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M.A. Spring Arbor University

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B.S. Northwood University

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Michelle Devine, Admissions Coordinator
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Brian Downing, Printing Technician

Marjorie Esch, Director of Web Services
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Kathy Graham, Registration Support Specialist
C.C. Kirtland Community College
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M.S.N. Michigan State University

Kurt Kiessel, Groundskeeper

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M.A. Spring Arbor University

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Winifred Sharpe, Systems Analyst

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Katie Tisdale, Foundation Manager
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 liaison of the Foundation and the President of the college serves as secretary of the Foundation.

Members as of May, 2014

Foundation Manager: Katie Tisdale Resource Development Specialist: Lynne Ruden

William Curnalia, President	Sandy Woods, Vice President	Ruggero Dozzi, Treasurer	Thomas Quinn, Secretary
Diane Abbonizio	Pauline Cournyer	Sheryl Coyne	Ed Harris
Eric Hart	Patrick Ryan	Rich Vlasic	Mike Wahl

KIRTLAND COMMUNITY COLLEGE ADVISORY COMMITTEES

Advisory committees for individual occupational programs at Kirtland provide information concerning competencies needed by employees, physical facilities and types of equipment used in the business or industry, technical curriculum content, and recruitment opportunities. Members also assist with promotion of the programs, evaluation of programs, job placement, and work experience. At times advisory members are instrumental in acquiring donations of equipment and supplies for occupational programs.

Automotive

Rodney Adams	Chris Kalthoff	Derek Pastell
Jeremy Akin	Ed Krause	Laura Percival
Smoke Bonk	Scott McAuley	Frank Schultz
Chuck Huber	Bernie Milnes	Ron Sheffield
Matt Jernigan	Gene Moore	James Witt
Wayne Johns	Bob Oakes	

Construction Technology (M-TEC)

Mitch Borowiak	Alan Mabarak	Eric Moore
Clark Dowker	Mark McCully	Steve Pyke

Corrections

Doug Atkinson	William Gutzwiller	Mark Sabin
Jerry Boerema	Randy Hazel	
David Deeter	Charles Hinman	
Brenda Ford		

Cosmetology

Daniel Beltz	Teresa Henry	Mary-Jo Rondo
Ann Colcanclasure	Carmen Miller	Wendy Sheldon
Billie Grezeszak	Tim O'Karski	Shannon Weaver
	Beth Petrik	Robin Winton

Law Enforcement

Bradley Bannon	Edward Stern
Duane Bean	Randy Stevenson
Kevin Grace	
Brian Hill	

Marketing/Business

Erine Adams	Julie Hock	Deb Shumaker
Connie Allen	Clay Horton	Trisha Underwood
Nick Baker	Jane Lange	Marian Weber
Brenda Bachelder	Lisa Lashley	Andrea Weiss
Vickie Barnes	Julie Lavender	Denis Weiss
Christie Blackford	Jim Massey	
Kelly Canter	Bob McGrail	
Mandi Chasey	Rosalie Myers	

Nursing

Susie Allen	Rhonda Howard	Karen Schaffer
Marcy Anderson	Beth Hubbard	Patricia Shantz
Sheila Atwood	Kathy Kent	Gay Showalter
Robin Begick	Cynde	Linda Skrocki
Nancy Bissonnette	Kochensparger	Charlotte Smith
Bordine	Jane Korthase	Jackie Smith
Karen Bloom	Diane Larson	Karen Soltis
Lynn Boyce	Sue Lucksted	Mary Steel
Nancy Burke	Julie McClure	Krista Stauffer
Noreen Connelly	Beth Mogle	Sara Vanderveer
Melody Culey	Jill Moore	Pat Visscher
Diane Fisher	Jody Moran	Toni Walker
Jim Fischer	Sharon Noffsinger	Patricia Wren
Carla Gardner	Nancy Nowaczyk	Claudia Yoder
Emily Gray	Nancy Pavelek	Kathy Zelinsky
Patty Greenen	Connie Qualls	
Wendy Hillman		

Office Information Systems

Kelly Bennett	Nancy Kussrow	Katie Tinker
Kelly Canter	Lisa Lashley	Sherry Trierweiler
Mary Dasho	Verna Lee	Loretta Wingard
Cathleen Felts	Carol Lovely	Sandy Wood
Kathy Graham	Jeannie McCans	
Sue Henry	Cindy Miller	
Renae Klee	Kim Sargent	

Special Populations

Caryn Ann Schutte	Julie Lavender	Student Rep.
Luann Mabarak	MRS Rep.	
Mary Kehoe	Dale Shantz	

Welding & Fabricating and Workforce Development

Jason Brigham	Scott Hamlin	Cheryl O'rourke
Dan Brown	Ryan Hanes	Roger Schwartz
Sharon Reagan Brown	Ron Hanna	Jamie Sheppard
Dan Buckingham	Casey House	Dave Starkey
Mark Busby	Jim Izzard	Rich Valasic
Mike Campbell	Kevin Jaskowski	Jeff Veryser
Jessica Carr	Mike Lacost	Terry Wilkins
William Cartwright	Josette Lory	
Brian Crawford	Tom Moran	
David Dekett	Dave Muladore	
Kevin Dennis	Tony Nash	
Jim Donajakowski	Morgan Neilson	